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BRITISH BIRDS

AN ILLUSTRATED MAGAZINE DEVOTED
TO THE BIRDS ON THE BRITISH LIST

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PREFACE.

THE year covered by this sixth volume of our Journal has been marked by steady progress rather than by any outstanding event of importance.

Our numerous contributors have combined to make a volume full of good observations on the breeding and other habits and the distribution of quite a considerable proportion of the birds on the British List. To one and all who have supported us, we may here record our grateful thanks.

The Marking Scheme, we are glad to say, has taken a further step forward, not only in the number of birds ringed but also in the results achieved by recoveries. Facts have been brought to light during the year by means of ringed birds, which clearly demonstrate that the history of the individual bird traced with the help of the ring, is of the greatest assistance in elucidating a number of difficult and important questions.

We are very glad to note as a result of the publication of our *Hand-List*, that a number of observations extending our knowledge of distribution have been brought to light, observations which would have remained unrecorded had not the information conveyed in the *Hand-List* shown them to be of importance. The nomenclature used in that work and now adopted in this Magazine, has met

with a wide chorus of approval and a localized storm of dissent. The latter we anticipated, but that there are so very many who approve of the principles enunciated in our Introduction, is a pleasing confirmation of our conviction that Internationally-regulated Rules will in the end dispense with the Bogey of dis-uniformity.

April 9th, 1913.

THE EDITORS.

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- B. LIGHT-BACKED RACE, *Larus fuscus britannicus*. AD. ♀, Caithness (Scotland), Summer, Coll. Brit. Mus.

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IMPORTANT NOTE.

As announced in the Preface to Volume V., the nomenclature to be used in future in BRITISH BIRDS will be that of our *Hand-list of British Birds*. The *Hand-list* is now available, and all changes of names are there explained—EDS.

THE LESSER BLACK-BACKED GULL OF THE
BRITISH ISLES.

Larus fuscus britannicus, subsp. nov.

BY

PERCY R. LOWE, B.A., M.B., M.B.O.U.

[PLATE 1.]

It is, I think, safe to say that most British ornithologists would not have hesitated to assert that the Lesser Black-backed Gull of our islands was the *Larus fuscus* of Linnæus. Yet the fact remains that the Lesser Black-backed Gull of the British Isles is perfectly distinct from the gull described by Linnæus under the name of *Larus fuscus*; and no ornithologist could have the least difficulty in recognizing the fact were he to compare a series of specimens from the type-locality with a series of our own native bird.

The fact that the difference has never been noted before can only be due, I presume, to "taking things for granted," and to that frequent cause of the perpetuation of inaccurate information which may be summed up in the phrase "never looking."

Linnæus in his *Systema Naturæ*, ed. X., 1758, p. 136, first described the Lesser Black-backed Gull from Sweden.

The mantle, scapulars, and wing-coverts of breeding birds from Sweden or Norway are characterized by a coloration which varies from a dark, slaty-black in the freshly-moulted spring-feathers, to a sooty or deep brownish-black with the advance of summer and consequent fading. If now we examine a series of breeding birds from the British Isles in corresponding summer-plumage, we find that the same parts are of a clear, slaty-grey colour, and nothing like so dark as the above; and this difference in both depth and character of coloration is so constant and well marked, that it can be recognized at the merest glance and without a moment's hesitation (*cf.* Plate 1).

Moreover, the difference can be as easily appreciated when individual specimens of the two races are compared as when the two races are examined in series.

Other distinctive features are by no means so marked as the above; but as far as the few measurements which I have been able to make would seem to indicate, males of the light-backed or British race have rather shorter wings and longer and stouter bills than the dark-backed or Scandinavian race (*cf.* measurements in list at end). I make this statement, however, with reserve, for a good many birds examined were not sexed, and the bills may vary considerably with age, so that a very much larger series is necessary before any very definite conclusion on this point can be arrived at.

The same relative proportions seem to obtain in female specimens, whose bills are considerably smaller than in the male.

Apart from these latter considerations, however, I have no hesitation in separating the British Lesser Black-backed Gull under the name of

LARUS FUSCUS BRITANNICUS.*

The types, both male and female, are preserved in the British Museum collection at South Kensington:—

Type ♂ Caithness (86.7.9.1). Summer plumage. Coll. Col.

Irby. Measurements: Wing, 17 in. (432 mm.);
exposed culmen, 2.10 in. (54 mm).

* Under the name of *Larus graellsii*, Brehm in 1857 described (*Allgemeine Deutsche Naturh. Zeitung*, 1857, p. 483) an example of the Lesser Black-backed Gull which was taken in Malaga harbour (Spain); and as the British light-backed race may wander in winter to the western Mediterranean (*cf.* text below) the question of course arises, should it be known under the name of *Larus graellsii*. My opinion is that this name cannot stand. Brehm's diagnosis is as follows: "Larus fusco similis, sed multo major, rostro multo crassiori et colori valde clariore." This description may possibly stand for a race which breeds on the Moroccan coast (e.g. Island of Alboran) or along the shores of the Mediterranean, but it certainly cannot stand for the British race, which is characterized by having the wings smaller than in *L. fuscus fuscus*, not "much larger" as in Brehm's diagnosis of *L. graellsii*. We are also left in doubt as to whether it is the colour of the bill which is "valde clariore," or whether it is the Gull itself. The type, too, is missing, so that with such uncertainty as to the particular race which Brehm was describing, I think there is nothing for it but to find a new name for the light-backed British race.

Type ♀ Caithness (86.7.9.2). Summer plumage. Coll. Col. Irby. Measurements: Wing, 15.80 in. (402 mm.); exposed culmen, 1.90. in. (50 mm).

Besides British specimens I have been privileged to examine examples agreeing exactly with the British form (*L. fuscus britannicus*) in the British Museum collection, and in the Hon. Walter Rothschild's Museum at Tring, from the following localities: Færoes: northern coast of France (Havre); one from the Azores (collected by Mr. Ogilvie-Grant, which is undoubtedly an example of the light-backed race of *L. fuscus*, but *cf. Nov. Zool.*, Vol. XII., p. 102; coast of Portugal (Setubal); Malaga in southern Spain; Algeria (Bône) and Morocco (Tangiers and Oran).

As regards the dark-backed race (*L. fuscus fuscus*) I have examined specimens in the above-mentioned collections from the following places: North Öland and Kalmar (Sweden); Bodö (Norway); Gotland; Pskov (Russia); and Skaisgirren (East Prussia); while Professor Collett and Professor Lönneberg have been so kind as to send me other examples from Norway and Sweden respectively (Drobak, Barum, and Vaxholm).

But in addition to these dark-backed birds I have examined others with equally dark backs (which I am unable to separate from examples of *L. fuscus fuscus*) from Cyprus, Palestine, and Egypt (Lake Menzaleh, Thebes and Port Said, *cf. list*). All these birds were taken in April and May, and are in full summer-plumage; and my opinion is that they represent birds of the typical or Scandinavian race, which had been wintering in the south and were on the point of making their way northward to breed. It must, however, be stated in passing, that the Lesser Black-backed Gull is *said* to be resident all the year round in the Red Sea (with what truth I have been unable to ascertain); and if the statement is correct, or rather if this Gull really *breeds* there, the birds just referred to from Cyprus, Palestine, and Egypt may of course be representatives of some southern-breeding race.

Against such a supposition is the fact noted by the late Captain Shelley (*Birds of Egypt*), that the Lesser Black-backed Gulls were making their way *northwards* down the Nile in April.

Allowing, however, that my conclusion in regard to these Egyptian and other birds is correct, it follows that we have in Europe two races of the Lesser Black-backed Gull, viz. :—

- (1) A Scandinavian or more eastern form, the dark-backed *Larus fuscus fuscus*, and
- (2) A more western or light-backed race, represented by *L. fuscus britannicus*.

Moreover, we may conclude that representatives of the Scandinavian and more eastern race, in greater or lesser numbers, migrate southwards across eastern Europe (possibly by way of the Rivers Vistula and Dnieper) to winter in the eastern Mediterranean, Egypt, the Red Sea, and possibly the Persian Gulf (?*L. fuscus affinis*); while on the other hand, representatives of the western race, following the Atlantic coasts of Europe, wander southwards as far as the northern and southern coasts of the western Mediterranean; or to Madeira, the Canaries, and the Azores.

The actual existence of two such distinct migration routes can, of course, only be proved by zealously continuing to “ring” nestling birds in their northern breeding haunts, a process which, in the case of other birds, has already been so fruitful in producing the most interesting and surprising results.

That a southerly migration in winter as regards our own native birds is much more complete than is generally appreciated is, I think, indicated by the difficulty I have experienced in obtaining British specimens *in winter plumage*.

Finally, I have examined specimens of the Lesser Black-backed Gull from the Canaries (Tenerife and the Grand Canary) kindly placed at my disposal by Mr. D. A. Bannerman, and one example in the British Museum collection which was taken at Valencia. These birds appear

to differ from both the above-described races; but whether they are representatives of another race meriting the distinction of subspecific rank, the material at present to hand is too meagre to allow me to say. It may, however, be pointed out that the Lesser Black-backed Gull breeds in at least one locality off the Moroccan coast (Alboran Island—Lilford) and extends southwards along the west African shores as far as Bonny (Saunders); so that it is very possible that these local birds wander in winter to the Canaries and Madeira or to places like Valencia on the Mediterranean shores, where they may be found along with winter representatives of the light-backed or more northerly race—*Larus fuscus britannicus*. These latter points I am now endeavouring to clear up.

LIST OF BIRDS EXAMINED.

Light-backed Race—*L. fuscus britannicus*.

		Wing.		Exposed culmen.	
		inches	mm.	inches	mm.
Ad. ♂	Caithness (Summer)	17	432	2.10	54
..	Loch Ballon, Ross-shire 5.vi.69	16.60	421	2.10	54
..	Loch Lomond 25.v.70	16.40	417	2.10	54
..	Orkneys (Summer)	16.50	419	2.10	54
..	Færoes 3.ix.73	15.10	384		
..	Malaga 20.iv.72	16.30	415	1.90	50
..	Romney Marsh 29.vii.83				
..	Tangiers (December)				
..	.. .. 5.v.88	Not measured (Tring).			
..	Seaton, South Devon .. 27.iii.97 (Coll. N. F. Teechurst)	16.90	430		
.. ♂ *	Orkneys 2.viii.91 (Coll. N. F. Teechurst)	15.50	394		
Imm. ♂	Setubal, Portugal .. 5.i.06				
..	.. .. 5.i.06				
Ad. ♂	Bône, Algeria (January)				
..	Malaga 21.x.56				
..	.. .. (Winter)				
..	Great Yarmouth 6.ix.93				
..	Aberystwyth 2.viii.92				

* Marked ♂ on label, but has ♀ bill and wing.

		Wing.		Exposed culmen.	
		inches	mm.	inches	mm.
Ad. ♂	Færoes 7.vii.28 (Tring coll.)				
„	Madeira 28.ii.04 (D. Bannerman coll.)				
Ad. ♀	Caithness (Summer)	15.80	402	1.90	50
„	Færoes 9.viii.73	15.80	402	1.83	48
„	Terceira, Azores 4.iv.03				
? [Sex	Oran, Morocco 6.iii.78				
? „ ? ♂	Torquay, England (No date)	16.90	430	2.0	52

Dark-backed specimens—*L. fuscus fuscus*.

Ad. ♂	Drobak, Norway 3.v.99	17	432	2.0	52
„	Larnaka Roads, Cyprus 19.iv.75	17.75	447	2.0	52
? ♂	Thebes, Egypt 24.iv.70	17.50	442	1.95	51
? ♂	„ „ 24.iv.70	17.55	443	2.10	54
Ad. ♂	Norway (May)	Not measured.			
„	Pskov, Russia 9.ix.94	„	„	} Tring coll	
„	Skaisgirren, East Prussia	„	„		
„	„ „	„	„		
Ad. ♀	Christiania, Norway 15.v.81	16.60	421	1.90	50
„	Bodö, Norway 7.vii.74	16.50	419	1.80	48
„	„ „ 7.vii.74	Very worn.			
„	Port Said, Egypt 8.iv.78	16	407	1.85	49
?	Palestine (no date)	16.75	424	2.0	52
Ad. ♀	Vaxholm, Sweden (July)	17.0	432	2.0	52
„	North Öland, Sweden 9.viii.90	Not measured.			
„	Gotland 26.v.95	„	„		
„	Kalmar, Sweden 12.v.03	„	„		
„	Lake Menzaleh, Egypt (April)	„	„		
„	„ „ „ „ (May)	„	„		
„	„ „ „ „ „	„	„		
„	„ „ „ „ „	„	„		

A TENGMALM'S OWL CAPTURED IN
NORTHUMBERLAND.

ITS BEHAVIOUR IN CAPTIVITY.

BY

J. M. CHARLTON.

ON January 31st, 1912, I received word that a small owl had been shot in the vicinity of the Seaton Burn, Northumberland. Accordingly, I immediately cycled over to the house of the owner at Seaton Sluice, and was pleased to find a specimen of Tengmalm's Owl (*Egolius t. tengmalmi*) sitting contentedly in a small wooden dove-cage. Mr. James Hall, in whose possession the bird was, informed me that he had "winged" it in Holywell Dene on December 11th, 1911, his setter having flushed it from a hawthorn bush in a small ravine. It was apparently much confused by the light, making no attempt to defend itself, and when brought home and placed on a table at first crouched down, and stared around with a somewhat bewildered expression. However, shortly afterwards, the news of its capture having spread, a party of the owner's friends collected and stood around gazing at the Owl, which had already so far lost its sense of fear that it devoured a Sparrow on the table.

At the time of my visit it was thoroughly accustomed to its surroundings, and perching on its master's hand when he put it into the cage, it allowed itself to be lifted out, and would sit there without attempting to get away, even out of doors. The kitten of the household, however, caused it some alarm at first, and on its near approach the Owl crouched down, vibrating the throat, but emitting no sound. If it came within reach the bird "clicked" its beak and attempted to strike with it. So mild, however, was the kitten's disposition that he did not at all resent this, and finally so overcame the natural hatred of the Owl as to assure it of his own good intentions.

The Owl feeds almost entirely on Sparrows and mice. The former it pulls to pieces, leaving the wings and tail,

while the heads of the latter are first torn off, then the remainder of the body is swallowed whole. The prey is always seized in the right foot and held up while it is torn to pieces by the beak. If any should be left over it is placed firmly between the bars by the perch, ready for



A TENGMALM'S OWL CAPTURED IN NORTHUMBERLAND.

another meal. On one occasion when no mice or birds were to be obtained, six large worms were put into the cage, all of which were swallowed with much evident relish. Although water had at first been placed in the cage, since the bird never bathed or drank any, it was removed.

Several times at night the Owl had managed to open the door of its cage and fly out, to be found in the mornings

quietly sitting on the top of the grandfather clock, the highest perch in the room. During the day it is not entirely confined to the cage, on the top of which as well as on the clock it is especially fond of sitting, and thence watches with half-closed lids the movements in the room. Strangers do not cause it much annoyance, but no further familiarity is allowed them than merely to scratch its crown and facial disc. It tolerates also the partly instrumental cause of its captivity, the setter, but if a strange dog enters the room it becomes terribly agitated, dashing in terror about the cage. The return of Mr. Hall from work and the forthcoming meal are eagerly looked forward to, and the Owl awakes from her daylight lethargy to watch the door with anxious glances, and should he ever omit to feed it at the accustomed time, if within the cage, it comes close to the bars and emits a low mewling note, resembling the indrawing of the breath between closed lips, and not unlike the sound produced by the Little Owl (*Athene n. noctua*). Besides this call it exceptionally gives a low kind of whistle.

On its capture its plumage was in excellent condition, but during the latter half of March the moult took place, after which the feathers of course were much brighter in appearance. A few weeks after it was caught the wounded wing had healed, although still stiff on account of the lack of proper setting.

This is the sixth specimen recorded for Northumberland, and had probably been blown out of its natural course of migration by the severe north wind which was experienced the day previous to its capture.

THE LATE WALTER IBBOTSON BEAUMONT.

IT is with great regret that we have to record the death of Mr. W. I. Beaumont of Plymouth, a keen field-naturalist and an enthusiastic supporter of our marking scheme, who was accidentally drowned on May 3rd, at Tarbert, Loch Fyne. We are indebted for particulars to Mr. Godfrey Heathcote, who writes as follows :—

“ Mr. Beaumont, as you know, had entered with enthusiasm into your Bird-marking Scheme, and spent a great part of the summers of 1910 and 1911 cruising among the small islands off the west coast of Scotland for the purpose of “ringing” young gulls and terns. With the intention of carrying on this work during the present summer, he went to Tarbert on the 25th April to superintend the fitting out of his yacht, and had almost completed his arrangements when the fatal accident occurred. It is thought that he must have been attacked with faintness, and fallen from the yacht’s dinghy while in the act of laying out a kedge, for no sound was heard either by those on board the yachts and launches lying near, or by those on shore. He was a skilful and experienced yachtsman, and, with his six-ton single-handed cruising yawl ‘Hawk-Moth,’ was well known on the west coast from Loch Fyne to Skye. He had been a member of the Royal Cruising Club since last July. He was also a member of the Alpine Club and a Fellow of the Royal Geographical and Zoological Societies, as well as a member of both the British Ornithologists’ Union and Club.

“ Regarding his ornithological work, he was characteristically modest, as in other matters, but, though he could not claim the wide range of knowledge possessed by our leading ornithologists, he was more than an ordinary field-naturalist. He had, in addition to his biological training, a natural faculty for close and accurate observation, and, in particular, I was frequently struck by the quickness of his eye for any ‘character’ likely to be useful in the identification of a new or unknown species.

“ Mr. Beaumont was in his fiftieth year, and was unmarried.”

Dr. E. J. Allen, Director of the Marine Biological Association of the United Kingdom, writes to us from Plymouth as follows :—

“ Mr. W. I. Beaumont commenced his biological studies under the late Professor Milnes Marshall in Manchester, and subsequently went to Cambridge, where he entered Emmanuel College. After leaving Cambridge he took up marine biology,

working first at Port Erin and at Valencia. He first came to Plymouth to work at the Marine Biological Laboratory in 1895, and has spent several months of each year here since then. He was specially interested in nemertines, nudibranchs and crustacea, especially schizopods. You are probably better acquainted with his bird-work than I am, but it was a subject in which he was always very much interested.

“ In addition to biology, he possessed a very sound knowledge of field-geology.”

Mr. Beaumont entered upon the “ringing” scheme with the utmost ardour, but he met with many disappointments through not being able to land in many places owing to rough weather or to the want of suitable anchorage where his yacht, which he worked single-handed, could be left in safety. Thus, in deploring his want of success he wrote in September, 1910 : “ I wasted most of a week at the end of June, for example, waiting at Crinan for a chance to visit some islands.” We may quote the following hints to “ringers” from one of his letters to us :—

“ I have this year adopted a plan of dealing with the rings which saves much time and trouble and facilitates accuracy. Those of your helpers who mark birds in colonies and have not already some dodge of their own may be glad to know of it.

“ Before visiting a nesting-station I arrange a supply of rings in order of numbering, and thread them on a piece of rope of suitable thickness. Log-line, 1 inch in circumference, does very well for sizes 3 and 4. Each ring should be pinched on to the line, so as to fit so tightly that it cannot slip over its neighbours and get out of its proper place, yet can be easily slid off when wanted. Besides arranging the rings in order to begin with, I examine the number on each as I thread it on the line and again before putting it on the bird, so as to eliminate all chance of error.”

Mr. Beaumont was a keen student of bird-life, as many observations in his numerous letters to us testify, and it was always a great pleasure to have a quiet chat with him about birds. He will be greatly missed by all those who had the privilege of being acquainted with him.

H.F.W.

NOTES

A MARKED STARLING REPORTED FROM FINLAND.

THE following record is of very considerable interest in connexion with my note on marked Starlings in Vol. V., p. 297 :—

STARLING (*Sturnus v. vulgaris*).—B.B., No. 16018, marked at Bradfield, Berkshire, on January 31st, 1912. Found dead on the snow on April 17th, 1912, at Masaby (parish Kyrkslätt) 23 km. west from Helsingfors, Finland. Reported by Professor J. A. Palmén, Helsingfors.

The bird had travelled just under 1,200 miles in an E.N.E direction. It is almost certain that other Starlings marked at the same time were winter visitors from a considerable distance, and it is very possible that some of the seventy birds which have been noticed at Bradfield for two winters may have travelled with this bird. It was “ringed” during the hard frost which commenced on January 28th, on which date thirty-three birds were caught, of which nine had been marked between January 12th and February 6th, 1911. On January 30th eight of these birds “ringed” in 1911 were recaptured, and on January 31st, one; but only twenty-three Starlings were ringed on the latter date as compared with sixty-nine on January 30th and one hundred and sixty-three on February 3rd, when six “two-winter” birds were noted.

The following recent records, however, prove that some of these birds were residents from the near neighbourhood, Englefield being two, and Bucklebury three miles away.

16,189 marked 29.1.1912 killed Bucklebury, about 15.4.12.

16,160 ” 3.2.1912 ” Englefield, 1.5.12.

11,898 ” 1.2.1911 ” ” 27.4.12.

14,920 ” 10.10.1911 ” Bradfield, 25.3.12.

14,902 ” 15.10.1911 Found freshly killed in a Tawny Owl’s larder, Bradfield, about 4.5.1912.

It will be noticed that the only three Starlings so far captured away from the neighbourhood after being “ringed” at Bradfield, had travelled in an easterly direction, viz. to Kent, Essex, and Finland.

NORMAN H. JOY.

RETURN OF A MARKED SWALLOW TO ITS BREEDING-PLACE.

ON May 6th, 1911, I marked an adult male(?) Swallow (*Chelidon r. rustica*) with ring No. B827 at Cheadle, Staffordshire. I again caught the bird on May 7th, 1912, at the same place.

Its mate had no ring on, although I ringed the hen on May 6th, 1911, so I am afraid she has been killed and the present hen is a new mate.

J. R. B. MASEFIELD.

CROSSBILLS NESTING IN SUFFOLK.

EARLY in April, 1912, I spent a day or two in the north of Suffolk amongst the fir belts. On April 6th I found a nest of a Crossbill (*Loxia c. curvirostra*) with three or four young ones about four days old, in a Scotch fir by the roadside.

The nest was placed about fifteen feet from the ground. Both parent birds were present. These were the only Crossbills I came across, though I traversed a good deal of suitable country, and was specially looking out for the birds.

LEONARD GRAY.

REMARKABLE NESTS OF CHAFFINCH AND ROBIN.

THE first photograph here reproduced is of the nest of a Chaffinch (*Fringilla c. caelebs*) which I took on May 5th, 1911.

This nest was built on two branches of a holly tree, just where they crossed, and the "tail," which is nearly 7 inches long, hung down between; with the exception of the "tail" the nest was quite normal.



The other photograph is one which I took on April 12th, 1912. It represents the nest of a Redbreast (*Daudalus r. melophilus*) built over an old Song-Thrush's nest on a branch of a small spruce tree, about 3 feet from the ground. It is chiefly composed of moss, leaves and hair, and measures 11 inches long, 8 inches broad, 7 inches high, and the

CHAFFINCH'S NEST WITH A "TAIL" SEVEN INCHES LONG.

(Photographed by D. G. Garnett.)

diameter of the cup of the nest is 3 inches. At first sight it resembles a half-completed Blackbird's nest. It should be remarked that the nest was rather more shut in than appears



NEST OF A REDBREAST WITHIN THAT OF A SONG-THRUSH.

(Photographed by D. G. Garnett.)

in the photograph, as it was necessary to bend back some branches so as to admit enough light for photographic purposes.

D. G. GARNETT.

CHAFFINCH'S NEST DECORATED WITH PAPER.

A PAIR of Chaffinches (*Fringilla c. cœlebs*) have built a nest upon the side of a tree trunk in the St. Nicholas Gardens in the centre of Scarborough, Yorkshire, and the hen is now (May 6th, 1912) incubating her eggs within nine feet of a much frequented public pathway. In the absence of the usual lichens for decorating the nest outside, the bird has stuck over it small pieces of paper, which have the effect of rendering it very conspicuous, and the nest, looking like a snowball, is visible quite one hundred yards away.

W. J. CLARKE.

[Paper is not infrequently used as a substitute for the usual lichens. One nest which I saw a few years ago was completely covered with small fragments of paper printed with Greek characters, which proved to be part of a discarded Greek dictionary.—F. C. R. JOURDAIN.]

BLUE-HEADED WAGTAILS IN CARNARVONSHIRE.

IN my opinion the occurrences of the Blue-headed Wagtail (*Motacilla flava flava*) in Merionethshire in 1897 and 1898, of a female bird, identified by Mr. T. A. Coward, in Carnarvonshire in 1910, and also of a male and female or immature birds which I observed this year (1912) in the latter county, lends much colour to the assumption (and nobody can yet contradict it) that birds of this species migrate up the western seaboard probably every year, but pass unnoticed in the small parties of Yellow Wagtails (*Motacilla flava raii*) with which they generally travel. This year I have paid closer attention than ever to the passage of these two species through the Creuddyn peninsula, with the result that on May 11th I watched through my Zeiss binoculars an adult male, which was accompanied by a male and female *M. f. raii*, on the isthmus to the south-east of the Great Orme's Head. Its bluish-grey head and cheeks and the pure white eye-stripe and chin, struck me the moment I cast eyes on it; and my prolonged observation of the bird and its plumage, as well as the happy opportunity afforded me of comparing it with its travelling companions, gave me every satisfaction. Ten days previously, however, I saw my first example of this species (presumably an adult female) in the company of a male and female *M. f. raii*, and I immediately noticed that whilst the female Yellow Wagtail differed in many respects from my new acquaintance, I considered the whitish colour of the stranger's eye-stripe, chin and upper-breast trustworthy evidence to prove that the bird was *M. f. flava*. However, not having previously seen the bird I decided to report nothing of its occurrence till I should see another, little supposing that I should do so only nine days later, namely the 9th May. I had a more favourable opportunity for watching this second individual and of making a detailed observation of its plumage, and again failed to trace the slightest tinge of yellow or buff on either chin, eye-stripe, or patch behind the ear-coverts, their whiteness again convincing me that the bird was clearly not referable to *M. f. raii*. On this example's breast, between the white and yellow portions, I could distinguish three or four small, pale brown feathers, and wondered whether these were marks of adolescence.

On May 16th, in the same year, a male *M. f. raii* and two of the birds which I have contended were *M. f. flava*, were feeding together in a field bordering on Llandudno Bay, and I watched them with the aid of my glasses for fully half an hour. I took my position behind a wide wooden post which

must have concealed me from the birds fairly well, for on three, if not four occasions, they passed so close that it was impossible to confuse or wrongly detect the colouring of each part of the plumage of all three. So *distinctly* white were the eye-stripes, chins, and the patches behind the ear-coverts of the Yellow Wagtail's companions, that I had no difficulty in identifying them as either female or immature Blue-headed Wagtails. Certain pale brown feathers on the breast of one of the individuals again suggested adolescence. From each shoulder, extending obliquely and converging to a point on the upper-breast, was a broad but broken arrow or V-shape formed of the brown feathers, the area above the point being white and that below it grading from a pale to a deeper shade of yellow.

I feel and maintain, as other ornithologists do, that our lack of knowledge, with strict reference to the frequency or otherwise with which it makes use of this apparently its westernmost migrational route, is due not so much to the want of reliable observers in that part of the country as to the fact that the species, particularly the female bird, must often be confused with its yellow congener, to which it bears a close superficial resemblance.

RICHARD W. JONES.

GREY WAGTAIL NESTING IN EAST SUSSEX.

YEAR after year, in spring and summer, when I go a-fishing in the streams that run over the ironstone rocks of Dallington Forest, and in the parish of Burwash, I come across pairs of Grey Wagtails (*Motacilla b. boarula*). I think they are resident or partially migratory. I saw Grey Wagtails about the streams towards the end of February this year (1912). The streams where I meet with these birds ripple over rock-ledges and gravel, and are well suited to their habits. I have looked casually for nests year after year, but never succeeded in seeing one till this spring. My attention was drawn to it by the woodman on Lady Margaret Cecil's property of Oak down in the parish of Burwash, who, when cutting faggot-wood on the side of a ravine bordering a rivulet, disturbed the hen bird from her nest. This was, according to the woodman, on April 12th, and there were four or five eggs in the nest. I visited the spot on the 19th: there were down-clad nestlings. The nest was carefully concealed, placed on a piece of jutting rock, with the bank and tree-roots overhanging. The parent birds were very shy. Though I was hidden fifty yards from the nest, the hen kept flying round with food, on the tops of large oak trees, and I could only follow her movements by her notes—"Zis zi," sharply uttered but more feeble than those

of the common Pied Wagtail. At intervals she darted down from the branches to the nest, fed the young with great rapidity and disappeared amongst the foliage just bursting out on the surrounding oaks and hazels. On the 22nd the young showed slaty-grey feathers, on the 27th they showed a white superciliary streak, and white gorgets. The female was still shy about feeding her young. During my watching I did not see the male carry any food to the nest. On April 29th the young birds left the nest, and proceeded down stream with the female bird, as observed by the woodman, who was still working near the locality of the nest.

H. W. FEILDEN.

[A nest was found in the same district by Dr. C. B. Ticehurst in 1906, and two other pairs of birds were seen. The nest was photographed by N. F. Ticehurst, who had suspected since 1896, when he saw Grey Wagtails in this district, that they might breed there (*Hastings and E. Sussex Nat.*, Vol. I., pp. 60-2, and Pl. VI. and VII.; cf. also *Brit. B.*, II., p. 376). Colonel Feilden's observations are an interesting confirmation, and it would appear that the Grey Wagtail breeds regularly in this district.—Eds.]

EARLY LAYING OF THE CUCKOO.

THE season of 1912 bids fair to produce many records of early breeding. Mr. A. W. Johnson, of Bucklebury, Berkshire, sends the following interesting particulars of a Cuckoo's egg taken on April 29th, 1912, in Berkshire: "The Cuckoo's egg was taken at 3.30 p.m. on April 29th from a nest of Hedge-Accentor, built 4½ ft. up in ivy growing over an old stump. The Hedge-Accentor was on the nest when first found that morning about 8 a.m., and the nest then contained two of her eggs. In the afternoon the nest contained the Cuckoo's egg alone; the Hedge-Accentor's two eggs were gone!"

Another Cuckoo's egg subsequently found by Mr. Johnson was fully two-thirds advanced in incubation on May 11th, and must therefore have been laid about May 2nd or 3rd.

Authentic records of the laying of the Cuckoo in England in April are so scarce, that Mr. Johnson's observations are of great interest.

F. C. R. JOURDAIN.

LITTLE OWL BREEDING IN MIDDLESEX AND SUSSEX.

THE Little Owl (*Athene n. noctua*) having in recent years spread throughout Hertfordshire, it was only to be expected that it would soon make its way into Middlesex. But, though its presence in the Enfield neighbourhood has been reported to me

from several quarters during the last year or two, I have not met with it personally until quite recently. On April 25th, 1912, however, hearing that a pair had frequented an orchard near Enfield for some months, I searched for a nest and finally found one of the birds with two eggs in a hole in an apple tree, about three feet from the ground. R. B. LODGE.

THE Little Owl seems to be getting very common about the Worthing district, and we hear them every night. At one farm at Angmering there were several of these birds for many weeks frequenting the old elm trees. They were very noisy both by day and night. They then became very silent for some weeks, but on May 6th, 1912, the farmer (Mr. John Tompkins) threshed one of his wheat-ricks, and in a hole in the thatch the men found a Little Owl sitting on six eggs. He brought the eggs to me. Two were hard-set, two slightly incubated, and two quite new-laid, showing the bird had sat on the first two laid. The nesting-hole was half way up the roof, and appeared to have been made by the bird.

These birds have a bad reputation. Are they really injurious?
S. V. CLARK.

[In a recent paper Mr. T. A. Coward gives some details as to the food of the Little Owl, from an examination of a small number of pellets (*Mem. and Proc. Manchester Lit. and Phil. Soc.*, Vol. LVI. (1912), No. 8). By far the larger proportion of remains found in these pellets belonged to small mammals, such as voles, rats, mice, and shrews. Beetle-remains were also numerous, but there was little in the way of bird-remains. In some of these pellets Mr. Coward found a considerable amount of earth and sand, and suggests that this came from digested earth-worms. Mr. Meade-Waldo has noted that the Little Owl feeds upon earth-worms, and I may remark that five specimens kindly sent to me by the Earl of Gainsborough from Rutlandshire, in December, 1910, had the stomachs crammed with the remains of beetles and earth-worms. It would be of interest to have more details of the food actually taken by this bird, which has now spread over the best part of England and is *said* to be very destructive to small birds and young game.—H.F.W.]

HOBBY AND WRYNECK IN CHESHIRE— CORRECTIONS.

MR. F. NICHOLSON has shown us a letter from the late Edward Milner, of Hartford Manor, Northwich, referring to two birds which we mentioned in the *Vertebrate Fauna of Cheshire*, and as the particulars we gave appear to be incorrect it is desirable that the errors should be corrected.

In this letter, dated August 6th, 1900, Mr. Milner states that a Hobby nested in Vale Royal New Park in 1897. On page 293 we give the date as 1895. Mr. Milner says that Mr. Charles Humfrey kept one of the young birds alive for over two years, and adds that he saw it himself and that it was "unmistakably a Hobby."

On page 260 we say that "in July, 1901, the late Edward Milner saw 'a Wryneck' in his garden at Hartford Manor," but this date is also incorrect, for in the letter, written in 1900, Mr. Milner distinctly says: "Last September I noted a Wryneck on a dying oak tree in front of my house, and watched it for a long time on the dead branches." Our information was received from Mr. C. E. Milner, after his father's death; no doubt he gave us the dates from memory. It is worth noting that the most recent occurrence of the Wryneck in Cheshire that we know of was in September, 1906. Birds appearing in this month would probably be on passage.

T. A. COWARD.

CHARLES OLDHAM.

HEN-HARRIER IN SOUTH-EAST NORTHUMBERLAND.

AN immature female Hen-Harrier (*Circus cyaneus*) was shot on January 24th, 1912, in Holywell Dene, near Seaton Sluice, Northumberland, by a Mr. Dixon, as it rose from some marshy ground. It had the two feet of a Skylark and also those of a finch in its stomach.

On January 23rd there was a heavy gale from the north-east lasting a short time and followed by much rain. The Hen-Harrier has not previously been recorded for this district, and it is, I believe, some years since it has appeared in Northumberland.

J. M. CHARLTON.

RED-BREASTED MERGANSERS IN CARNARVONSHIRE IN APRIL AND MAY.

I FIND on consulting the *Fauna of North Wales* that the Red-breasted Merganser (*Mergus serrator*) has not apparently been recorded from the north coast of Wales in spring; it may therefore be worth while to place on record the fact that on April 30th, 1912, I saw four birds—two drakes and two ducks—and again on May 3rd in the same year eight birds, of which four were drakes, in Conway Bay at the extreme north-east of Carnarvonshire. The behaviour of the drakes strongly indicated symptoms of sexual anxiety, and the singular manner in which they turned round suddenly on the water, faced one another, instantly craned their necks forward and as erect as possible, and together gave head, neck, and breast one

vigorous bob downward, exhibited what appeared to be an element of hostility towards one another. It was during these performances that the wide chestnut band on their necks could be best seen. They dived frequently and often gave chase to one another.

RICHARD W. JONES.

GREAT SHEARWATER IN KENT.

DURING the south-westerly gales of October (about the 24th to the 27th), 1911, a Great Shearwater (*Puffinus gravis*) was found exhausted on a farm at Stone-in-Oxney, on high ground overlooking Romney Marsh. There was some doubt as to the bird's identity at the time, and I am indebted to Mr. Catt, of Iden, Sussex, to whom it was brought for preservation, for kindly borrowing it from its owner a few weeks ago for me to see. It was a male.

There is only one previous record of this species from Kent, and its capture is interesting in the light of Mr. H. G. Alexander's observations made in the Bay of Biscay and the western Channel during the last week in September (*cf.* Vol. V., p. 253).

N. F. TICEHURST.

SNIFE BREEDING IN KENT.

A PAIR of Common Snipe (*Gallinago g. gallinago*) nested this year (1912) in Benenden, Kent. On April 21st there were four eggs, and the bird was sitting. It is remarkable that they should have chosen a rushy meadow adjoining a wood where the Woodcock breeds annually.

R. E. CHEESMAN.

[As I suggested in the *Birds of Kent* (p. 452), it is not unlikely that Snipe breed in that county more numerously than the actual records represent. One or more scattered pairs probably breed in many suitable places throughout the county, but records of nests being found are still very small in number; Mr. Cheesman's note is therefore valuable, and all the more so as the locality is a new one. On April 30th, 1910, I was able to verify for myself the breeding of the Snipe in the Wittersham Levels referred to on page 453 of my book; some six pairs were "drumming" there, and I found one nest. The only other record I have since received is one from Colonel J. M. Rogers, who found a nest of four eggs in process of hatching in the Darenth valley on May 11th, 1908.—N. F. TICEHURST.]

BLACK-HEADED GULLS FOLLOWING A SWARM OF FLIES.

At about 9.30 in the morning of December 31st, 1911, a large movement of the common two-winged shore-fly took place along the coast near the mouth of the river Tyne. Dense

masses of these insects were blown past the shore by the south-west wind, and the rocks, banks and houses in the vicinity were covered with thousands upon thousands of the half-dazed creatures. This *apparent* migration continued all day up to 5 p.m.

Early in the following morning I noticed a large quantity of gulls off shore, and their numbers increased throughout the day until it is no exaggeration to say that between Tynemouth and Cullercoats, a distance of perhaps a mile and a quarter, the sea was white with them. All were Black-headed Gulls (*Larus ridibundus*). By edging close into the rocks when the tide was full, they were enabled to pick off the flies clinging to them or snap up those floating on the surface. They gradually departed throughout the next day.

The Black-headed Gull at that time of year is in this district perhaps the commonest of the family; but I have never seen one-tenth of the birds together before as on this occasion. So extraordinary were their numbers as to call forth remarks from the casual observer, and a notice appeared in the *Newcastle Daily Journal* commenting on their presence.

J. M. CHARLTON.

THE 1912 "WRECK" OF THE LITTLE AUK.

YORKSHIRE.—In the account under Scotland, signed H. F. W. (Vol. V., pp. 337-8) it is said that the Little Auks "were first noticed in Yorkshire . . . on January 20th." On that part of the coast between Scarborough and Filey, considerable numbers were passing during the whole of January, 1912, and the latter part of December, 1911. Many hundreds passed at this period, and scores were washed ashore in a dead or dying condition. Stragglers penetrated inland for several miles. I saw the first Little Auks at Filey on December 26th, 1911, when there was a number swimming and diving along the Brig side. I have a note that the wind was westerly, the sea smooth, and the temperature mild at the time, and I was surprised to see the birds under these conditions. I heard of one or two stragglers previous to this date, but did not see one myself before December 26th. (W. J. Clarke.)

ESSEX.—A Little Auk was found dead on a marsh at Rettondon on January 21st, and another in a very exhausted state was found in a creek of the River Crouch in the same parish on February 4th. (L. Gray.)

EARLY NESTING OF MOOR-HEN.

ON March 29th, 1912, I found on an island in a pond at Burnage, Didsbury, a Moor-Hen (*Gallinula c. chloropus*) sitting on six eggs. This is the earliest date for which I have a record.

Nesting operations in the garden here are early this year, a Song-Thrush having four eggs on March 12th, and another young on March 29th; a Blackbird one egg on March 16th, while on April 5th I found twenty-four nests, viz. two Hedge-Sparrow, twelve Thrush, six Blackbird, two Starling, one Mistle-Thrush, and one Robin, all with eggs or young.

HERBERT MASSEY.

[This is a remarkably early date for the Moor-Hen, but curiously enough Mr. J. H. Owen informs me that on March 28th, 1912, he found a nest with one egg at Felsted, Essex. Exceptionally young, two or three days old, were found at Hoveton, Norfolk, on April 2nd (*cf. Birds of Norfolk*, II., p. 416) and Mr. O. A. J. Lee found highly incubated eggs on April 6th near Callander, N.B.—F. C. R. JOURDAIN.]

PERSISTENCE OF THE RIGHT OVARY AND ITS DUCT IN BIRDS. Mr. T. E. Gunn contributes a paper to the *Proceedings of the Zoological Society* (1912, pp. 63-79, Plates II.-V.) on this subject, in which he tabulates a number of observations made by himself as well as those published in our pages (*cf. Vols. IV.*, pp. 188-9, 216-8, V., pp. 45-9). Mr. Gunn shows in the early part of the paper that authors have made few and slight references to the presence of a second ovary. The majority indeed do not admit the presence of a right ovary at all in the adult female. He comes to the conclusion that neither death nor disaster is "the necessary or even common result of paired ovaries," and goes so far as to suggest that the suppression of the second ovary is a "retrograde step." Mr. Gunn has made observations on this point since 1892, and has come across forty-five instances of double ovaries. Of these thirty-three have been in the Falconidæ. The proportional figures are very interesting, and well worth reproducing here:—

Compiled from Mr. Gunn's notes, enumerating the species examined and the proportion of double ovaries occurring.

Specimens obtained in Great Britain.

A. Fal- conidæ (7 species) 33 out of 50 females exa- mined =66%	$\left\{ \begin{array}{l} \frac{10}{18} \\ =55.55\% \\ \frac{4}{6} \\ =75\% \end{array} \right.$	Sparrow-Hawk (<i>Accipiter n. nisus</i>) ..	14 out of 20 females examined				
		$\left\{ \begin{array}{l} \text{Kestrel } (Falco \textit{ t. tinnunculus}) \dots \dots \dots \\ \text{Hobby } (F. \textit{ s. subbuteo}) \\ \text{Peregrine } (F. \textit{ p. peregrinus}) \dots \dots \dots \end{array} \right.$	8	12	..	..
			1	2	..	..
			1	4	..	..
		$\left\{ \begin{array}{l} \text{Hen-Harrier } (Circus \textit{ cyaneus}) \dots \dots \dots \\ \text{Montagu's Harrier } (C. \textit{ pygargus}) \dots \dots \dots \\ \text{Marsh-Harrier } (C. \textit{ æruginosus}) \dots \dots \dots \end{array} \right.$	5	6	..	..
			3	4	..	..
			1	2	..	..

		Great Crested Grebe (<i>Colymbus c. cristatus</i>)	2 out of 4 females examined
B Families other than Falconidæ (7 species) 12 out of 101 females examined = 11.88%	}	Red Grouse (<i>Lagopus l. scoticus</i>) ..	3 ,, 17 ,, ,,
		Black Grouse (<i>Lyrurus t. tetricus</i>) ..	1 ,, 5 ,, ,,
		Bewick's Swan (<i>Cygnus b. bewickii</i>) ..	1 ,, 4 ,, ,,
		Water-Rail (<i>Rallus a. aquaticus</i>) ..	2 ,, 7 ,, ,,
		Woodcock (<i>Scolopar rusticola</i>) ..	1 ,, 50 ,, ,,
		Little Gull (<i>Larus minutus</i>) ..	2 ,, 14 ,, ,,

Compiled from Signora Cecilia Piechi's notes published in BRITISH BIRDS, Vol. V., pp. 45-9.

Specimens obtained in Italy, with the exception of two from Sardinia.

A. Fal- conidæ (11 species) 23 out of 48 females exa- mined = 48% (47.91).	}	} <i>Falco</i>	Sparrow-Hawk (<i>Ac- cipiter nisus</i>) ..	3 out of 7 females examined.	
			Kestrel (<i>Falco t. tin- nunculus</i>) ..	2 ,, 6 ,, ,,	
			Lesser Kestrel* (<i>F. n. naumanni</i>) ..	1 ,, ? ,, ,,	
			Merlin (<i>F. r. regulus</i>)	2 ,, 4 ,, ,,	
			Red-footed Falcon (<i>F. v. vespertinus</i>)	5 ,, 8 ,, ,,	
			Hobby* (<i>F. s. sub- butco</i>) ..	1 ,, ? ,, ,,	
			} <i>Circus</i>	Hen-Harrier (<i>Circus cyaneus</i>) ..	1 ,, 4 ,, ,,
				Marsh-Harrier (<i>C. aruginosus</i>) ..	4 ,, 6 ,, ,,
				Pallid Harrier (<i>C. macrurus</i>) ..	2 ,, 4 ,, ,,
				Common Buzzard (<i>Buteo buteo</i>) ..	3 ,, 6 ,, ,,
		Serpent-Eagle (<i>Cir- caëtus gallicus</i>) ..	1 ,, 3 ,, ,,		
B. Families other than Falconidæ (2 species) 2 out of 11 = 18%	}	Short-eared Owl (<i>Asio f. flammeus</i>) ..	1 ,, 5 ,, ,,		
		Rook (<i>Corvus f. fru- gilegus</i>) ..	1 ,, 6 ,, ,,		

* Not included in the figures, as the number of females examined is not stated.

BIRDS IN NORFOLK IN 1911.—Mr. J. H. Gurney's yearly report on Norfolk ornithology for 1911 (*Zool.*, 1912, pp. 121-39) does not contain much of importance which has not already appeared in these pages, but the following interesting facts may be mentioned:—

SERIN (*Serinus c. serinus*).—A male was caught in a net on the North Denes, Yarmouth, on January 28th.

RED-FOOTED FALCON (*Falco v. vespertinus*).—One was brought into Yarmouth on June 1st.

SPOONBILL (*Platalea l. leucorodia*).—One or two were seen on May 23rd and from 25th to 31st; one on June 6th; two from June 22nd to 27th—at various places in the county.

STONE-CURLEW (*Burhinus æ. edicnemus*).—One seen by the Rev. M. C. Bird on January 2nd near the coast, and the same bird again seen on January 20th.

RED-NECKED PHALAROPE (*Phalaropus lobatus*).—One at Yarmouth on September 15th.

AVOCET (*Recurvirostra avosetta*).—One at Breydon on July 15th and 16th.

COMMON CURLEW (*Numenius a. arquata*).—Mr. N. Tracy was shown a nest with three broken eggs near Lynn on May 31st (*cf.* nesting-record for 1910, Vol. IV., p. 88).

COMMON SNIPE (*Gallinago g. gallinago*).—A nest with three eggs was reported by the Rev. M. C. Bird on March 3rd, a remarkably early date (*cf.* Vol. V., p. 336).

HOODED CROW IN HEREFORDSHIRE.—A Hooded Crow (*Corvus c. cornix*) was caught on the Titley estate on April 17th, 1912. Only six previous occurrences of the bird in the county appear to be recorded (E. Cambridge Phillips, *Field*, 11 v.12, p. 941).

WHITE WAGTAILS IN EAST ROSS.—Two specimens of *Motacilla a. alba* were obtained by Miss A. C. Jackson, on September 16th, 1911, on the coast at Tarbatness (*Scot. Nat.*, 1912, p. 90). The White Wagtail has seldom been recorded from north-east Scotland.

WILLOW- AND MARSH-TITS IN NORTHUMBERLAND.—Mr. George Bolam has kindly sent me for publication the following extract from the appendix to his forthcoming work on *Birds of Northumberland and the Borders*.

Urged by Mr. H. F. Witherby, whose interest in tracing out the distribution of these birds is so well known, and who has most kindly examined the specimens in order to confirm my identification, I am able to state that a bird from my collection, now in the Museum at Newcastle (and for the loan of which I am indebted to Mr. E. Leonard Gill), which I shot near Allerdean Mill on 8th January, 1888, is a typical brown-headed example of the Willow-Tit. Its sex was not noted at the time, but my journal shows that it was one of a pair of birds which were frequenting the tall hedge running down the marsh between Scremerston and Unthank, where I used for many years to be accustomed to see a nest or two of these birds in the stumps of the ancient whitethorns. Scattered pairs breed in several places in that locality, as at Allerdean, Straker Strad, and Aneroft, as well as a little further afield in Berrington, and Haiden Denes, and elsewhere, and I have little doubt that some at least of these will turn out to be Willow-Tits. I have preserved several of them at different times in years gone by, but no more of these are

at present available for examination. On the other hand, there is a little doubt that the true Marsh-Tit is likewise common, in Northumberland at any rate but here again the only available specimens for precise determination, at the moment of writing, are a bird kindly sent me by Mr. Abel Chapman, which his man had killed at Houxty-on-Tyne, on 22nd February of the present year, and another obligingly sent to me by another good friend from Alhwick, near which it was obtained on 29th November, 1911. Both of these have been passed by Mr. Witherby as undoubted specimens of *P. palustris*. They are sufficient to establish the fact that both birds are widely distributed with us, and no doubt local residents will now pay greater attention to the matter and perhaps supply more definite records.

I may add that Mr. W. Portal has kindly sent me a specimen of a Marsh-Tit (*P. p. dresseri*) which was taken at Hexham on April 10th, 1912. H.F.W.

HOOPOE IN YORKSHIRE.—A Hoopoe (*Upupa e. epops*) is recorded by Mr. W. A. Durnford (*Field*, 11.v.12, p. 941) as having visited his garden at Elsecar near Barnsley for some six hours on May 4th, 1912. Mr. Durnford remarks that this is the second appearance of a Hoopoe at the same spot in the last three years.

TENGMALM'S OWL IN SHETLAND.—A specimen of *Egolius t. tengmalmi* was captured alive in a barn on January 23rd, 1912, at the north end of Unst (T. E. Saxby, *Scot. Nat.*, 1912, p. 90).

THE BILL OF THE YOUNG HERON.—Professor P. P. Sushkin contributes a paper to the *Proceedings of the Zoological Society* (1912, pp. 125-6 and Plate XII.,) on the "Ontogenetical Transformations of the Bill in the Heron (*Ardea cinerea*)."
In this paper he shows that in an embryo the bill is at first straight and rather slender, with the tip of the upper mandible conspicuously swollen and the culmen *concave*. The gape measures 12 mm. About a day before hatching the embryo's bill is thicker, its swollen tip not so prominent, and is slightly hooked and the culmen not so concave. The gape measures 22 mm. One day after hatching, the bill is larger and conspicuously thicker, and the swelling of the tip has almost disappeared. The gape now measures 25 mm. About three days after hatching, the bill has nearly assumed its conical shape, but is still relatively short and thick, and the tip is conspicuously hooked. The gape has increased to 32 mm.

STORM-PETREL IN CAPTIVITY.—Dr. C. B. Ticehurst contributes to the *Avicultural Magazine* (Vol. III., pp. 111-113) an interesting little paper of observations on a Storm-Petrel (*Hydrobates pelagicus*) which he kept alive for ten days by "cramming" it with fish-liver, though this is presumably nothing like its natural food. Dr. Ticehurst remarks:—

The Storm-Petrel *never* stands at rest on the webs, but on the whole length of its tarsus, in which position also it frequently walks, or rather shuffles, the head and neck being kept low; as it gets up speed it gradually raises up on to its webs, but in this position its balance is not good and the wings are frequently raised, no doubt to maintain the balance preparatory for flight. I clearly made out that there are two methods of starting flight, the one by shuffling along on the tarsi and then gradually getting up on to the webs and running along with the wings beating rapidly, the other by rapidly beating the wings vertically and sliding backwards on the ground or progressing backwards in the water; in the latter method, I believe an opposing wind to be necessary to help the bird, and I frequently saw it try to fly by this method when close to the door, under which a considerable draught was blowing.

Dr. Ticehurst believed that the bird found its food entirely by the sense of smell.

BLACK-TAILED GODWIT IN THE CROMARTY FIRTH.—Two examples of *Limosa limosa* were seen by Miss A. C. Jackson on the Cromarty Firth on September 13th, 1911, and another on September 30th (*Scot. Nat.*, 1912, p. 92).

THE SYRINX OF THE SCOLOPACIDÆ.—Mr. W. P. Pycraft describes and figures in the *Ibis* (1912, pp. 334-41) the syrinx of the Common Snipe (*Gallinago g. gallinago*), the Jack Snipe (*Limnocyptes gallinula*) and the Woodcock (*Scolopax rusticola*). They are markedly different, and a comparison shows that the Woodcock is the least specialized; but too much stress should not be laid upon the bird's "restricted vocal powers," for its curious spring-note beginning with a high-pitched "Twhit" followed by the deep "Burr-burr-burr" must be accounted for. Mr. Pycraft remarks that "the differences which obtain between the syrinx of the Jack Snipe and of the Common Snipe are at first rather surprising, but it must be remembered that they are correlated with a difference in the form of the posterior border of the sternum, which is double-notched, while in all the other Snipes so far examined this margin has but a single pair of notches. But the differences revealed by a comparison of the pterylography, of the convolutions of the intestines, and of the myology are negligible.

"From the evidence so far available, we must regard the Jack Snipe as entitled to the generic rank accorded it long since."

BLACK TERNS IN BEDFORDSHIRE AND HERTFORDSHIRE.—W. Todd writes that he saw a Black Tern (*Hydrochelidon n. nigra*) flying over the lakes in Woburn Park on May 3rd, 1912, and T. Lewis writes that he saw two among many Common Terns at Tring Reservoir, on May 4th. With

reference to the latter Mr. C. Oldham also writes: "Terns were present in some numbers on the large reservoir at Wilstone, near Tring, on the morning of May 4th, a day of light easterly winds. About thirty Common Terns were hawking over the water, and scattered among them were several Black Terns. It was not easy to ascertain their precise number, but there were five at any rate, for I had in view at one time four that were resting upon a rail in the water, and another was on the wing in their immediate vicinity. A Cormorant, a White Wagtail, unusual numbers of Common Sandpipers and of Swifts in flocks, showed that the migratory movement was not restricted to the Terns, as did a party of fourteen adult Lesser Black-backed Gulls which put in an appearance about mid-day. The Gulls dropped down to the water, but stayed only for a few seconds—indeed some of them did not actually alight—and then rose and drifted away to the north-east."

SANDWICH TERN NESTING NEAR ABERDEEN.—The Sandwich Tern (*Sterna s. sandvicensis*) appears to breed only sporadically on the east side of Scotland. Mr. A. L. Thomson records (*Scot. Nat.*, 1912, pp. 84-5) the finding of a nest with one egg on June 11th, 1910, in the midst of a large colony of Black-headed Gulls and Common Terns near Aberdeen. The egg subsequently disappeared, so that the identification rests upon the knowledge of the distinctive character of the egg possessed by Mr. Thomson and Mr. A. G. Davidson, who also saw the nest. Single birds or small parties have been noted on this coast in the spring and summer on several occasions each year since 1908, as well as in the autumns of 1907, 1908, and 1910.

EARLY ARRIVAL OF THE COMMON TERN.—Mr. G. Stout states (*Scot. Nat.*, 1912, p. 92) that he saw three examples of *Sterna hirundo* on February 24th, 1912, at Cardross, on the Clyde. On Mr. Eagle Clarke's authority this is the earliest recorded date for the bird's arrival in the British Isles. In the next number of the same journal (p. 117) however, Mr. J. R. Lawrence asserts that he saw three "Terns" near Davaar Point on February 1st, and a flock on February 4th, and remarks that he is well acquainted with the bird at Pentland Skerries.



LETTERS



“ ON INCUBATION.”

To the Editors of BRITISH BIRDS.

SIRS,—Mr. Dunlop's interesting article on “ Incubation ” in your last number (Vol. V., pp. 322-7) tends to throw a new light on an old subject, but it seems to me that the writer does not distinguish sufficiently between “ standing over the eggs ” and incubation proper. For instance, it is the common and normal practice among domestic pigeons for one parent or the other to be in constant attendance on the nest after the laying of the first egg, but incubation does not begin until the laying of the second egg forty-six hours later, and the young invariably hatch out practically simultaneously. Again, Moor-Hens (*Gallinula chloropus*) always hatch the whole of their brood at the same time, and until the whole clutch is laid the eggs are never warm. With regard to the Grebes, the writer seems rather confused. The covering of the eggs by vegetation is surely a more effective mode of concealment than the bird herself, and as the bird has no special means to drive off would-be enemies, her presence before incubation commences would be a source of danger rather than of safety. The presence of the parent bird standing over the eggs and thereby concealing them is undoubtedly true for some species, but the cases in which *incubation* begins with the laying of the first egg are much scarcer and must not be confused with the former habit.

J. LEWIS BONHOTE.

SIRS,—In Mr. Eric B. Dunlop's article on “ Incubation,” in the May number of BRITISH BIRDS (Vol. V., p. 324), he refers to the Moor-Hen (*G. c. chloropus*) as “ ovitegous.”

This is entirely contrary to my experience. Of many nests examined, mainly in the Epping Forest district of Essex, I have not come across an instance of the bird commencing to sit before the completion of the clutch. In the case of two nests which I had under close observation during 1911 and 1912 respectively, on a small pond at Woodford, the bird was rarely to be seen in the vicinity of the nest before the full clutch was laid, but spent the day on a larger sheet of water some 300 or 400 yards distant.

Moreover, in the case of the 1911 nest, the eight young were all hatched during the course of one day, five during the morning and three during the afternoon, and not on successive days, as would have been the case had some eggs been incubated longer than others.

It may be of interest to record that shortly after leaving the egg each young bird joined the other parent, which kept up a continual calling-note in some rushes on the other side of the pond. This, however, was probably due to the fact that I examined the nest several times during the day, and consequently alarmed them.

C. L. COLLENETTE.

THE LIFE OF SIR WILLIAM JARDINE.

To the Editors of BRITISH BIRDS.

SIRS,—For some time past I have been engaged in writing the "Life" of Sir William Jardine, the naturalist.

Would you be so good as to insert this letter in your Magazine, in the hope that, if it catches the eye of anyone who may be able to assist me, either by letters from Sir William Jardine or from personal acquaintance, they will communicate with me.

HUGH S. GLADSTONE.

THE STOMACH OF A WATER-RAIL.

To the Editors of BRITISH BIRDS.

SIRS,—On opening the stomach of a Water-Rail (*Rallus aquaticus*) I found a small stomach inside the ordinary one. This small stomach was $1\frac{1}{4}$ em. across and open at one end, but unfortunately it had been cut into so that I was unable to see how it was attached. In colour it was slightly paler than the ordinary stomach, but otherwise exactly resembled it except in size. When found it contained food. The stomach has been sent to Sir John McFadyean, who says that it is lined by mucous membrane with tubular glands, and is undoubtedly a true digestive stomach. A microphotograph of a section of the small stomach is enclosed. The bird was a female and in good condition.

MARJORY GARNETT.



REVIEWS

The British Warblers. A History with Problems of their Lives.
By H. Eliot Howard, F.Z.S., M.B.O.U. Part VI.
Coloured and Photogravure Plates. R. H. Porter. 21s.
net per Part.

IN this Part* of his interesting work Mr. Howard discusses the breeding habits of the Willow-Warbler and Savi's Warbler, and gives a short description of the Rufous Warbler, while the photogravures and coloured plates (issued subsequently) are by Mr. Grönvold at his best. We may here remark that it might be stated on the coloured plates, as to whether the specimen depicted is in summer or winter plumage.

In his account of the Willow-Warbler the author discusses at some length whether migrants such as the Warblers return to the same nesting-place, and whether the female seeks her former mate. Mr. Howard has already given us plenty of evidence to prove that, in the Warblers at all events, the male chooses and defends the "territory" in which breeding takes place, and that he arrives in advance of the female. He here brings forward some strong arguments to show that the male cannot wait deliberately for the return of his previous year's partner, as in certain contingencies (such as the death of the female) he would lose the chance of reproduction. "An individual," writes Mr. Howard (pp. 8-9), "that did not seize the first opportunity offered to it of pairing would not reproduce so frequently as one that did, and its descendants, if they inherited a similar tendency to hesitation, would gradually be eliminated. It would doubtless be untrue to say that the same male and female never meet, since according to the law of chance a reunion must in some instances take place, but to lay it down as a rule that the same individuals meet again and again in consecutive seasons and are consequently paired for life is a different matter, for there can be no rule of that kind unless some useful purpose were thereby served."

In our review of Part III. (see Vol. III., pp. 62-4) we ventured on some suggestions with regard to this matter, and we may take Mr. Howard's discussion in the Part now before us as an answer to those suggestions. We admit the strength of his arguments, but we cannot believe that he has got to the bottom of the matter, and since we brought forward in

* For notices of previous Parts, see Vol. II., pp. 67-8; Vol. III., pp. 62-4; Vol. IV., pp. 62-4 and p. 320.

the review above mentioned the case of the Wryneck nesting for many years in the same tree, actual proof by "ringing" has been forthcoming in two instances that the same pair of migrants (Swifts) has bred in the same spot for at least two years in succession (*cf.* Vol. V., p. 165). We have also several records of one of a pair of Swallows returning to the same place but the sex of these is doubtful, and one case of a male House-Martin (*cf.* Vol. III., pp. 299, 399; V., p. 102, and *supra*, p. 13). Then we have the record of the Wood-Warbler caught on a nest in 1910 and caught again on a nest within eighty yards of the same place in 1911 (Vol. V., p. 57). Here again however, the sex of the bird is not certain, but it was in all probability the female. We have little doubt that "ringing" will produce further "hard" facts in connexion with this subject, and meanwhile the records already to hand must be considered before Mr. Howard's theories can be accepted.

In habits the Willow-Warbler is very similar to the Chiff-chaff, but it is interesting to note that the two species express their emotions by different actions, and the "wing-flapping" of the Willow-Warbler seems a distinctive feature of its sexual activity. It is noted, too, that the two species have a mutual antipathy which results in frequent battles, and this is the more likely since their habits, food, and habitats are so similar. An interesting case of polygamy in the Willow-Warbler is recounted, and there are many other observations due to the author's extremely careful watching which we have not space to mention.

The account of the life-history of Savi's Warbler is rather meagre, but this is a bird which we have, unfortunately, long lost as a breeding species. H.F.W.

A Catalogue of the Vertebrate Fauna of Dumfriesshire. By Hugh S. Gladstone. Dumfries: Maxwell. 5s. net.

THIS is a neat little work, giving a list of the species and a very brief account of their status in the county. The bird portion is taken from the author's *Birds of Dumfriesshire*, brought up to date by the *Addenda*, which we have already noticed. (Vol. V., pp. 256-7). The new matter referring to the other classes of vertebrates is beyond our province. The book is provided with a map and an index.



ROBERT SIBBALD BART M.D.

1701 Aetatis 80

ROBERT SIBBALD, AFTER THE ENGRAVING IN SIR WILLIAM
JARDINE'S "NATURALIST'S LIBRARY."

BRITISH BIRDS

EDITED BY H. F. WITHERBY, F.Z.S., M.B.O.U.

ASSISTED BY

REV. F. C. R. JOURDAIN, M.A., M.B.O.U., AND NORMAN F. TICEHURST, M.A., F.R.C.S., M.B.O.U.

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ROBERT SIBBALD AND HIS PRODROMUS.

BY

W. H. MULLENS, M.A., LL.M., F.L.S.

[PLATE 2.]

THE first attempt to treat of the Fauna of Scotland on a comprehensive scale* was that made by Robert Sibbald in his *Scotia Illustrata sive Prodrromus Historiæ Naturalis*, published in Edinburgh in 1684. This "Prodrromus," or "Fore-runner," which Sibbald produced after a labour of twenty years,† was the result of an attempt on his part to compile a geographical and historical account of Scotland, including a description of the natural history of that kingdom. Undertaken at the instance of his patron the Earl of Perth, the actual production of the "Prodrromus" seems to have been due to the command of Charles II., whose physician and geographer Sibbald was, and although it entailed on him, as he tells us, "great pains and very much expense in buying all the books and manuscripts I could gather . . . and procuring information from all parts of the country, even the remote isles," his only reward was, according to his own account, a fee of a hundred guineas, bestowed on him by James VII.‡ in March. 1685.

The full title and collation of the "Prodrromus" is as follows :—

Scotia Illustrata / sive / Prodrromus / Historiæ Naturalis/
in quo / Regionis natura, Incolarum Ingenia & Mores,
Morbi iisque medendi Methodus, & / Medicina Indigena
accurate explicantur : / ET / Multiplices Naturæ Partus
in tripliee ejus Regno, Vegetabili scilicet, Animali &
Minerali / per hancee Borealem Magnæ Britaniæ Partem,
quæ Antiquissimum Scotiæ / Regnum constituit : undi-
quaque diffusi nunc primum in Lucem eruuntur, & varii
corum Usus, Medici præsertim & Mechanici, quos ad
Vitæ / cum necessitatem, tum commoditatem præstant,

* Some ornithological matter is contained in the writings of Hector Boethius or Boece (1465-1536), and of George Buchanan (1506-82). They both wrote Histories of Scotland.

† *cf.* title-page of "Prodrromus."

‡ James II. of England.

eunetis / perspicue exponuntur. / Cum Figuris Aeneis / Opus viginti Annorum / Serenissimi Domini Regis Caroli II Magnae Britanniae &c. / Monarche Jussu editum. / Auctore Roberto Sibbaldo M.D. Equite Aurato, Medico & Geographo / Regio, & Regii Medicorum Collegii apud Edinburgum Socio / Edinburgi, / Ex Officina Typographica Jacobi Kniblo, Josuae Solingensis / & Johannis Colmarii, Sumptibus Auctoris / Anno Domini M. D. C. LXXXIV, 1 Vol. Folio.

Collation pp. 4 un. + pp. 18 + pp. 18 un. + pp. 102 + pp. 6 un. (Pars Prima) + pp. 6 un. + pp. 114 + pp. 6 un. (Pars secunda, liber primus & secundus) + pp. 6 un. + pp. 56 (Pars secunda, liber tertius) + pp. 2 un, & 22 plates.

Birds are dealt with in the Third Book of the second part, pp. 11-22, and again on p. 36 of the same book, where under the heading "A discourse of the geese of Scotland," the well-known fable of the generation of the Barnacle-Goose from "seeds and rotting timber," is discussed and confuted.

Although the ornithological matter in the "Prodrumus" is far inferior to that contained in Willughby's *Ornithology* (1676), much of Sibbald's information being derived from "the communications of ignorant and credulous correspondents,"* it nevertheless contains much that is of interest and importance. It is perhaps best, however, to let Sibbald's remarks speak for themselves, and as the original work is printed in obscure and somewhat involved Latin, we have appended a free translation of Sibbald's account of the birds of his native country, omitting only those parts which are of a medical nature, and adding some few brief annotations where necessary. †

* The "Prodrumus" was severely attacked by Dr. Archibald Pitcairne (1652-1713), a contemporary of Sibbald's, and eminent as a Physician, Mathematician, and Poet, in a work entitled *Disertatio de legibus Historicae Naturalis*. Edinburgh 1696.

† It is almost impossible at times to translate Sibbald's Latin literally, but an attempt has been made to preserve the correct sense as far as possible. My best thanks are due to Mr. Hugh S. Gladstone of Capenoch, for placing at my disposal a translation and notes of the "Prodrumus."

[Translation of Sibbald]

CONCERNING BIRDS.

CHAPTER I.

OF BIRDS IN GENERAL.

. . . Certain of them migrate, others do not depart or hide themselves far away from the places they usually frequent.

CHAPTER II.

OF THE CARNIVOROUS LAND BIRDS.

. . . The Eagle places its nest in steep and inaccessible places, such as the highest rocks or trees, so that it may not be disturbed by hunters or hostile beasts, and that its young may be the more securely guarded from any harm. When hunting for its prey it despises the smaller and attacks the larger animals such as kids* and fawns. The learned Matthew Mackaile, a chemist of Aberdeen, informs me that there are very many Eagles in the western parts of the main island of Orkney, which is called Pomona, as is also the case in the Island of Hoy, and that one of them seized an infant of a year old, wrapped up in a shawl, which his mother had laid down for a moment at a spot called Houton-head, while she was collecting peats for the fire, and carried him to Hoy, a distance of some four miles, which event being made known by the shrieks of the mother, four men set off in a small boat, and knowing where the nest was, they recovered the infant, untouched and unhurt.

The Eagles which are found among us are, as I am informed :
Chrysaetos [the Golden Eagle], which derives its name from the yellow colour of its plumage.

Haliaeetus, the Sea Eagle or Ospray.

Melanætos, in one of the Orkney Islands.

Pygargus Hinnularius (so called because according to Turner† it preys on fawns). an Erne [the White-tailed Eagle].

The smaller diurnal birds of prey are called Accipitres : these are either of the more noble kind which are wont to be tamed and trained for Hawking, or of the baser and more cowardly sort, which either because they cannot be taught, or are but of little use for Hawking are neglected by man.

* Literally "wild she-goats."

† William Turner (1500-68) author of *Avium Præcipuarum brevis & succincta historia*, Cologne, 1544. Turner says "Pygargus, if I err not, in the English tongue is called an Erne."

The former sort are by our people termed Hawks, and by fowlers are divided into long-winged and short-winged hawks, the long-winged being those in which the wings when folded extend almost to the end of the tail.

The nobler of the long-winged hawks usually trained for fowling among us are :—

Falco gentilis [the Peregrine] Tercell-gentle [Tercell, the name applied in falconry to the male hawk of different species] in Ross and the Orkneys.

Falco sacer, the Sacre [possibly the female Peregrine].

Gyrfalco, the Gerfalcon.

Falco Gibbosus. Can this be our Hobby-female* [gibbosus, i.e. hunch-backed, it is futile to attempt to identify this or many others of the birds Sibbald mentions ; he evidently described most of them from hearsay].

Accipiter Æsalon, Merlin the female, Jack the male.

Tinnunculus male and female, Stanchel [the Kestrel].

The short-winged Hawks, the wings not reaching to the tail, among us are :—

Accipiter Palumbarius, the Goshawk. The male is called the Tercell.

Accipiter Fringillarius, or Nisus, the Sparrow-hawk.

The baser kind, or unteachable long-winged hawks are :—

Balbusardus, the Bald Buzzard [the Marsh-Harrier].

Buteo Vulgaris, the Buzzard.

Subbuteo, by some called *Buteo albus*, the Ring-tail [the female Hen-Harrier].

Milvus, the forked-tail Kite, or Gled.

Milvus palustris, the Bog-gled. Is this the *Milvus Æruginosus* of Aldrovandus ? †

Milvus Albicans. Is this the *Lanius albicans* ?

Milvus niger, a black Gled. Is this the *Lanius* ?

Milvus similar in colour to the ash-coloured falcon. Is this the *Lanius Cinereus* ?

Cuculus, the Cuckow.

The nocturnal birds of prey among us, from hearsay (or according to my witnesses) are :—

Bubo maximus, of a black and dusky colour. In the Orkneys [the Eagle-Owl].

Otus, or *Noctua Aurita*, the Owl with feathers standing above his ears [the Long-eared Owl].

* The Hobby is now a very rare visitor to Scotland.

† Ulyses Aldrovandus (1522-1605) author of *Ornithologiae de Avibus Historiae*, Libri XX. Bologna, 1599-1603.

Noctua, the common Gray Owl.

Strix, the Scritch Owl [the Tawny Owl].

Aluco minor of Aldrovandus, the White Owl, or Church-Owl [the Barn-Owl].

Nycticorax, the Night-Raven, and this seems the same as the Caprimulgus of others [the Nightjar].

Vespertilio, a Bat or Flitter mouse [classed among the birds by most of the earlier writers].

Birds with thick and somewhat long and straight beaks among us are :—

Corvus, the Raven, among our folk the Corbei.

Corvus Cinereus. Is this a kind of Vulture ?

Corvus minor, the Carrion-Crow.

Corvus semicinerus. Is this the Hooded Crow of our country people ?

Cornix—the Chough.

Spermologus frugivorus, the Rook.

Cornix Aquatica.

Coracias, the Cornwall Kae.

The frequent crowing of Choughs foretells showers.

Graeculus, or Monedula, a Jackdaw, a Kae.

Concerning the Pica tribe :—

Pica varia Caudata [the Magpie].

Pica Glandaria, the Jay (Glandaria=acorn-eating).

Among Woodpeckers the following are found with us :—

Woodpeckers have a straight, hard, angular and sharp pointed beak, adapted for boring trees : their feet have two claws in front and two behind. They feed solely on insects.

Picus viridis [the Green Woodpecker—this bird is very rare in Scotland, as are also the two next mentioned].

Picus varius minor [the Lesser Spotted Woodpecker].

Picus Cinereus [the Nuthatch. *cf.* Willughby's *Ornithology* 1, 142].

Accompanying the above is :—

Upupa [the Hoopoe] in the Merse* and Orkneys. On its head it has a crest two fingers breadth in height. A fine description of it is given by the learned Willughby in his *Ornithology*, Book 2, p. 100, and a figure of the bird is to be found on plate 24 of that work.

The Fish-eating land birds among us are :—

Ispida, the Kings-fisher [the old form of our modern Kingfisher].

* The Merse = " Marcia : The Country of the Mers or March, commonly called the Sheriffdom of Berwick."

CHAPTER III.

Of grain-eating birds.

Among these are birds with shorter and smaller beaks and white flesh, which form the Genus Gallinaceum, of them we have the following :—

Gallus Gallinaceus and Gallina Domestica. There are many kinds or varieties of these with us, such as those with feathered feet, etc.

Capo [the Capon]. The flesh of this bird takes the highest place, being preferred to that of the Partridge ; it has an excellent flavour and is easily digested.

Pavo, the Peacock.

Gallopavo, Meleagris, a Turkey [Meleagris, generally applied to the Guinea-fowl] the flesh of the young is preferable, as being more tender.

Phasianus, the Pheasant. It is reared in the establishments of certain of the nobility. The flesh is of good taste and delicate savour.

Perdix Cinerea, the common Partridge. The flesh is very good and most nutritious.

Coturnix, the Quail. The flesh for excellence of flavour and delicacy of taste is considered equal to that of the Partridge.

Ortygometra. Is this the Land-Rail ?

Crex, the Daker-hen, with us the Corn-crek, found in the cornfields. Ortygometra (which is Crex) affords food of the same flavour as the Quail and is of delicate quality.

Fowl frequenting woods and eating plants and berries. Those with red, or scarlet eyebrows :—

Urogallus, Tetrao major of Aldrovandus, Cock of the Wood.—Is this our Capercalze ? The hen is called Grygallus Major by Gesner* and Aldrovandus. There is a figure of the male and female in the plates [see Plates 14 and 18 of the “Prodromus”].

By our writers are mentioned the Abietina and Betulea, which are said to feed on the buds of the same kind of trees. Their flesh is of pleasing flavour.

Tetrao or Urogallus minor of Aldrovandus. Gallus Scoticus and Gallus palustris Scoticus of Gesner, called by us the Black-Cock, common on our moors and marshes. The hen is called Grygallus minor by Gesner and Aldrovandus. It provides most delicate food.

* Conrad Gesner (1516-61) author of *Historiæ Animalium*. Zurich, 1555.

Tab. 13



Geo. Main, fecit

PLATE 14 OF THE "PRODROMUS," DEPICTING THE HEN
CAPERCAILLIE AND THE GREAT SKUA.

The bird *Lagopus*, according to Aldrovandus the White Partridge of Savoy or Francolin of the Italians: with us, the Ptarmigan. The flesh is of marvellous flavour and good nourishment.

There is another *Lagopus* of Pliny, similar to the *Attagen* of Aldrovandus, or the Francolin of the Italians, if it be not exactly the same. The Moor-cock, among our country folk the moor-fowl [the Grouse]. The flesh is extremely tender, especially that of the young birds, and very nourishing.

The kind of fowl lacking the hinder toe:—

Otis, the slow bird of Aldrovandus. This seems to be that which is called *Gustard* by our writers [the Great Bustard]. In size it is fully equal to a turkey. It is said to frequent *Merse* and I was recently informed that one had been seen in *East Lothian* not long since.

Hector Boethius says that the *Gustard*, as he calls it, is not unlike the Partridge in plumage and flesh, but in size of body it exceeds the swan.

Birds which dust and wash themselves:—

Columba Domestica, or *Vulgaris*, the Common Pigeon or Dove. This Pigeon either has bare feet and is of greater or less size, or has feathered feet, being of the larger size, and crested of the lesser size; or it is the trembling pigeon.

The wild Pigeons found amongst us are as follows:—

Turtur [the Turtle-Dove].*

Palumbus torquatus, the Ring Dove.

Oenas or *Vinago*, the Stock Dove or Wood Pigeon † [the true Wood-Pigeon is mentioned above as *Palumbus torquatus*].

Columba Rupicola [the Rock-Dove].

The Thrush Family.

Under this title are included both Blackbirds and Starlings. These birds have this much in common, as regards size they come between the Pigeons and Larks, their beak is of medium length and thickness, bent slightly downwards, the mouth within is yellow—the tail long. The food consists of berries and various insects, and they are Song Birds. The following are found with us:—

Turdus Viscivorus, the Shreitch [the Mistle-Thrush].

* An uncommon visitor to Scotland.

† Formerly very rare in Scotland, now increasing in numbers.

Turdus, simply so called, or *Viscivorus minor* [the Song-Thrush].

Turdus Pilaris, the Field-fare. It flies over to us about the end of Autumn: it feeds on Holly and Juniper berries. Its flesh is valued at banquets.

Turdus Iliacus or *Illas*, or *Tylas*, the Red wing or Wind-Thrush. The picture of it in our plates [No. 13] is drawn by the hand of that most noble lady and heroine, the Countess of Errol.

Merula Vulgaris, the Blackbird.

Merula Torquata [the Ring-Ouzel].

Sturnus, a Starling. Among the Italians it is served at table. It can be taught to speak perfectly,* and to imitate the voice and cry of any kind of animal.

Now we have to treat of little birds, which are either thin-beaked and for the most part insectivorous, or thick-beaked. First of all about the thin-beaked birds, among which we reckon the Larks.

CHAPTER IV.

OF LITTLE BIRDS.

The small birds among us which have slender beaks are these: The Lark, distinguished from other birds by the very prolonged claw of the heel or hinder digit, as also by its song, which it utters when flying on high.

Alda vulgaris, the common Lark. It has a sweet and delicate flesh [the Sky-Lark].

Alda Arborea, the Wood Lark [possibly the Tree-Pipit].

Alda Pratorum, the Tit Lark [the Meadow-Pipit].

Alda Cristata.

The Swallow has a large head in proportion to the size of its body. A short beak, short and narrow feet, very long wings, a long and forked tail. Its flight is agile and almost unceasing. This bird is a messenger of Spring. Of its species there are among us:—

Hirundo Domestica, the common House Swallow.

Hirundo Riparia, the Sand-Martin or Shore-bird.

Hirundo Apus, the Black-Martin [the Swift].

Thin-beaked birds which have the tail of one colour:—

Curruca is almost as large as a Tit-lark or Robin: the beak is thin, rather long and black.

The bird similar to the Stoporella.

Ruticilla, the Redstart.

Rubecula, the Robin red-breast.

Luscinia,* or Philomela, see *Historia Naturalis* of John-
stonus† where he states that ours sings less sweetly than
others.

Passer Troglodytes of Aldrovandus, incorrectly *Regulus*,
the Wren.

Thin-beaked birds which have the tail of two colours :—

Oenanthe Tertia, *Muscicapa Tertia* of Aldrovandus. The

Rubetra of Belon,‡ the Stonechatter [the Wheatear].

Motacilla Alba, the white Water Wagtail.

Motacilla flava [the Yellow Wagtail].§

Small birds with short, but larger beaks :—

Parus major, the Oxeeye [the Great Tit].

Parus Caeruleus [the Blue Tit].

Parus Sylvaticus of Gesner, very small but conspicuous
for having a red spot through the middle of the top of
the head each side being black [probably the Gold-
crest].

Small birds with large, thick and strong beaks :—

Chloris, the Green-Finch.

Rubicilla or Pyrrhula of Aldrovandus, a Bull-finch, Alp
or Nobe ; there are various species of this among us.

Loxia or Curvirostra, its bill being curved back on either
side, the Cross-bill.

Passer Domesticus [the House-Sparrow].

Passer Campestris [the Tree-Sparrow].

Fringilla, among us called Snowfleck and Shoulfall
[possibly the Snow-Bunting ; Snowfleck being one of
its provincial names in Scotland].

Carduelis, the Gold-finch.

Linaria vulgaris, the common Linnet.

Serinus of Gesner. Is this the bird which is called the
Thrissel-cock by our people ? But our bird differs in
size from a common Linnet, and has pied and green
feathers [possibly the Siskin].

Embriza alba of Gesner, akin to the Lark, according to
Aldrovandus. The Bunting.

Citrinella, the Yellow Youlring [the Yellow Bunting].

* Luscinia—The Nightingale ; this bird is not, however, known to
breed north of Yorkshire, and has only once occurred as a straggler in
Scotland.

† John Johnston (1603-75) author of *Historia Naturalis*. Frankfurt-
on-Maine, 1650.

‡ Peter Belon (1518-64) author of *L'Historie de la Nature des Oyseaux*.
Paris, 1555.

§ This is the literal translation : but the bird meant is probably the
Grey Wagtail, which is much commoner in Scotland than the Yellow.

Luteola, a Bird of a bright yellowish colour. Back and belly.

This will suffice for the land birds, we now have to treat of the water birds, of which there are a great number, on account of the countless lakes and the ambient sea, studded with islands.

CHAPTER V.

OF WATER BIRDS, WITH DIVIDED FEET.

Water birds are either those with divided feet, which live near the water and usually seek their food in watery places, which nevertheless do not swim on the water (these are nearly all long-legged, the leg being naked to a little above the knee, so that they may wade in the waters more conveniently) or web-footed, which swim on the water, and for the most part have short legs.

Grus, the Crane—sometimes comes to the Orkneys.

Ardea Cinerea major, the common Heron.

Ardea Stellaris, the Bittern, known amongst us as the Buttour.

Platea or *Pelecanus* of *Aldrovandus*, the *Lepelaer* of the Low Countries. This comes to us sometimes. [The Spoonbill.]

Scolopax, the Woodcock, its flesh is of the finest flavour.

Gallinago minor, the Snite or Snipe. It is of delicate taste.

Birds with thin, very long and curved beaks :—

Numenius or *Arquata*, the flesh is of excellent flavour, there is a picture of it in our plates. [Plate 12 of the “*Prodromus*” : this is the Common Curlew.]

Elorius Rondel [possibly the Whimbrel].

Water birds, which are not fish eaters, with thin beaks of medium length :—

Himantopus of *Pliny*, which should be treated of at some length in this history, because it has not been identified by any of those who have treated of Natural History in their writings.

This bird [the Black-winged Stilt] (of which two pictures, a larger and a smaller one, are given in our plates, drawn from the bird itself), was sent to me by *William Dalmahoy*, an officer of the Royal Guard, and one very well acquainted with the history of birds.

It had been shot with a gun, at a lake near the town of *Dumfries*, where also another was afterwards shot, but lost through the carelessness of a soldier.

By the common consent of the learned, this is the bird which under the name of *Himantopus*, is described by Pliny in these words:—"The *Himantopus*, which is much smaller, although of the same length of leg. It is bred in Egypt, stands on three toes, principally feeds on flies, lives in Italy for a few days.

Birds drink by suction, that is, those that have a long neck, a little at a time and with the head thrown back, as though pouring the water into themselves.

The *Porphyrus* [the Purple Gallinule] alone drinks by sips, the same bird being of a kind by itself, dipping all its food under the water, and then lifting it to its beak with its foot, as though it were a hand," which he (Pliny) says also applies to the *Himantopus*.

The name, according to some, is derived from the blood-like colour of its legs, others derive it from its feet, as though it were bow-legged, for its legs are very long and slender, for that reason certain people of Aethiopia, who move with a crawling gait (as Solinus interprets it), their legs being bent, are called *Himantopodes*, by Pomponius Pliny.

Oppian certainly writes, that the birds . . . obtain their name from the slenderness of their legs.

Aldrovandus who conjectures that Pliny speaks of this bird, describes and depicts it amongst the water-fowl, on the authority of *Ornithologus** [Gesner] who named it *Erythropodes*, so, also, does that most accurate writer, the learned Willughby describe it.

But this *Himantopus* is white over the whole belly, breast and lower neck, and also on the head between the eyes ; but above the eyes it is black, and on the back and wings it is of a black or dusky colour. The bill also is black, it is a span or more in length, slender and fit only for consuming wood-lice or other insects. The tail shades from white to ash colour, it is white underneath. On the back of the neck are black spots tending downwards ; the wings, legs, and thighs are of marvellous length, but very slender and fragile, and they are all the weaker for standing on, because the hind toe is lacking, and the front toes are short for the length of the tibia, so that the bird would properly be called *Himantopus* or *Loripes*.

The toes are of almost equal length, of a blood-red colour, the middle one is slightly longer. The claws are small, black and somewhat re-curved.

So far as I can make out none of the writers (on Natural History) had seen this bird. Aldrovandus, indeed, takes from *Ornithologus* [Gesner] a figure described from the skeleton

* Aldrovandus plagiarised freely from Gesner, whom he quoted as "*Ornithologus*."

of a bird sent by Dalechamp,* but it has this mistake, that the thighs are much shorter than the tibia, and it figures the bird with bent legs, because that was the position of the legs in the skeleton, in which perhaps the legs had shrivelled up, which errors, most recent writers about birds have copied in their drawings.

I have taken care that my figures should represent the bird as it actually is, and I have given as accurate a description of the bird as I am able, from the bird itself.

In size it slightly exceeds the Lapwing. The length of the whole bird from the top of the head to the end of the middle toe is twenty inches. The beak straight, and two and a half inches in length, the upper part of the beak is longer than the lower, by the ninth part of an inch. The neck is three inches long; from the neck to the tip of the tail is seven inches and one-eighth. The length of the wings from end to end is eight inches and seven parts of an inch.

The length of the legs, tibia, feet and toes, from the trunk of the bird, where they join on, to the claw of the middle toe is about twelve inches. The upper part of the leg, covered with feathers and muscle, measures one and a half inches; from where the feathers cease to the joint, connecting the tibia with the leg, three and a half inches.

The tibia, from the joint of the thigh to the joint of the foot, is four inches and six parts of an inch in length. The foot from the joint of the tibia to the end of the middle toe, is one inch and five parts of an inch long.

The middle toe is longer than the second, or outer toe, by two parts of an inch. The outer toe exceeds the inner and shortest toe by one part of an inch.

The whole beak is black, furrowed on each inner side. The tongue is white, short, and tapering from a broad base to a narrow point, at its extreme end it reaches to no more than a third part of the beak.

The wings extend on each side beyond the end of the tail, by one and a half inches. The tail is three inches and one part of an inch long. The body is light and slender, almost like those birds of the marshes which we call Water-hens.

The colour on the head and lower neck is white, on the back and wings, black, mixed somewhat with a greenish tint.

The upper part of the tail, and upper neck, shaded from white to ash colour, the under parts are all white, and the upper part of the head is also white.

* James Dalechamp (1513-88), a celebrated French physician and annotator of Pliny.

The legs are blood-red colour, as also the three toes, of which the middle is the longest, the inner one the shortest.

The middle and outer toes are joined by a very small membrane. Ornithologus [Gesner] adds, "The cavity of the knee is remarkable, the joint so flexible that even in the skeleton the tibia may be bent back to the femur."

This bird truly appears from its structure to be more fitted for flying than running; certainly progress would seem to me, to be more difficult unless balanced by an equal expansion of the wings, its legs and feet being so long and slender.

Oppian, treating of these birds says that there is this peculiarity about them, that the lower jaw being fixed, the upper jaw alone is moveable; but in the specimen before us, the movement of the jaws does not differ at all from that of other birds, as appears from the joints in the skeleton.

Bellonius* wrongly gives the *Pie-de-mer*, *Pica Marina*, for the *Himantopus* of Pliny, as is manifest from consideration of the picture and description he gives of it.

Fair-minded readers will pardon me from presenting the description of this bird at such length, because the accepted errors about the bird had to be exploded, and its likeness had to be drawn according to its real nature.

Haematopus, the *Pica Marina* of Belon.

Gallinula Erythropus major of Gesner. The Red-Shank, or Pool-Snipe.

The bird called the Stint, is this the *Cinclus Prior* of Aldrovandus?

Insectivorous water birds with short beaks:—

Capella, or *Vanellus*, the Lapwing or Bastard Plover [the Green Plover].

Pluvialis viridis, the Green Plover [the Golden Plover].

Pluvialis cinerea flavescens, called *Squaturola* by the Venetians [the Grey Plover]. These birds are used for food, they are of delicate flavour and easily assimilated.

Morinellus, common in the Merse [the Dotterel]. It is in request for food on account of its excellent flavour

Charadrius, the Sea-Lark.

Birds which swim on the water and have separated feet, their toes having no side membranes attached:—

Gallinula Chloropus major of Aldrovandus, the Common Water-hen.

The Water-rail† of our own country—of this bird the description has been sent me by Mr. F. Brown, a very learned man.

* Peter Belon.

† The description is, of course, that of the Water-Hen not Water-Rail.

It is of the size of a Lapwing, its plumage becoming blacker from the crown of the head to the tip of the tail, it is ash-coloured on the belly, and snow-white on the under side of the tail. Its beak is almost as long as that of the Pigeon, but broader and thicker. The upper part of the beak is of two colours, the higher portion reaching from the eyes to the centre is red and prominent, so that you might fancy a piece of wax had been put on it, similar to that with which we are wont to seal our letters. But the remaining portion is green. The skin of the legs and thighs is greenish, except that part where the leg begins, which has a crimson circlet like a garter. Its tail is bent over its back, like a little dog when running, and it walks on the top of the waters.

Swimming birds with side membranes extending from the toes :—

Fulica, the Coot.

CHAPTER VI.

Of web-footed birds, three-toed web-footed birds, or those lacking the hinder claw :—

Alka Hoieri* the Auk, the Scout of our country folk. It is found on the island of Bass, its eggs are larger than a hen's, and are marked with black spots, it is used for food. [The Razorbill, *cf.* Willughby, p. 323.]

Lomwia of Hoierius, found on Fair Island. [Possibly the Red-throated Diver.]

The Arctic Duck of Clusius† of which a picture is given in our plates. [Plate 16 of the "Prodromus," according to the Index. The figure in the Plate is that of the Puffin.]

A bird called Columba Groenlandica, the Sea-Turtle Dove, on the island of the Bass where it is called Turtur [the Black Guillemot].

Four-toed web-footed birds, in which all the toes are joined together with membranes :—

Anser Bassanus, a picture of a young one and of the head and foot of an adult is given in our plates. By our countryman Boethius, it is said to be a species of Eagle [the Gannet]. It is somewhat smaller than the common goose and much fatter. It feeds on herrings, and its flesh when cooked retains the flavour. The younger ones are ash-coloured, the old ones white. The beak is very sharp, long, straight, and slightly crooked at the point. The sides of both mandibles are slightly

* Henry Hoier, or Hoierus, a learned man of Bergen, in Norway, and a correspondent of Clusius.

† Carolus Clusius (1526-1609) a famous botanist and author of *Exoticorum libri decem*, 1605.

serrated. The feet are black, and the intervening toe membranes broad, and so much wrinkled that the bird can stand firmly on the sharpest rocks on one foot only. The bone which is commonly called "Bril" is in this bird so connected with the breast that by no force can it be torn away, which prevents the bird from breaking its neck when violently dashing into the sea in pursuit of herrings.

Concerning which matter, it is said, that if the bird is placed anywhere out of sight of the sea it cannot raise its body from the earth to fly, which some attribute to the length of its wings, but I rather attribute this to the stupidity of the bird, for when reared among dwellings it appears to be a singularly stupid bird.

Each hen Gannet lays but a single egg at a time. Those who pamper their appetites most, cannot by their skill produce any flavour so delicate of meat and fish mingled, as this bird has when roasted. Hence among our countrymen the full-grown chickens are held to be delicacies and fetch a high price;—they come to us in the spring-time, and do not leave before the Autumn. They breed not only on the Island of Bass, but on Ailsa and other islands of the Hebrides.

Corvus Aquaticus, the Cormorant, frequent on the rocks of the Firth of Forth.

Corvus Aquaticus minor, or *Graculus Palmipes*, the Shag. Four-toed web-footed birds with a free hind toe, the beak narrow and not serrated at the point:—

Puffinus Anglorum. Common on the shore of our County of Galloway [the Manx Sheerwater, *cf.* Willughby's *Ornithology*, p. 333].

Birds with narrow beaks, hooked at the tip and serrated:—

Merganser, the Harle of Belon, the Goosander. There are several kinds of *Mergus* with us. The greater and smaller ones on the coast of Buchan, one of which has been engraved on a silver plate by the hand of the Most Noble the Countess of Errol.

Birds with a narrow beak, not hooked at the tip with short wings and able to dive, called *Colymbus*:—

The *Colymbus* has a narrow, straight, sharp-pointed bill, small head and small wings, feet placed behind near its tail for the purpose of swimming more rapidly and diving with ease. The legs wide and flat, or compressed. The claws broad and similar to human nails. Among this sort of bird are those with separated feet, lacking a tail.

Colymbus or *Podiceps minor*, a small Loon . . .

Others which are web-footed and tailed :—

Colymbus maximus our *Stellatus*, the *Mergus maximus* of Fair Island or *Arcticus* of Clusius, the greatest diver, or Loon [the Great Northern Diver]. One was killed with a bullet near the island of Keith, a drawing of it is given in our plates [Plate 15 of the “*Prodromus*”].



A PORTION OF PLATE 15 OF THE “*PRODROMUS*,” DEPICTING THE GREAT NORTHERN DIVER.

Colymbus Arcticus, called Lumme by Wormius. [Probably the Black-throated Diver.]

Web-footed birds with four toes and a free hind toe, having a narrow beak not hooked at the tip and long wings :—

The Larger Gulls.

The largest Gull, pied with white and black, or blue-black, the Great black and white Gull [the Great black-backed Gull.]

The bird Kittiwake, one of the Gull tribe, and of excellent flavour.

The Greatest Ash-grey Gull, the Herring Gull.

The Lesser Ash-grey Gull, the common Sea-Mew [the Common Gull].

With the Gulls are classed Cataractes.

Our species is equal in size to the Wood-goose, with black, hooked claws. A picture of it is given in our plates [Plate I4 of the "Prodromus"].

It is a rapacious bird, and devours Teal and birds of a like size [the Great Skua].

Larus major albus, the Sea-Mew.

The Smaller Gulls.

Hirundo Marina, *Sterna* of Turner. The Pietarne of our countrymen, one was shot with a bullet in the island of Keith by that learned Knight, Sir Andrew Balfour, while we were in company together there. [One of the Terns.]

Birds with webbed feet and broad beaks :—

The tame Swan.

The wild Swan, very many of them in the North. When the stiffer and harder feathers have been plucked out from their skins, the softer plumage or down which remains is used as a means of keeping out the cold. More especially coverings for the heart and stomach are commonly made from them. And from the very softest of the feathers quilts are also made.

The tame Goose. The flesh is used for food. The softer feathers of this bird are used for quilts and pillows.

From the quills, the pens, used by writers, are prepared.

Anser Ferus, the Common Wild Goose.

The Goose of our country folk called the Ember Goose, which is said to make its nest under the water, and also to hatch out its eggs there. It is common in the Orkneys [the Great Northern Diver].

Dunter Goose. This is also found in the Orkneys. Its eggs, which are of the same size as the common Goose, are found in the Island of Keith.

The Skeeling Goose, of which it is said that grains of pepper are found in its stomach, but this is by no means certain.

Berniela or *Bernacla*, or *Clakis*. About this bird many fables are related, it will therefore be as well to record its true history.

A complete treatise was written about this bird by Michael Megyerus which he entitled "De Voluere Arborea," wherein

he attempts to defend its doubtful generation ; by the learned Willughby it is thus described :—

It is smaller than the tame Goose. Its beak is black, much smaller and shorter than that of a Goose, being scarcely one and a half inches from the tip to the angles of the mouth. That part which is near the beak is white, except at least a small patch between the eyes and beak, which is black. From the neck to the breast-bone it is black above and below. The under part of its body is white, with some tinge of ash colour, nevertheless, the lowest feathers of the thighs just above the knees are black. The end coverts of the tail are white, above them the feathers grow black, elsewhere the back varies between black and ash colour. The tail is black. The flight feathers are black and ash-grey. The smaller feathers, which clothe the wings are white on their outer margins, and elsewhere for a considerable space black, the remainder is ash-coloured. The hinder toe is very small.

The French call these birds *Macquerolles* and *Macreuses*, and in Lent they are sent from Normandy to Paris. But in reality it has been discovered by the Dutch that these Geese lay eggs, and that from these eggs these birds incubate and hatch their young in the manner of other birds. [The Barnacle-Goose.]

The Duck Tribe.

The Common Tame Duck is used for food, although it does not afford such good nourishment as the Goose.

Boschas major, the Common Wild Duck.

Querquedula major, the Teal.

Anas Circia, the Summer-Teal. Is this the bird which our countrymen call the Ateal ? [the Garganey].*

The Eider Duck, of Wormius,† with very soft plumage, which is thus described in the account of his Museum :—

The male differs from the female in many respects, though their outlines are nearly the same. The male obviously follows a duck in shape, with a flat black beak, approaching rather to the shape of a Goose's than of a Duck's ; in the middle it is provided with two oblong openings for respiration ; it is three inches long and sloped two ways like a comb. From its nostrils upwards two very black patches consisting of the softest feathers extend beyond the eyes to the back of the head. A narrow white line divides them, which reaches to

* A very rare visitor to Scotland.

† Olaus Wormius, or Worm (1588-1654), author of *Musaeum Wormianum*, Amsterdam, 1655.

the upper part of the neck, and is shaded from green to white.

The whole of the neck, the lower part of the head, the breast, and the upper part of the back, and wings are white. The flight feathers, however, are black, as also the whole breast and rump. The tail is three inches long, and is also black. The feet are black and have three toes joined down to the extremity by a black membrane. The legs are short and black. The feet are furnished with sharp and incurved claws, they have on the rear side a spur placed at the beginning of the leg—furnished with a similar membrane and claw. The female is of the same shape and size, but is all of one colour, brown with some black spots, dispersed here and there. In other respects it is similar to the male. These birds make their nests on the rocks, and lay many and fine-flavoured eggs. Their feathers are very soft and most suitable for filling quilts.

From a very small compass they expand enormously and warm the human body beyond all other feathers.

These birds are wont to moult at certain seasons, and then the traders enrich themselves by dealing in this merchandise.

This bird seems to me to be the same as our *Colca*, and Buchanan mentions when treating of the Island of *Suilskeraiia* [*Suliskerry*]. “In this Island is seen a very rare kind of bird, unknown in other places, they call it *Colca*. It is in size a little inferior to a Goose. Every year it arrives there in Spring, and brings up the young, which it hatches, until they are able to take care of themselves. About that time the feathers fall off from the whole body of their own accord, and leave the bird naked, after which it again betakes itself to the sea, nor is it again seen till the following Spring. And moreover it possesses this peculiarity that its feathers have no quills, but clothe the whole body as though with a light down, in which there is no hard point.”*

Thomas Bartholomew asserts that the wild Eider Duck has its beak somewhat sharper than the common Duck. Their flesh is salt in taste.

Albanoca, a web-footed bird, speckled with red and white and ash-coloured spots. It nests on the Island *Ailsa*.

CHAPTER VII.

Of various kinds of birds found with us which are of uncertain class, and of which an exact description is desired.

The bird called *Gare*, like a sea crow, with a very large egg [the Great Auk].

* cf. Aikman's *History of Scotland*, Vol. I., p. 55.

- Junco, a bird with a black head, called Cole-hooding. It nests among rushes [the Reed-Bunting].
- Titlinga, Titling, or Moss-cheeper. Is this a species of *Curruca* ?
- A crested bird like a sparrow.
- A bird with a yellow head, with a red spot, it lives near the water.
- A black bird, with a white spot on its breast. It is the size of a starling, sings and swims. Is this the *Merula Aquatica* ? [Possibly the Dipper.]
- A bird larger than a quail, of the same colour, its beak is three inches long and is curved.
- A bird of an ash-grey colour, larger than a lark, with a red head—it frequents water and is called the Pickerel.
- A Moor fowl marked with white spots, of most excellent flavour.
- A sea bird called the Sea-Coulter. [Possibly the Puffin, the word Coulter—a plough-share—being used to describe the shape of the Puffin's beak.]
- A sea bird called Taster. [Mr. Gladstone thinks this may be the Black Guillemot. Swainson, *Provincial names of British Birds*, gives p. 219 Tystie as its local name in the Orkneys and Shetlands.]
- A sea bird called the Sea-Cock.
- A web-footed bird with a flat beak of scarlet colour ; this bird is of ash-grey colour, and is smaller than a quail.
- A bird called Lyra by the people of the Orkneys, larger than a plover and smaller than a duck, it is very fat, and of a fishy flavour. [Swainson, p. 212, gives Lyre as the local name of the Manx Shearwater in the Orkneys.]
- Harle, a web-footed bird larger than a duck. Is this the Merganser ? [*vide* under Merganser, "Harle of Bellon, the Goosander."]
- A bird of a black colour in the back, smaller than the domestic duck, living on fish, and called Snolefanger.
- A web-footed bird with a beak like a Heron's, it is found in the Orkneys.
- The Cockandy, a web-footed bird equal in size to the goose, of a grey colour. [Cockandy is given by Swainson, p. 220, as the local name of the Puffin in Fife.]
- The Badock, a large sea bird of a black colour [the Common Skua].

As will be seen from the above translation of that portion of the "Prodrômus" which deals with the Ornithology of Scotland, and which occupies some ten pages of the entire work,* Sibbald's remarks contain but little original information, and for the most part consist of a catalogue of birds, some of which it is now almost impossible to identify, compiled on hearsay evidence. In one or two instances however, where he had been able to obtain the skin of a rare bird, such as the Black-winged Stilt, which he was the first to record as a visitor to the British Islands (*cf.* Yarrell, Vol. III, p. 305), Sibbald is almost meticulous in his descriptions. His greatest sin of omission is, however, in the case of the Great Auk, which he merely records under the heading of those birds of which he required a more accurate description. Sibbald's mention of the Great Auk, "is the first printed notice of this bird as British," and the first to record the name *Gare* as the anglicized form of the Icelandic *Geirfugl* (*cf.* Newton, *Dictionary of Birds*, p. 303). Of the bird itself, Sibbald unfortunately knew nothing, and his information as to its existence was apparently derived "from a MS. description of the Western Isles by Dean Munro, drawn up about 1549." (*Tom. ut supra.*) In "An Account of Hirta [i.e. St. Kilda] and Rona, Given to Sir Robert Sibbald by the Lord Register Sir George McKenzie of Tarbert," and published by William Auld together with other accounts of the Hebrides, at Edinburgh in 1774, we are informed "that of these fowl . . . there is one called the *Gare Fowl* which is bigger than any goose, and hath eggs as big almost as those of the Ostrich" (Auld, p. 63).

In addition to those in the "Prodrômus" some small notice of the birds of certain districts in Scotland may be found in two of Sibbald's other works, viz. *The History . . . of the*

* A considerable part of the "Prodrômus," 114 pages in all, is devoted to Botany, including the indigenous plants of Scotland, "a few rare species made their first appearance in this book, particularly that which Linnæus named 'Sibbaldia,' after the author." Animals and fish are also dealt with somewhat fully.

Sheriffdoms of Fife and Kinross, 1 vol. folio, Edinburgh, 1710 (pp. 46-49), and *The description of the Isles of Orkney and Zetland*, 1 vol. folio, Edinburgh, 1711 (pp. 8, 24, &c.).

Want of space forbids us to give but the barest details of Sibbald's life. The curious may read them at length in Vol. XX. (IX. of the Ornithological section) of Sir William Jardine's *Naturalist's Library*, 40 vols., 12 mo., Edinburgh 1833-43, where a list of his works, some thirty-two* in number, may also be found. The portrait of Sibbald here given (Plate II.) is reproduced from the frontispiece in the volume mentioned; its original is in the Royal College of Physicians, Edinburgh. Sibbald was born, according to the account in his *Autobiography*,† at the head of Blackfriars Wynd, Edinburgh, on 15th April, 1641. In 1650 his parents being resident in Fife he attended the village school at Cupar, and afterwards pursued his studies at the High School and University of Edinburgh. In 1660 he went to Leyden, where he took the degree of M.D. He afterwards studied at Paris and Angers, and returning to London remained there three months, and then settled down in his native city. His attention having been turned to the study of natural history by his friend Dr. Andrew Balfour (1630-94), about the year 1667 they together instituted a botanical garden in Edinburgh for the purpose of studying the medicinal properties of the various plants and herbs; the scheme received general support, and the collection grew to a considerable size. In 1681, chiefly through Sibbald's exertions, the Royal College of Physicians was founded in Edinburgh and a charter obtained from Charles II. In 1682 he was appointed by Charles II. Geographer Royal for Scotland and one of the Royal Physicians, and in the same year he received the honour of knighthood from the hands of the Duke of York. Owing to religious persecution, he having turned

* *The Dictionary of Nat. Biography* computes the number as twenty-one.

† The MS. of this is in the Advocates Library, Edinburgh.

Roman Catholic, Sibbald fled to London in 1685, but repenting of "his rashness he resolved to come home and return to the Church he was born in," and after a short period and a severe illness, he returned to his former faith and his native country in 1686, and publicly published his recantation in Edinburgh (*cf. Evelyn's Diary*, Vol. III., p. 23). Sibbald was twice married, and died it is presumed in 1722.

Two of the Plates in the "Prodromus" are here reproduced viz. No. 14, depicting the hen Capereaillie and the Great Skua and No. 15—the Great Northern Diver.

THE LATE JOHN GERRARD KEULEMANS.

ONE of the most interesting personages connected with the ornithological world of the latter part of the nineteenth century, has passed away. To most of the younger school Keulemans, who died on March 29th 1912, at the age of sixty-nine years, was known only by name, and few realized the individuality of the unassuming artist, or recognised that for thirty years he was the unrivalled and unequalled draughtsman of ornithological subjects. From 1870 to 1900 scarcely any ornithological work of importance was complete without "illustrations by Keulemans," and his sureness of design, combined with his facility of expression, made his beautiful figures always a delight to refer to.

Keulemans was a man of few words, and the following brief details of his life will probably be as novel to most as they were to the present writer.

Born on June the 8th, 1842, at Rotterdam, of Dutch parents, he was early imbued with the love of natural history, and gifted with Art he entered Leiden Museum at the age of eighteen, and worked there for two years. The love of travel, which characterized his whole life, then led him to Africa on a collecting trip, and at one time he had a coffee plantation on the west coast, but fever forced him to return to Europe, where he again took up a position in the Leiden Museum.

The work which made him world-famous, however, commenced in 1869, when he came to England to illustrate books for Bowdler Sharpe, and from that time onwards the drawing and painting of bird-subjects was his sole pursuit.

But his love of travel still continued, and in these years he journeyed over almost the whole of Europe. He was an exceptionally good linguist, speaking five languages fluently. His chief hobby was music, the cello being his favourite instrument, and on this he was an accomplished performer. That he was an ardent Spiritualist, having contributed much to the literature of the subject, will seem strange to those who knew him only as the artist.

He was twice married and leaves nine children.

Of Keulemans it can be truly written "Er liebt in seiner Werken," as a reference to his beautiful figures must always induce thoughts of the artist.

GREGORY M. MATHEWS.



NOTES

THE ODD EGG IN A CLUTCH.

WITH reference to Mr. Riviere's note and the Rev. F. C. R. Jourdain's footnote (Vol. IV., pp. 311-3) on the above subject, last year, I had under observation a number of nests of the House-Sparrow (*Passer d. domesticus*) built in the ventilators of a large building in the country.

I found that in every nest where there was an odd egg, it was the last laid. I had not the opportunity to watch which egg hatched first, so took a long series of eggs for reference, and I also have a long series before me, taken at the same place in 1903 for the same purpose. That the odd egg is due to failure of colouring matter I have very great doubts, because the odd egg is almost always marked quite differently, in some cases being blotched while the other eggs are finely speckled, and vice versa. Although the pale eggs show more of the white ground-colour, the blotches are not weak in pigment, and are what I should call, using a photographic term, sharp—not washed-out or blurred. Looking at the various clutches I find that what is the odd egg in one clutch is the predominant one in another, and in some clutches the last and odd egg is the darkest.

I have seen it stated that the influence of the male of a pair of birds cannot affect the colour of the egg laid by the female. What I suggest, however, is that the colouring of the egg may be affected through the male parent of the female having been hatched from a clutch where pale eggs were dominant.

The regularity with which the odd egg occurs points rather to some law at work, either Mendelian or another law somewhat analogous to it, than to a mere absence of pigment. I should mention that in some clutches of five there is no odd egg at all. This may be caused through both the grandparents being from a stock which laid pale eggs or vice versa, as I have both pale and dark clutches without an odd egg.

On the other hand, I have clutches of six where there are two "odd" eggs. That the odd egg is laid by the same female and not deposited by another as I have seen suggested, is, I think, proved in one clutch, in which all the eggs are of the same peculiar shape, and in another in which all the eggs have a fault in the shell—a small lump—in the same position in each egg.

I have a clutch of six eggs of the Linnet (*Carduelis c. cannabina*): five have the ground-colour white, and the sixth and last egg laid has a bright blue-green ground-colour. All the eggs have the markings normal.

I have two clutches (five and six) of eggs of the Sparrow-Hawk (*Accipiter n. nisus*) with white ground-colour and deep brown markings, with the exception of the last egg laid, which in each case has a pale blue ground-colour and bright red markings.* In one clutch four eggs have violet underlying markings; in the fifth and last egg these are absent.

The odd egg, however, is not the last laid with all species. Last year I found a nest of a Snipe (*Gallinago g. gallinago*) with two eggs only, one dark, the other pale. Subsequently two more pale eggs were laid. Of course I cannot be certain, but I should be inclined to say that the dark egg was the first laid, judging by my experience with other nests of this species and the Redshank, where the dark egg has been the first laid. I also found a nest of the Meadow-Pipit (*Anthus pratensis*) with one egg dark brown, and three pale grey. The following day a further pale grey egg was laid, which completed the clutch.

In looking through my series I find in clutches of Robin, Whitethroat, Great Tit, Golden-crested Wren and Magpie, where there is an odd egg it is pale, but in those of the Blackbird, Carrion-Crow, Curlew, Tree-Pipit, Meadow-Pipit, Lesser Tern, Common Tern, Skylark, Kestrel, Redshank, Snipe, and Corn-Bunting, both pale and dark odd eggs occur, whereas in the Lapwing and Kentish Plover the ground-colour is sometimes paler or darker in one egg, the surface-markings being pretty equal in all eggs in the clutch. Ringed Plover clutches do not as a rule contain an odd egg, but I have one in which three eggs are blotched and the fourth finely spotted, and another clutch is exactly the reverse. C. W. COLTHRUP.

CROSSBILL NESTING IN BUCKINGHAMSHIRE.

I HAVE just seen some back numbers of BRITISH BIRDS containing records of Crossbills (*Loxia c. curvirostra*) in various counties. As Buckinghamshire seems to be absent from the list of nesting-counties (Vol. IV., p. 333), the following record, though belated, may be of interest:—

* This may be due simply to fading from exposure to light. The blue ground tends to fade to white, and red-brown turns to sepia-brown. This has been the case with *exposed* nests of Sparrow-Hawk several times in my experience, so that one could tell almost at a glance the order in which the eggs were laid.—F.C.R.J.

On March 27th, 1910, I saw a flock of four or five birds near Gerrards Cross, and on April 1st a nest was shown to me in Gerrards Cross. The nest (which I have) was on the lateral branch of a larch, about 18 ft. high, and near a main road. There were four eggs, and the young were still in the nest on April 23rd.

I have no evidence of their presence or nesting in 1911 or 1912, though each season I have been told of their "being about."

R. BULSTRODE.

CROSSBILL NESTING IN HAMPSHIRE.

A COMPETENT and reliable observer informs me that he located two nests of Crossbills at Beaulieu on May 18th, 1912. One of these had been knocked out of the tree by boys throwing stones, and it was not possible to say if there were eggs or not. On the other nest the bird appeared to be sitting, but my informant could not be certain, as he was unable to climb to the nest. On June 1st, however, he reported that the old birds were feeding young continually at this nest. The birds have been observed in the neighbourhood for the last twelve months.

THOMAS H. C. TROUBRIDGE.

CIRL BUNTING IN MERIONETH.

As the Cirle Bunting (*Emberiza ciris*) is apparently a rare bird in western Merioneth, it may be worth recording that on May 9th, 1912, I heard and saw one singing at Tonfanau, near Towyn. I failed however to detect the bird again on two subsequent visits of some hours, so it may have been only a passing bird. In Vol. I., p. 325, Mr. L. W. Crouch records the occurrence of a male at Llwyngwrl in June, 1907, a few miles distant from the locality I was in. Mr. Rawlings, of Barmouth, tells me he once saw a Cirle Bunting near that town some twenty years ago, but never heard of one since in the district.

S. G. CUMMINGS.

ALBINISTIC REED-BUNTINGS.

On June 9th, 1912, while beating over a rough marshy field on the Essex side of the River Lee, my friend, Mr. W. J. Fowler, and I flushed two young Reed-Buntings (*Emberiza s. schæniclus*) which were quite white. They were well able to fly, but by keeping one on the move we at last tired it out, and captured it.

With the exception of the head, neck, and upper part of the breast, which were slightly tinged with yellow, the plumage was of a beautiful snowy whiteness, not a dark feather showing anywhere, but the eyes were very black in contrast with the rest of the bird.

We released this young one, as I am curious to see whether they will nest next year or not. The old birds were much perturbed by our chase of their young one, and followed us the whole time. They were both quite normally plumaged birds.

M. HARRIS.

PIED FLYCATCHER IN LEICESTERSHIRE.

THE Pied Flycatcher (*Muscicapa h. hypoleuca*) being so very rarely recorded in Leicestershire, it may be of interest to note that on April 28th and 29th, 1912, one (a fine male) was in the Grove of the Rectory grounds at Burbage, near Hinckley, where I watched it for some time on both days, but have not seen it since.

STEPHEN H. PILGRIM.

LESSER WHITETHROAT IN MERIONETH.

ON May 20th, 1912, I heard a Lesser Whitethroat (*Sylvia c. curruca*) singing at Dolgelly near the railway. It was evidently nesting, as the bird was still in the same spot when I passed again in the evening. In this part of Merionethshire it seems decidedly rare, for during a stay of three weeks in this district this was the only one I heard. According to Mr. H. E. Forrest's *Vertebrate Fauna of North Wales*, the records for this species in western Merioneth are practically nil.

S. G. CUMMINGS.

HOOPOE IN DERBYSHIRE.

MR. JAMES DRURY sends me a note on the occurrence of the Hoopoe (*Upupa e. epops*) near Chesterfield. The specimen was too badly shot for the sex to be distinguishable. It was received on October 6th, 1911.

Several records of the appearance of the species in September and October 1911 on the Shetlands and the east coast of Scotland are quoted in Vol. V., p. 201. The records for Merioneth and Shropshire in August (p. 167) may refer to a different migration.

F. C. R. JOURDAIN.

BREEDING-HABITS OF THE CUCKOO.

ON May 19th, 1912, I found the nest of a Hedge-Sparrow (*Prunella m. occidentalis*) containing three eggs. That afternoon a friend and myself watched a Cuckoo (*Cuculus c. canorus*) which we surmised wished to lay, for fully half an hour on the clipped ornamental yew-hedge in which the nest was built. It hopped a few paces at long intervals, always approaching the nest, and after each journey stood with wings half extended downwards and made a careful survey of all the fence near it. In doing so it constantly stretched out its

neck so that the upper part, from the beak to the end of the tail formed practically a straight line, and at times leaned over the edge of the fence at such an angle that one felt it must overbalance. When it had reached a point some four or five yards from the nest, the Hedge-Sparrow came out and attacked it. It always flew at the Cuckoo's head, and the latter rose each time a few feet from its perch and so far as I could see fought entirely with its feet, uttering all the time a note which I have never heard before and can only syllable as a somewhat harsh "cak-cak-cak-cak-cak." During an interval in the fighting the birds sat for fully a minute facing each other and quite still, like fighting cocks, but about six inches apart. After some time a Thrush joined in the fray, and the Cuckoo was put to flight. A Starling sat on the fence throughout the fight, apparently much entertained, but took no part, neither did the Hedge-Sparrow's mate ever put in an appearance.

On May 20th there were four eggs and on May 21st five eggs in the nest, and on that afternoon two ladies who were staying in the house (Elton Hall, Peterboro') watched a similar performance to that described above for over an hour. On the following morning the nest contained only three eggs and no Cuckoo's egg. The same number remained each morning until that of May 29th, when there were but two Hedge-Sparrow's eggs left and the Cuckoo had laid. It will be noticed that the Cuckoo's egg was laid twelve days after the first of the Hedge-Sparrow's, and a full week after commencement of incubation. The shell of the third egg, which lay below the nest, showed this to be well advanced in incubation.

I regret that the nest was destroyed the next day by someone. It was built not ten yards from the drawing-room window.

Apropos of Mr. Johnson's letter to Mr. Jourdain (*supra*, p. 18), in which he refers to all the eggs of a Hedge-Sparrow being removed by a Cuckoo, I met with a similar case this year.

LEWIS R. W. LOYD.

LITTLE OWLS BREEDING IN ESSEX.

THE first I heard of the Little Owl (*Athene n. noctua*) in the neighbourhood of Felsted, was from Mr. Hughes-Hughes, of Leez Priory, who had been brought a specimen for identification at the end of 1909 by the bailiff on one of the Guy's Hospital farms. Early in 1910 the bailiff at the next farm, Pond Park, also shot one and reported in the summer that there was still a pair there. This pair was on the same farm

in 1911, but I cannot find any trace of them this summer, although the birds were there at the beginning of April. Lord Warwick's keepers at Easton tell me that there was a nest in the park in 1910, and that four or five young birds were reared; also that there are one or two pairs there still. In 1911 there was at least one nest at Little Green farm, and five young were reared in the nest found. I know of one nest there this year, but cannot say what is in it as the entrance-hole, as usual, is very small. In the park at Langleys, Mr. Tufnell's residence, there were two pairs nesting this year; but the birds were found to be taking Pheasants, and after considerable search a nest was found with Pheasants in the "larder." The young were destroyed, and that pair of birds and one bird of the other pair. I found a nest with four eggs on May 7th, 1912, but unfortunately in enlarging the hole, dropped a large piece of wood on the nest and smashed an egg; the birds deserted. I have also had information of a nest at Great Bardfield this year, but have not had time to go to it. At the beginning of this summer I knew the whereabouts of five separate pairs of these birds near the School at Felsted. Wherever I ask about them now in the neighbourhood they seem to have been noticed, and, in my opinion, they will soon be very common at the present rate of increase.

J. H. OWEN.

THE FOOD OF THE LITTLE OWL.

THERE has been much discussion in various sporting papers as to the destructiveness to game of the Little Owl (*Athene n. noctua*). I have carefully kept out of the controversy for the reason that, in conjunction with the late Lord Lilford, practically all the Little Owls in the kingdom have their origin from the birds liberated on our estates, and afterwards carefully preserved by us and sympathetic friends and neighbours. I think I can claim to having had the first Little Owl's nest in this country on my ground, for a pair bred in a rock near here as far back as 1879. I have had numerous nests and broods under my most careful observation for some fifteen years--so many I cannot enumerate them, but certainly some hundreds. Many nests with young have been daily examined in very different localities. The "hoards" of food, usually hidden in another tree, or in the roots of a tree near each brood, have also been watched. There are generally two or three of these "hoards" to each nest. The food of the young after they have left the nest and until quite on "their own," has also been as carefully ascertained as possible, so I can write of the food of this bird with some confidence.

They are very large consumers of insects, beetles, earth-worms, lizards, mice—and during the time the young are being fed, kill a great many birds. These consist *almost entirely* of young Thrushes, Blackbirds, Mistle-Thrushes, Sparrows, Chaffinches, Greenfinches, some Skylarks—just what one might expect; but the main point comes in the fact that, in all these years I have never *seen the remains of a single game-bird in a nest or "hoard."* No doubt the Little Owl will occasionally get the habit of taking young game from the coops in a rearing-field, but that is quite another affair, as birds in a rearing-field have no watchful parent with eyes looking out in every direction, and ready to give warning and drive off an enemy when necessary. The foster-mother in a coop has only one point of vision, viz. straight ahead. I know at the present moment of a brood of Little Owls in an orchard in which some four hundred small chicks are being reared in artificial "foster-mothers," and no damage is being done; and also of two broods close to a rearing-field where some fifteen hundred young Pheasants are being reared.

The fact that this Owl hunts much by day has been given as a reason why it should be so destructive to game. The Little Owl, when hunting by day, is so well advertised by the attendant small birds, that any old hen Pheasant or pair of Partridges with a brood are well aware of its presence long before there is any danger to them. This Owl does not hunt in woods, or where there is thick cover, but along hedgerows, amongst scattered trees, and in quite open ground. After the hay and corn is first cut they hunt almost entirely for insects and voles over the freshly-exposed fields, and make use of any perch such as a gate or any slight elevation, to survey the ground round them. At this time of year, viz. from mid-July onwards, their food consists almost entirely of insects and voles, which can very easily be proved by examining the castings which are found in large numbers.

On the Continent this Owl is looked upon with anything but disfavour; but I am inclined to think it is more insectivorous abroad than it is with us, probably for the reason that reptiles and insects are more easily obtained on the Continent than in these islands, while in this country small birds abound. I have been rather diffuse in describing the food of this bird, as I see the Editor asks for more information as to its food.

E. G. B. MEADE-WALDO.

A NEST found by me early in May contained the remains of a number of small birds, the greater part of a young rabbit, and the wing of a full-grown Rook. A local keeper informed

me that last year a nest was found containing no less than twenty-seven young Pheasants. I was also told by a farmer that he had seen Little Owls sit on the top of his hen-coops and carry off chickens as fast as they came out from its shelter. The common idea in that part of Huntingdonshire (near Peterboro') seems to be that the Little Owl, having located a brood of young game-birds, will carry off the lot and "store" them for future use. They are also accused of going down rabbit-holes after the young, and do certainly nest in them, as I have seen. On April 25th, 1911, I disturbed a Little Owl in the act of sucking the last of a full clutch of Wild Duck's eggs. I know of many instances of young birds being taken from the nest in broad daylight, and may note that one of these nests (a Flycatcher's) was built in a creeper on the wall of a house (1911).
LEWIS R. W. LOYD.

WHILE hunting for the nest of a Little Owl on April 17th, 1912, near Ely, Cambridgeshire, I flushed a bird from a hole fifteen feet from the ground, in a walnut-tree. The hole had evidently been in use for a long time, as it was nearly full of "remains." Amongst numerous pellets I found the pelvic girdle of a frog, with the legs still attached; I also found another hind leg of a frog; the head and one wing of a Blackbird, quite fresh; and numerous pellets consisting chiefly of the wing-cases (elytra) of beetles, and a few skulls of some of the small mice and shrews.
CLEMENCE M. ACLAND.

THE Little Owl is by far the commonest owl in Bedfordshire, and appears to be turning out the Barn-Owl and Tawny Owl from many of their former nesting-haunts. In my experience it is rare to find a nest that does not contain remains of small birds of various kinds—Finches, Tits, Sparrows, Buntings, Lark, etc., and on one occasion I found a casting containing the bright orange bill of a male Blackbird. Frogs also seem by no means unusual as an article of diet. Its comparatively diurnal habits give it opportunities to damage young game. The head keeper of a large shooting estate in Cambridgeshire last year was missing a great many of his young Pheasants from the coops. The culprit—a Little Owl—was tracked down and shot. In the nest were found seventy-four young Pheasants! GEORGE T. ATCHISON.

LONG-EARED OWL LAYING IN A TENANTED NEST OF MAGPIE.

HAVING watched a pair of Magpies (*Pica p. pica*) building their nest at Maxstoke, Warwickshire, my friend, Mr. H. G. Wagstaff, climbed to the nest on May 12th, 1912, judging

that the complement of eggs would then be complete. When about half-way up the tree, he was very surprised to see a Long-eared Owl (*Asio o. otis*) quit the nest, and still more so on finding the contents to consist of five eggs of the Magpie and one of the Long-eared Owl. The whole were about three parts incubated.

BERNARD STARLEY.

SPOONBILLS IN SUFFOLK.

ON June 4th, 1912, I saw three Spoonbills (*Platalea l. leucorodia*) about two miles north of Southwold, and watched them on the wing with a field-glass. The flight was very easy, and rapid for birds of that size, and I noticed that they flew with necks extended and not drawn back like a Heron. A few days previously three had been seen on Breydon and possibly these were the same birds.

JULIAN G. TUCK.

BLACK-THROATED DIVER IN CARNARVONSHIRE.

ON May 14th, 1912, I had the pleasure of watching for the third time in three consecutive years an adult Black-throated Diver (*Gavia arctica*) in Llandudno Bay. When recording the occurrence of the second individual, I ventured to suggest that it was quite possible that the species passed along the Welsh coast more often than was generally supposed, and I feel that the present additional occurrence tends to prove more clearly that the species *does* journey northward and passes along the north coast of Wales with some degree of regularity.

RICHARD W. JONES.

EARLY BREEDING OF DOTTEREL.

WHEN making my way over some very high ground in the northern Highlands on May 25th, 1912, I found a nest of a Dotterel (*Charadrius morinellus*) with three eggs. The bird was at the nest, and I consider it likely had been sitting for a day or two. This is the earliest date on which I have ever heard of a Dotterel's nest. It is curious if a so-called "early" season should affect a bird which breeds at so high a level as the Dotterel.

CLIFFORD BORRER.

"TWIN" NEST OF BLACK-HEADED GULLS.

WHILE visiting a small nesting-colony of the Black-headed Gull (*Larus ridibundus*) near the mouth of the Blackwater, Essex, on June 3rd, 1911, I came across an unusual "twin" nest, a photograph of which is here reproduced.

The nests, which were scattered over more than an acre of marsh to the number of seventy or eighty, were built up

through nine inches to a foot of water. The nest in question was fresh-built, and very little larger in total diameter than the usual type, but as will be seen in the photograph, it had two



“cups,” and was undoubtedly occupied by two birds, the clutch of three eggs being warm, while the single egg was in the act of hatching at the time the photograph was taken.

C. L. COLLENETTE.

ARCTIC SKUA IN CARNARVONSHIRE.

On referring to the *Vertebrate Fauna of North Wales*, I find that the Arctic Skua (*Stercorarius parasiticus*) has at no time been recorded from the north coast of Carnarvonshire, so that it is doubtless well worth recording the occurrence of an example which I saw in the Conway estuary on May 11th, 1912. Throughout the whole time that I watched the bird it chose to follow and harry the Lesser Terns in preference to the Herring-Gulls.

RICHARD W. JONES.

THE 1912 "WRECK" OF THE LITTLE AUK.

Dr. Blackmore, of Salisbury, tells me (May 26th) that a man brought him a Little Auk alive, from Winterbourne, "two or three months ago." Presumably this was part of the "Wreck."
G. B. HOXY.

MOOR-HENS' NESTS SCREENED WITH
"DOMES" OF REEDS.

ALTHOUGH the Moor-Hen (*Gallinula c. chloropus*) often builds a nest in a most exposed position, this is not always the case. I have noticed in the neighbourhood of Felsted, Essex, that when one builds in the juncus rushes, it does all it can to screen the nest from observation. Such a nest is made of the usual materials in the thickest part of the rushes, and about a foot above the water. It is quite invisible then as a rule to a passer-by, but to screen it from above the bird bends down the rushes so as to make a sort of dome over the nest. This I think is very effectual in hiding the nest from other birds,



as I have never seen the eggs in such a nest sucked, but it is almost needless to say that the dome at once attracts the attention of any bird-nester. This year such nests are very common where these rushes grow in the Chelmer.

J. H. OWEN.

EARLY NESTING OF THE MOOR-HEN AND
COMMON SNIPE.

IN connexion with the note in the last number of BRITISH BIRDS on the early nesting of the Moor-Hen (*Gallinula c. chloropus*), it is worth recording that on March 24th, 1912, I found a nest of this species containing four eggs, at Hampton-in-Arden, Warwickshire. It may also be of interest to state that a keeper in the same district informs me that on April 4th, 1912, he found a nest of the Common Snipe (*Gallinago g. gallinago*) which had been broken into by a grazing cow; the eggs, four in number, had been incubated about a week. I think this is worth adding to the other early records which have appeared recently.

A. GEOFFREY LEIGH.

[We regret that the date on which Mr. Owen found the nest of the Moor-Hen at Felsted was wrongly stated on p. 23 as March 28th. It should have been March 23rd.—Eds.]



LETTERS

“ON INCUBATION.”

To the Editors of BRITISH BIRDS.

SIRS,—I read Mr. Dunlop's interesting article “On Incubation” in your May number (Vol. V., pp. 322-7) with much interest, and also the letters from Messrs. J. Lewis Bonhote and C. L. Collenette in your June issue (Vol. VI., pp. 29-30).

I do not agree with Mr. Bonhote in his remarks *re* the breeding of domestic pigeons. I am willing to grant that in the majority of cases the incubation period in domestic pigeons commences on the laying of the second egg, but this is not a universal law.

In domestic pigeons, as in the wild Columbarian races, the female lays her first egg and then allows a full day to elapse before the second egg is laid. If the female was the only factor as regards incubation, that first egg would not be incubated but merely stood over at night until the second egg appeared, and then incubation would begin and both the young ones would be hatched simultaneously on the twentieth day from the laying of the first egg. As a matter of fact, in the pigeon-world, the male also takes his due share in incubation, i.e. the female incubates from 4 p.m. to 10 a.m. and the male from 10 a.m. to 4 p.m., and it entirely depends on the individuality of the male as to whether the first egg is incubated before the second egg appears or not. Certain males never begin their incubating duties until the second egg is laid, other males begin incubation as soon as the first egg appears, and in this latter case you find that the first egg laid hatches on the eighteenth day and the second egg not till two days later, and owing to the difference in size, the second youngster nearly always dies, owing to the older, and therefore stronger, youngster always getting the parents' first attention as regards food; if however the parents happen to be good feeders, the second youngster may live, and in many cases does so, but always remains smaller and weaker than the first-hatched young one.

With the rest of Mr. Bonhote's letter and the whole of Mr. Collenette's I entirely agree.

F. W. SMALLEY.

To the Editors of BRITISH BIRDS.

SIRS,—Mr. Bonhote, in his criticisms of my article on Incubation (Vol. V., pp. 322-7) states that I do not differentiate sufficiently between “standing over eggs” and incubation proper, and cites his experience of domestic pigeons in support of this statement. He says “it is the common and normal practice among domestic pigeons” for one of the birds to be constantly on the nest after the deposition of the first egg, but that incubation does not commence until the second egg has been laid, “the young invariably hatch out practically simultaneously.” In my paper I recorded the result of observations in

15 instances. Out of the 15, "eleven sat as soon as the first egg had been laid"; in each of these cases the eggs did not hatch practically simultaneously, but with as great an interval as there was between the laying of the eggs. Since the paper appeared I have noted exactly the same thing with another strain of pigeons. In the four cases in which incubation did not commence until the second egg was laid, the single egg was frequently left unattended. With regard to the Moor-Hen it is certainly not unusual for this species to commence incubation with the laying of the first egg; I have noted cases myself, and good observers have informed me that they have had the same experience. I do not think there can be much doubt that the presence of the parent Grebe adds to the safety of its eggs, for the nest is usually surrounded by water, and is comparatively easy to defend. Mr. Bonhote states that, "the presence of the parent bird standing over the eggs and thereby concealing them is undoubtedly true for some species." It would be interesting if he would mention a few species which habitually employ this method of protecting their eggs. He further says that, "the cases in which *incubation* begins with the laying of the first egg are much scarcer and must not be confused with the former habit" (i.e. standing over eggs). So far from this being the case, the fact is (as I indicated in my articles) that the species which incubate with the laying of the first egg (Ovitogae) are very numerous; I have no doubt that further careful investigation will prove that at least a third of the species in existence belong to this group.

ERIC B. DUNLOP.

THE STOMACH OF A WATER-RAIL.

To the Editors of BRITISH BIRDS.

SIRS,—In reference to a letter on this subject in the last number (p. 30), may I put forward a simple and obvious suggestion? Was not the small stomach containing food simply the mucous membrane of the stomach or gizzard which had (as often happens, especially if it has become a little dry) become separated from the muscular coats? This suggestion is, I think, further strengthened by Sir John MacFadyen's remark that it was "lined by mucous membrane with tubular glands." No mention is made of muscle being present, the absence of which one would expect if only the mucous membrane had been examined.

CLAUD B. TICEHURST.

THE BRITISH LESSER BLACK-BACKED GULL.

To the Editors of BRITISH BIRDS.

SIRS.—In Dr. Lowe's article on this subject in your last number it is stated that the "difference has never been noted before."

In his *Rambles of a Naturalist* (p. 231), Mr. J. H. Gurney, jun., wrote in 1876 of the Lesser Black-backed Gulls collected in Egypt, "On comparing five adult Egyptian skins with three English ones it is seen that the back is darker by many shades." R. C. BANKS.



MALE TEREK SANDPIPER SHOT AT BROOKLAND, ROMNEY MARSH,
KENT, ON MAY 23RD, 1912.

(Photographed by T. Parkin.)

BRITISH BIRDS

EDITED BY H. F. WITHERBY, F.Z.S., M.B.O.U.

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REV. F. C. R. JOURDAIN, M.A., M.B.O.U., AND NORMAN F.

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THE TEREK SANDPIPER IN KENT.

A NEW BRITISH BIRD.

BY

THOMAS PARKIN, M.A., F.L.S.

[PLATE 3.]

ON May 23rd, 1912, two specimens of the Terek Sandpiper (*Terekia cinerea*), a male and a female, were obtained at Brookland, Romney Marsh, Kent. On the 24th another male, and on the 25th another female, were obtained at the same place. The birds were sent direct to Mr. G. Bristow (taxidermist) of Silchester Road, St. Leonards-on-Sea. One of the birds shot on the 23rd was at once brought to me for identification; it was in spring-plumage, and had the appearance of having been killed only a few hours previously. The two obtained on the 24th and 25th were seen in the flesh by Messrs. J. Harrison and W. R. Butterfield.

One of the birds killed on May 23rd was exhibited by me at the British Ornithologists' Club on June 12th last.

DESCRIPTION.

Although the habits and notes of the Terek Sandpiper are said to be essentially those of a Sandpiper, the comparatively long and decidedly upcurved bill and the comparatively very short legs make it structurally so different from other members of the group as to warrant its separation generically.

MALE — SUMMER-PLUMAGE. *Upper-parts*: Bronzy-grey with dark brown mesial streaks to the feathers of the head and mantle, and broad black-brown stripes on the scapulars forming a conspicuous double band down the back. Forehead mottled with whitish and upper tail-coverts bronzy-grey mottled with

sandy-brown. Tail bronzy-grey. Primaries and lesser wing-coverts blackish-brown. Secondaries brown, tipped and edged with white, the innermost together with the innermost wing-coverts being more or less mottled with sandy-brown.

Under-parts: White, with the sides of the neck and flanks much mottled with brown and the throat and breast finely streaked with brown.

Wing 126; bill 49 (curved upwards); tarsus 27 mm.

MALE—WINTER-PLUMAGE. Much the same as above, but more ashy-grey on upper-parts with very little of the brown mesial-markings and less distinct lines on the scapulars. Under-parts white, the sides of the neck and breast being washed with grey.

FEMALE. Very similar to the male, but rather less clearly marked with black-brown on the upper-parts.

JUVENILE. Much as the adult in winter, but the colours less pure and the black-brown markings on the scapulars ill-defined.

H. F. WITHERBY.

DISTRIBUTION.

This bird is confined to northern Russia and Asia during the breeding-season, and an excellent account of its distribution during that period has been contributed by Mr. Sergius Buturlin to Mr. Dresser's work on the *Eggs of the Birds of Europe* (p. 726) which is quoted below: "It breeds from the valley of the Onega in the west to the Kolyma basin in the east. but as it has been met with in Kamtschatka, as a straggler on the Commander Islands, and as it visits the central parts of the Anadyr in the spring, it may possibly breed somewhere on the Anadyr; it breeds numerously in the delta of the Dvina, is found near Mezen, ranges north to 68° on the Petchora, to 67° 30' N. lat. on the Ob, but much further north on the Yenesei, as Popham met with it near the limit of forest growth which there, between Dudinka and Kestrovaiia,

is in 70° . On the Kolyma I met with it breeding in $68\frac{1}{2}^{\circ}$ N. lat. It is more difficult to trace the southern limits of its breeding range; it is only known as a migrant on Saghalien, the Amoor, or southern Dauria, and has not been found breeding on the shores of the Sea of Okhotsk, but is found in the summer in the Minusinsk district (about 54° N.), and I observed it in pairs in June in the basin of the Alei (in about 51° N. and 81° E.); in the Ural basin it breeds commonly down to $52\frac{1}{2}^{\circ}$, and was on one occasion found breeding near Orenburg (in about $51\frac{3}{4}^{\circ}$ N.); it breeds in Ufa, Kazan, but not in the Samara Government except in the Volga valley, where it breeds down to $53\frac{1}{2}^{\circ}$ N. Half a century ago the southern limit of its breeding range was in the Volga district, and I am sure from personal observation during many years that it was never met with in the basin of the Sura, in the Simbirsk and Penza Governments, even as recently as the 'eighties, but early in the 'nineties Mr. B. M. Zhitkov found it breeding in the Alatyry valley on a tributary of the Sura in the northern Simbirsk Government; ten years later it was numerous there, and since 1899 I have observed it breeding in the Sura near Promsino, in about $54\frac{1}{2}^{\circ}$ N., and it is now quite common there; in the first years of the twentieth century it was found breeding still further south, in the south-eastern parts of the Penza Government (about $53\frac{1}{2}^{\circ}$ N.) by V. M. Artobolevsky; in 1896 N.N. Malyshev, and in 1897 M. M. Khomiakov met with it breeding in some numbers on the Oka in the Riazan Government (about $54^{\circ} 94'$ N. and 41° E.); in July 1884 a female with well-developed ovary was obtained near Moscow, and in June 1881 the Terek Sandpiper was found breeding on the River Kobodga in the Novgorod Government (about $58\frac{3}{4}^{\circ}$ N. and 35° E.). Therefore it is clearly proved that its range is extending somewhat rapidly towards the south-west in central Russia."

According to Sandman several pairs bred on islands in the Gulf of Bothnia in Finland in 1894 and 1895. Skins and eggs are preserved in the collections of Messrs.

Bonsdorff and Lindman (*cf.* Naumann, new ed. IX. (1902), p. 107.)

As a passage-migrant Buturlin states that it occurs in the Governments of Petersburg, Pskoff, Kieff and Kharkov, and as a straggler even in the Baltic Provinces, while of late years it has become not rare on passage on the eastern shores of the Black Sea. Radde and Henke record it as a passage-migrant in the Caucasus and the Astrakhan district, while it also occurs on passage near Constantinople (*Ibis*, 1876, p. 64). In middle and south-western Europe it is a rare straggler, but has been recorded from Germany, from Brunswick in autumn, 1843, by Blasius, who himself shot one specimen and heard of another; one from the Oberrhein (in the Museum of Karlsruhe); and one from Pomerania in April, 1910, by Reichenow (*Orn. Monatsber.*, 1910, p. 179); several times from France (Normandy and near Paris by Temminck, and south France by Jaubert and Barthélemy-Lapommeraye); from Italy about eleven times, both in spring and autumn, and from Switzerland several times, on two occasions in spring. In Africa it occurs on the Red Sea littoral and Abyssinia, as well as in Madagascar, Loango, British Central Africa, and south to Damaraland and Natal, while Sir E. Newton recorded it from Mauritius. In Asia it ranges south to Aden, the Persian Gulf, India, Ceylon, the Andaman Isles, the Malay States, Burmah, Cochin China and China, as well as east to the Japanese Isles, and has occurred as a casual even on Bering Island in the Commander Group. In the Malay Archipelago it has been recorded from Borneo, Java, Sumatra, Celebes, Ceram, Palawan and the Philippine Isles, and ranges even to New Guinea, Australia (North Australia and New South Wales) and Tasmania.

F. C. R. JOURDAIN.

As this bird is new to the British List since the publication of our *Hand-List of British Birds*, it should be added at page 179 thus —

TEREKIA CINEREA

386a. *Terekia cinerea* (Güld.)—TEREK SANDPIPER.

SCOLOPAX CINEREA Gldenstadt, Nov. Comm. Petrop., xix, p. 473, pl. 19 (1774—Shores of Caspian Sea).

Terekia cinerea Gld., T. Parkm, Brit. B., vi, p. 74.

DISTRIBUTION.—*England*.—Four. Male and female Brookland (Kent) May 23rd, 1912, male, 24th, and female, 25th, same place (*ut supra*).

DISTRIBUTION.—*Abroad*.—Breeds in north-east Europe and northern Siberia from west Finland (Lat. 64° Gulf of Bothnia) to the Kolyma basin, southwards to about 54° N. lat. in central Russia and west Siberia, but not so far south as the sea of Okhotsk in east Siberia. Passes on migration through Asia and east Europe (eastern shores of Black Sea and shores of Caspian Sea), wintering in the Eastern Archipelago and Australia, also along the shores of southern Asia, in north-east Africa and in small numbers even to South Africa. Rare in middle and west Europe; three times in Germany, several times in Switzerland, eleven in Italy, several times in France.

AUTHORS OF THE HAND-LIST.

“STUDIES IN BIRD MIGRATION.”

MR. EAGLE CLARKE'S long-looked for work* is now before us, and as we should expect from the pen of so able an authority, we find these two volumes crowded with interesting and reliable information. These “Studies,” as the author is careful to point out, do not comprise the “last word” in the fascinating and intricate problems of bird migration, but deal solely with the author's *own* experiences, helped by the records accumulated when he was on the British Association Committee for the Study of Bird Migration, and consequently this work touches only on migrations which affect the British Isles. On this score we find the work all the more pleasing, as here we have a book which is the result of years of observation in many remote and eminently suitable “migration stations,” written from first hand knowledge and free from the mass of wild speculations and theories which so frequently characterize the products of an armchair worker.

The first two chapters, the only two at all in the way of a compilation, are devoted to ancient and modern views, and are more in the nature of an introduction for beginners to the studies which follow, than an exhaustive catalogue. In the second chapter the author briefly capitulates the theories of the how, why, and wherefore of migration, though he does not add to our previous knowledge as to why birds migrate; and he holds to the supposition that birds find their way by “orientation,” which however unsatisfactory to our minds, appears to be the only explanation tenable, at all events at present, since it seems quite clear from the American experiments with the Noddy and Sooty Terns, that birds *can* find their destination without external help.

In the following chapter we find the various migrants classified into groups, such as summer visitors, partial migrants, etc., and examples are given under each heading, the author indicating what is now becoming more widely realized, that not only are there few really sedentary species, but that even in our area we have a resident and migratory race of the same species. In a full list of casual visitors an indication is given as to the normal home of each and we here note a few small mistakes, e.g. the home of the Large-billed Reed-Bunting which occurred in England, is south-west Europe and not Asia. There then follows an appendix giving all species in the various classes of migration, with a rough outline of their

* *Studies in Bird Migration*, by William Eagle Clarke. Vol. I., pp. xvi + 323 (2 Plates, a map and 6 charts); Vol. II., pp. viii + 346 (16 Plates). London: Gurney and Jackson, 1912. 18s. net.

winter and summer retreats; to the list of Summer Visitors we should have added the Arctic Skua. We do not think that the winter-range of the Yellow Wagtail extends to South Africa, or that the Red-necked Phalarope is frequent in south-west Europe in winter. To the list of partial migrants might be added the Rock-Pipit and Tree-Sparrow. The third appendix gives a list of Winter Visitors, and to this list we should add the Black-headed Gull; though they probably occur, we know of no records so far of the Continental forms of Goldfinch and Hedge-Accentor being found in winter in our area; appendix IV. gives a full list of the birds of passage, with the seasonal distribution indicating their origin and destination.

Chapter IV. is one of the most interesting ones in Vol. I. and deals with the various routes of the varied migrations traceable in our islands: these results, we are sure, are founded on a mass of well-digested statistics, and are plainly and concisely written: many of these routes are in detail almost impossible to prove, or on the other hand to disprove, but further investigation in the future may, we think, in some cases confirm, amplify, or modify them. For example, is it quite certain that *all* birds of passage to the north in spring, after arriving on our south coast, pass up the east and west coast lines only and do not pass through the country inland? Then again the routes of departure of British emigrants are given in some detail, but it appears to us to be almost impossible to differentiate some of these from those of birds of passage; further, we cannot quite agree that these migrations of our departing summer birds are much in evidence; it is true for some species, but many, and especially the insectivorous Passeres, slip away unnoticed. Mr. Clarke's researches have led him to believe that in the great east to west movements in autumn, the flights are to the W. at the mouth of the Thames, to the N.W. or NN.W. on the Suffolk coast, and to the S.W. or SS.W. on the Kentish coast; though many undoubtedly follow this course we think that future investigation will show that these flights are not rigidly adhered to.

In the next three chapters the author takes us through a year of migration, and describes in a clear and readable way for each month what birds are moving, whether they are bound, and to what group of migrants they belong. In passing we may note that the occurrence of such species in February as the Nightjar and Tree-Pipit, even if correctly identified, must be so occasional as to be best omitted. We see no mention made of what is on the east coast a very pronounced migration in April of partial migrants travelling north: such species include Linnet, Tree-Sparrow, Greenfinch, etc. The author

takes it for granted that all late migrants in spring are birds which are on passage for breeding-quarters further north, but evidence is slowly accumulating to show that this is not invariably the case, and that some individuals arrive late and breed in the south of England long after others of the same species are breeding there and even further north. In the same way he thinks that the early immigrants are "home birds"; this we think is almost impossible to prove, and furthermore accompanying them sometimes are Continental species, e.g. Redwing (Feb. 19th). With these chapters are two maps showing the advance of the isotherm of 48° F. north in spring and south again in autumn, and the author points out the relation between the arrival of summer birds in one area and the coincident advance of this isotherm, which, moreover, makes it quite clear why these migrants are first seen in the south-west; again, in autumn a drop in the temperature acts as a direct incentive to start the migrating movement from further north.

In three appendices connected with these chapters are given first and average dates of arrival of summer and winter visitors and the periods of migration of passage birds. The *usual* date of first arrival in England of summer visitors is, in our opinion, in some cases given too early, particularly in those of the Yellow Wagtail, Willow- and Wood-Warblers, and House-Martin, while the dates for both summer and winter visitors must much depend on locality, and none is specified; doubtless as more reliable records are obtained for some of the scarcer species, or species which come little under notice, the dates of passage will be amplified.

An important chapter is that dealing with the influence of meteorology, and Mr. Clarke has been fortunate to obtain the assistance of Dr. Shaw of the Meteorological Office. The author starts by pointing out that it is the weather conditions at the *point of departure* of the migrants which must be looked at to solve the question of weather influences on migration, and from a mass of statistics he has come to several important and reasonable conclusions. Firstly, that when there is an anticyclonic centre lying over the continent which extends to our shores, the North Sea is spanned by settled weather and a south-easterly type of weather prevails; this is the most favourable weather for passage of migrants between Great Britain and the Continent; if however the favourable conditions do not reach our eastern sea-board, then, although favourable for a start, bad weather and consequently "wreckage" ensues on approaching England. Secondly, the opposite kind of weather, that is an anticyclonic centre covering most of

south-west Europe and a cyclonic centre to the north of us, causes unsettled conditions in the North Sea and a south-west type of wind, and so unfavourable for passage of migrants to or from the north-east or north, but favourable for passage from south Europe to us, or *vice versa*. The north-easterly and north-westerly types of weather are similarly explained and their influences on migration, while four maps of these main types render the letterpress much clearer. To criticize these conclusions would be out of place here, as a large amount of fresh statistics would have to be gone over, and it must be left to future workers to corroborate or modify his views; but it may be here remarked that the types of weather considered are what may be called simple types, and that the question of the presence of secondary disturbances in western Europe might profoundly alter the expectations which Mr. Clarke has enunciated.

Mr. Clarke has come to the conclusion, with which we concur, that the direction of the wind *in itself* has no influence on migration; fog, he finds, is an unfortunate and unforeseen event for migrants, and it often prevails in areas otherwise favourable for movements; high wind from any quarter acts as a deterrent; a fall or rise in temperature at the origin of the migration, acts as a direct incentive to start in autumn and spring respectively.

As typical examples of the different classes of migrants, Mr. Clarke has taken the same species as those embodied in the third to sixth interim reports of the British Association Committee, viz. Swallow, Fieldfare, White Wagtail, Song-Thrush, Skylark, Lapwing, Rook, and for the most part these accounts are reprints of those papers; little of importance has been added, and so requires little notice here. In a few cases further proofs have come to hand of migrations which were then surmised, such for instance as the passage of the White Wagtail, this species passing north numerously along our west coast-line, and in smaller numbers along the east, while it is shown to be a common migrant in Orkney and Shetland. We note that the Song-Thrush has been established as an autumn immigrant on the east coast from Central Europe, and we think the Fieldfare might be put in the same category. Mr. Clarke has succeeded in unravelling the tangled skein of these migrant types, and states his conclusions with great clearness, while added to each type is a list of those species which perform similar migrations; it must be left for future workers to corroborate and, we think, in places, amplify or modify his views.

The last chapter of the first volume gives an interesting and fascinating account of a month spent at the Eddystone Lighthouse. The author points out that this sojourn was undertaken in order to ascertain something of the emigratory movements from our shores in autumn, and that this station was chosen as being well isolated from the south coast, and giving an additional opportunity of seeing what migration was passing in the night. The substance of his experiences and results has already appeared in the *Ibis* for April, 1902, pp. 246-69, and so requires no further notice; added, however, is a full record of every species which came under notice, and an interesting photograph of the famous towers. Since Mr. Clarke's visit the light has evidently been altered from "the enormous" power of 80,000 candles to one of 292,500 candles!

In the autumn of 1903 the author undertook a month's stay on the Kentish Knock Light-vessel, twenty-one miles from the nearest points of the Kent and Essex coast, it being in a suitable position for studying the passage of migrants crossing the southern part of the North Sea. The chapter devoted to this is practically a reprint of a paper in the *Ibis* for 1904, pp. 112-42. Like the experiences at the Eddystone the account is extremely interesting, and shows what a lot of migration can be seen in suitably-chosen spots, albeit uncomfortable ones. Mr. Clarke twice makes reference (Vol. I., p. 290 and Vol. II., p. 36) to two races of Starling, one with a purple head obtained at the Eddystone exclusively, and the other with a green head obtained only at the Kentish Knock; the former was thought to be an immigrant race, but surely the latter were also immigrants? We have studied this question of two races with some care, and feel certain that the two races do not exist; we have seen British-breeding birds as well as east-coast migrants, with heads of both colours, and in a few specimens tinges of both colours prevail on the same bird. We think it is probably a question of wear or age, or perhaps both. It must be remembered, moreover, that the purple gloss will change to green on altering the position of the light from in front to behind the observer.

The next three chapters are devoted to an account of Fair Isle and its migrants. This small island of $2\frac{1}{2}$ square miles, lying midway between Orkney and Shetland, appeared to the author to present unrivalled chances for observing the passage of birds to and from the north owing to its isolated position, its smallness of size, and to the fact that it is situated beyond the breeding-range of most of our own avifauna. The

results obtained by Mr. Clarke in his annual visits more than bore out his expectations, and so much valuable information was acquired that he has been induced to establish a watcher there who keeps a daily record of migrants. The combined results of all observers have established, besides a host of interesting facts concerning migration, the occurrence in this small island of nearly one-half of the birds that have ever been known to occur in the British Isles!

After giving a general description and history of the island, he goes on to tell us of the habits of the migrants under strange conditions, the difficulties of the observer, and other interesting incidents. Following this he takes us round a year's bird-observing in diary form, and finally he gives a complete list and data of every bird which has been known to occur in this remote spot. While the breeding birds only number twenty-eight (and ten of these are summer visitors) no less than one hundred and sixty-five species have been observed as migrants, regular or casual: five species have been added to the British List from this island, and innumerable rarities have been detected. Most of these have been recorded from time to time in the *Scottish Naturalist*, but we note that here, previously unrecorded, appear the following rarities—Coues's Redpoll (2), Black-headed Bunting (1), Scarlet Grosbeak (2-3), Short-toed Lark (2), Icterine Warbler (3), Marsh-Warbler (1) (formerly recorded as Reed-Warbler, Sept. 24th, 1906). Of other migrants whose status is now made known to us for the first time, we find that the Little Bunting and Siberian Chiffchaff are not uncommon in autumn, and the Northern Willow-Warbler in spring, while the Northern Chiffchaff, Continental Hedge-Accentor and Lesser Whitethroat occur regularly on both passages.

St. Kilda has always been of interest to ornithologists as the former British home of the Great Auk, and possessing *the* great breeding-stations in the British Isles of the Fulmar and Leach's Petrel, as well as for having a Wren peculiar to the island. From the visit of Martin Martin (1697) downwards, some dozen men have written on the birds found there, all without exception in the summer months, but it was left to Mr. Clarke to ascertain what migrants in autumn reach this remotest western isle during his two visits of five and six weeks. After giving a short topographical account of the island, the author points out that it is in a favourable position for observing migrants from Iceland and Greenland, and also lies on the verge of the stream of migration which sweeps down the west coast from and to northern Europe.

During these two visits he was able just to double the known avifauna of the island, and out of ninety-six species which came under observation, sixty-two were migrant-visitors and fourteen mere waifs; one new British bird, the American Water-Pipit, and two new Scotch birds, the Marsh-Warbler and Baird's Sandpiper, were obtained. The diary of daily observations in 1910 and a full list of St. Kildan birds are added, with several good photographs of the island, and a complete ornithological bibliography. Hitherto unrecorded from the Outer Hebrides we find occurrences of the following species: Black-throated Wheatear (1), Wryneck (1), Great Snipe (1), Sooty Shearwater (several), Scarlet Grosbeak (3), Little Bunting (2), Red-throated Pipit (2), and Northern Chiffchaff (1), while additional records of such rarities as Greenland Redpoll, Turtle-Dove (1), Barred Warbler (1), Lesser Whitethroat (4), and Garden-Warbler (several) are of interest, and the White Wagtail is considered a common migrant.

Perhaps one of the most forlorn, wild, and desolate spots to the ordinary man, is the little group of uninhabited islets known as the Flannans or Seven Hunters, situated in the Atlantic about twenty miles west of Lewis. To the ornithologist, however, they are of considerable interest, so much so that Mr. Clarke having received interesting migration-schedules from the lighthouse keeper for a number of years, was induced to spend a fortnight on the largest grass-covered island. The results of these combined observations has enabled him to enumerate no less than one hundred and fifteen species as having occurred there, mostly migrants, and he gives us a full list of species and data. Evidently these islands catch the fringe of the west coast passage-movements, besides being sometimes visited by cold-driven birds in winter. Several unexpected rarities have been obtained, such as the Short-toed Lark, Eastern Sky-Lark, Two-barred Crossbill and the Pratincole (in July!), while the Tree-Pipit, Pied Flycatcher, Red-backed Shrike, and Dotterel have been added to the Outer Hebridean fauna. The Goldcrest appears to be an uncommon migrant at any of the western isles.

From the Flannans Mr. Clarke paid a flying visit to Sule Skerry, a small islet 35 miles north-west of Hoy Head, Orkney, and the results of his visit and the observations of Mr. Tomison (the light-keeper) over a number of years are embodied in a short chapter. The west coast stream of migrants to and from the north via Shetland apparently impinges upon this lonely spot, and one hundred and three species have been recorded, of which Mr. Clarke gives the details; amongst them

are such rarities as Eversmann's Warbler and the Siberian Chiffchaff. The curious absence of the Starling, Sky-Lark, and Chaffinch as *regular* autumn-visitors is worthy of note. Apparently by an oversight the Gannet is omitted from the list of Sule Skerry birds.

The last chapter gives an account of an abortive visit to Ushant, which island certainly must be, from its position, an ideal one for observing migrants, as it should catch the westerly and southerly coasting streams. Mr. Clarke was just able to prove that much migration does take place there, before he was hustled out of the country as a spy! The rest of his vacation was spent on Alderney, where a fair amount of migration was witnessed during his short stay, though it was impossible to say whether the birds were travelling west or south. Even in such a limited time he was able to expand the status of many species, and add a few new ones, which shows how very little we know of the birds of the Channel Isles.

In conclusion, we may say that we have nothing but praise for Mr. Clarke's book, and congratulate him on bringing it to such a successful conclusion. It is eminently the product of a worker; to the beginner in the study of migration it will point out the right lines of investigation; to the student it gives much interesting matter for consideration, and it will be read with great pleasure by every ornithologist.

C. B. TICEHURST.



NOTES



INCREASE AND DECREASE IN SUMMER-RESIDENTS.

AN INQUIRY PROPOSED.

EVERY year there appear many notes in periodical literature recording a diminution or increase of certain summer-birds in various localities. A good many correspondents have written to us from time to time on the subject, but isolated observations in a case of this kind are of little importance, as they may be due simply to local and temporary fluctuations.

To discover the real meaning of these fluctuations the co-operation of a number of observers over a wide area is absolutely essential. We think that the subject is one which ought to be inquired into, and as a preliminary step we seek the co-operation of every reader of *BRITISH BIRDS*, and would ask each to fill in the schedule which is sent out with this issue. In this schedule only brief answers are required, and the inquiry has been confined to those species which are most often spoken of as fluctuating in numbers. To make the inquiry satisfactory, the answers in the schedules should be founded on the most careful observation possible. The most valuable information of all is such as is given by the Messrs. Alexander in Vol. II., pp. 322-6, and by Mr. H. G. Alexander in Vol. V., pp. 103-5; and it is to be hoped that some of our readers will be able to give the exact number of pairs in certain areas in 1911 and 1912, while others who cannot go so far as this, will give brief reasons for their conclusions.

Every reader is particularly requested to fill in and return the schedule at once.

THE EDITORS.

EARLY NESTS IN 1912.

THE following notes of early nesting in 1912 may be of interest in connection with the other records which have been published:—

March 16th, Suffolk: Several Mistle-Thrush with eggs. April 27th, Kent: Bullfinch with five eggs, incubation commenced; Yellow Bunting with four eggs, incubation advanced. May 1st, Kent: Blackcap with five eggs, incubation commenced. May 4th, Kent: Whitethroat with five eggs, fresh. Surrey: Blackcap with five eggs, incubation commenced; Lesser Whitethroat with three eggs, fresh. May

6th. Kent : Blackcap with four eggs and a Cuckoo's, incubation commenced.

My previous earliest date for Lesser Whitethroat is May 8th (1904), and for the Cuckoo May 20th (1892), in the nest of a Redbreast. May 1st for Blackcap and May 4th for Lesser Whitethroat are probably new records. P. F. BUNYARD.

[With regard to the Lesser Whitethroat, Mr. J. E. Harting states that an egg was found at Willesden on April 28th; and Mr. S. G. Cummings has recorded a nest with five eggs (incubation begun) near Chester, on May 6th, 1962. This latter instance is of course from considerably further north.—F. C. R. JOURDAIN.]

CROSSBILLS BREEDING IN SUFFOLK FOR THE THIRD YEAR IN SUCCESSION.

THOUGH apparently there were not so many Crossbills (*Loxia c. curvirostra*) breeding in England in 1912 as in 1910 and 1911, nevertheless in Suffolk a fair number successfully got off with young, and one or two nests met with their usual fate of being destroyed by squirrels. This scarcity of birds was undoubtedly due to the almost total failure of the cone crop. I have heard that they were also quite absent on their usual breeding-grounds in many parts of Scandinavia owing to the failure of the spruce cones. Should there be a failure in the food-supply abroad this year, I think we may look forward to a big immigration this autumn, as the Scotch pines are loaded with new cones, especially in this district.

On January 17th I received advices that Crossbills had been seen in Suffolk in fair numbers, and that a partly completed nest had been located. On the two following days both birds were busy at the nest. Bad weather set in and the nest was deserted and no birds have been seen there since, though in a neighbouring belt of pines a male bird was in full song indicating the presence of a nest at no great distance. On March 10th a nest was found in a Scotch pine twelve feet from the ground, from which a brood of young flew on the tree being climbed. One of these was secured after flying thirty yards, and was kept in confinement, but died in a few hours and was sent by me to Mr. Witherby. Three other pairs of birds were seen on this date. On March 16th I visited the locality and found a nest with eggs which had been destroyed, a second nest from which birds had quite recently flown, and a third in a similar condition. The following day I did not see or hear a single bird, and there was practically no very recent work on the few cones that there were.

On April 14th I found some very recent work on the cones close to Croydon, where I found Crossbills breeding in 1910, suggesting that they were breeding somewhere in the locality.

A very interesting point to which I do not think attention has been drawn before, is the very foul state of the nests from which young have flown, owing no doubt to the inability of the parents to remove the faeces. This can be readily understood when we bear in mind the shape of the mandibles. The ground under the nest is also usually strewn with the faeces.

Crossbills, like many other species this year, were a fortnight earlier than the usual date when the bulk of the birds start nesting. I have no doubt that had I visited the locality earlier many other nests would have been located. However, I feel convinced that the Crossbill is (and probably always has been) a firmly established English-breeding bird, and I do not consider it is more sporadic in its nesting than many other British birds such as the Hobby, Hawfinch, Grasshopper-Warbler, etc. etc. P. F. BUNYARD.

[I may mention that there is no proof that the Crossbill has ever nested before for three years running in any one locality in England.—H.F.W.]

GREY WAGTAIL BREEDING IN HERTFORDSHIRE.

As there appear to be few records of the nesting of the Grey Wagtail (*Motacilla b. boarula*) in Hertfordshire, it may be of interest to record that I have known of their nesting in that county on the banks of the river Chess for the last nine years. This year one pair has nested and reared two broods. M. BEDFORD.

ISABELLINE WHEATEAR IN SUSSEX.

AN Isabelline Wheatear (*Enanthe isabellina*) shot at Rye Harbour on March 28th, 1912, has already been recorded in these pages (Vol. V., p. 328). I saw this specimen almost, I might say, in the flesh, as Mr. Bristow had just finished removing the skin from the body. On May 10th another bird of this species, a male, was shot in a quarry at "Old Roar," St. Leonards-on-Sea, and was examined in the flesh by Mr. W. Ruskin Butterfield. This specimen was secured by Mr. W. H. Mullens, and is now in the Hastings Museum amongst the fine collection of local birds presented by him to that institution. The two birds above recorded make the third and fourth examples of this species obtained in Great Britain. According to the recently published *Hand-List of British Birds* there are only two other records, viz. Female, Allonby (Cumberland), Nov. 11th, 1887; male, Rye Harbour (Sussex), April 17th, 1911. THOMAS PARKIN.

DESERTED WREN'S NEST USED AGAIN.

IN May, 1912, I found the nest of a Wren (*Troglodytes t. troglodytes*) in an apple tree. It was not lined, and I did not expect it to be used. At the beginning of June the birds (or others) returned to it and lined it, and two eggs were deposited. The nest was then deserted again for nearly three weeks, and the eggs were spoilt. I left them in the nest and was surprised, early in July, to see a Wren leave the nest when I kicked the tree. I then found that two more eggs had been laid. These hatched in due course, and the young were becoming feathered, when something destroyed the nest.

J. H. OWEN.

EARLY LAYING OF THE CUCKOO AND REMOVAL OF THE EGGS OF FOSTER-PARENTS.

As it is stated in BRITISH BIRDS for June (p. 18) that authentic records of the laying of the Cuckoo (*Cuculus c. canorus*) in England in April are very scarce, perhaps the following note may be of interest.

On May 1st, 1902, I was told by a gamekeeper (in Surrey) that on the previous day (that is on April 30th) he had found a Robin's nest in which there was a large dark-coloured egg in addition to three Robin's eggs. I at once asked him to show me the nest, which was in a bank quite close to where we were standing. I found that it contained, besides three Robin's eggs, a fine large Cuckoo's egg of a very unusual red-brown colour like that of some Tree-Pipits' eggs. Now this Cuckoo's egg must have been laid at the latest in the early morning of April 30th, as the keeper saw it in the nest at about ten o'clock on that day, and it may have been laid the day before (April 29th).

Three years later on May 4th, 1905, my eldest son informed me that he had found a Robin's nest in a bank not far from my house with one egg in it. He took me to the nest and on extracting the egg I found that it was not only a Cuckoo's egg, but a red-brown one, the exact duplicate of the one I had taken from the Robin's nest in the wood about four hundred yards away on May 1st, 1902. I have these two red-brown Cuckoo's eggs still in my collection, and although the original beautiful rich-red colour has much faded since they were first taken, they are still very distinctive, and I have never seen any other Cuckoo's eggs like them. They were undoubtedly laid by the same bird, or the second was laid by a descendant of the Cuckoo whose egg I took on May 1st, 1902.

On May 20th, 1908, the son of a fruit-farmer living near me told me that he had that day found what he thought was a yellow "dishwasher's" (Wagtail's) nest under a strawberry plant. I asked him how many eggs there were in it, and he said there were five. I told him not to touch it, as I would like to come and look at it the following morning. I met the lad about ten o'clock the next morning and the first thing he said to me was, "them dishwashers have been taking their eggs out of the nest and carrying them away." He told me that he had just come from the nest which was less than one hundred yards from where we were standing, and that whereas on the previous day there were five eggs in it, there were only two when he had just looked at it, but that he had found another on the ground about a foot away, which he had picked up and returned to the nest. We then walked up to the nest which my companion had inspected less than a quarter of an hour before; there was only one egg in it, which I at once saw was a Cuckoo's, but we found one of the Wagtail's eggs on the ground quite close to the nest. It was that of a Pied, not a Yellow Wagtail. We searched all round amongst the strawberry plants, but could not find any more of the Wagtail's eggs. If the Cuckoo did not carry any of them away on May 20th it must have removed three from the nest and carried away two of them on the morning of May 21st before 9.30, and after the egg which had been left on the ground had been returned to the nest it must have come back, and after ejecting the two Wagtail's eggs still in the nest must have gone off with one of them, leaving the last one on the ground near the nest. Very likely it would have removed this egg too, if I had not intervened.

Last year on May 23rd, 1911, I found a Cuckoo's egg in a Greenfinch's nest in my garden. On this occasion none of the foster-parent's eggs had been removed, as I found the Greenfinch sitting hard on her own five eggs and the Cuckoo's.

F. C. SELOUS.

WRENS AS FOSTER-PARENTS OF THE CUCKOO.

ALTHOUGH I have found a large number of eggs and young of the Cuckoo (*Cuculus c. canorus*) this summer (1912) they have all been in the nests of well-known foster-parents, except one which I found on July 1st. This has been reared by Wrens (*Troglodytes t. troglodytes*), and I watched both birds feeding it for nearly an hour. They fetched food, caterpillars, very often, and always fed the Cuckoo from the side and not from the front. The contrast in the bulk was

amazing and ludicrous. They seemed in a much greater hurry to get food than even other foster-parents, and never stayed a moment after parting with the morsel. The Cuckoo was in splendid condition, but seemed very hungry, and kept up its food-cry nearly the whole time I watched. After "ringing" him I left him to them, and am hoping that there will be more in Wrens' nests in the same locality next year.

On July 14th, 1912, I was watching a pair of Hedge-Sparrows feeding a young Cuckoo, and noticed that a pair of Wrens had a nest with young quite near. I soon located the nest, and then noticed that one Wren seemed to be very quick in delivering the food. It soon dawned on me that this Wren was helping to feed the young Cuckoo, and that only one Wren was attending to its own young. I made the nest containing the Cuckoo more open to view, and retired to watch with my field-glasses. Soon I was joined by three boys (members of the Felsted School Scientific Society, and two of them keen bird-watchers), and between us we made certain that there were only two Wrens about. On July 16th I went to try and get a photograph of the Wren feeding the Cuckoo, but did not secure one good enough for reproduction. The Wren did not mind the camera much. The Hedge-Sparrows were much more timid, and seemed to be losing interest in the Cuckoo. On the following day I visited the spot again, but the Wren proved curiously timid, and I did not get a photograph at all. The Hedge-Sparrows never came near the nest, but I saw one in the next field. That evening the Cuckoo had left the nest and was perched near it. The Hedge-Sparrows did not come near it, although I watched from a distance. The Wren kept feeding it until after 8.30 p.m.

As a possible explanation of this behaviour, I may state that the Wrens fetched food out of a bean-field near by, and in their journeys to and from this field to their own nest they passed the nest containing the young Cuckoo; it may be supposed that the Wren once yielded to the Cuckoo's cry for food, and afterwards continued to feed him. Also the "food-cry" of the nestling Wren appears to me more like that of the young Cuckoo than is the "food-cry" of any other nestling.

J. H. OWEN.

HONEY-BUZZARD IN Co. ANTRIM.

AN adult male Honey-Buzzard (*Pernis a. apivorus*) was shot at Shane's Castle, co. Antrim, on July 13th, 1912. I had an opportunity of examining it whilst it was being skinned at Messrs. Sheals, the Belfast taxidermists; it was in

very good condition, being fat and in splendid plumage. Its stomach contained, amongst other things, large quantities of wasps and wasp-grubs, also some bees and a few caterpillars.

W. C. WRIGHT.

THE DISTRIBUTION OF THE FULMAR PETREL.

IN our last volume a number of interesting notes were published relating to the extraordinary extension of the breeding-range of the Fulmar (*Fulmarus g. glacialis*) in recent years. Mr J. A. Harvie-Brown has just contributed a valuable paper on the subject (*Scot. Nat.*, 1912, pp. 97-102 and 121-32 and map) in which he traces in detail the extension of its breeding-range. Mr. Harvie-Brown draws attention to two important facts: (1) the Fulmar established itself in the Færoes as comparatively recently as about 1839; (2) the St. Kilda colony dates back at least two hundred and fifty years.

The following is a list of the places and first dates at which nesting was observed, extracted from Mr. Harvie-Brown's paper:—

SHETLANDS.

- 1878 (or previous) Foula.
- 1891 Horn of Papa off Papa Stour.
- 1896 (or 1895) Calder's Geo, Eshaness (Mainland).
- 1897 Hermaness (Unst).
- 1897 Ramna Stacks (north Mainland).
- 1898 Noup of Noss near Lerwick.
- 1900 Fitful Head, south of Mainland.
- 1901 Noup o' Norby, Sandness.
- 1902 Uyea Cliffs and other points north-west Mainland.
- 1906 Whalsey and Yell.
- 1908 Bressay and possibly Hascosay.

FAIR ISLE.

- 1903 (or previous).

ORKNEYS.

- 1900 (or previous) Hoy Head.
- 1901 Westray.
- 1907 Between Stromness and Bay of Skail.
- 1910 Markwick Head.
- 1911 Deerness and Copinshay.

MAINLAND.

- 1897 Clomore Cliffs (Cape Wrath) (Sutherland).
- 1900 Dunnet Head (north Caithness).
- 1911 Berriedale Head (east Caithness).

HANDA (west coast Sutherland).

1902

HEBRIDES.

St. Kilda original British colony.

1886 North Rona.

1887 Sulisgeir.

1902 (probably earlier) Flannan Isles.

1902 (probably earlier) Barra Head.

1904 Eilean Mor.

1910 Shiant Isles (no doubt nesting but nests not seen).

IRELAND.

1911 (possibly 1907) north Mayo coast.

1911 (probably 1910) Ulster coast.

EARLY NESTING OF DOTTEREL.

WITH respect to Mr. Borrer's note in the last issue (p. 67), it may be worth mentioning that on June 14th, 1911, I picked up in Inverness-shire a young Dotterel (*Charadrius morinellus*) several days old. Allowing nineteen days for incubation, which is probably the minimum, egg-laying in this instance must have commenced not later than May 21st.

S. E. BROCK.

[Mr. J. Watson Kendal, writing in the *Field*, 1885, p. 708, (Vol. 66) stated that eggs might be found from May 23rd to July 5th, but mostly in June. The duration of the incubation period is not exactly known, but Heysham stated that it rarely lasted longer than 18-20 days. If we accept the lower of these estimates as the maximum, Mr. Kendal's statement agrees almost exactly with Mr. Brock's record.—F.C.R.J.]

MOVING LAPWING'S EGGS.

A LAPWING (*Vanellus vanellus*) made her nest, such as it was, on the top of a potato drill in a large field. When found it contained three eggs and the potato haulms were just showing. A farm hand, coming across the nest when scarifying, and not wishing to destroy the eggs, moved them three drills away—a matter of six feet six inches. It may be of interest to note that this did not affect the bird, for she took kindly to the new position, eventually bringing off her brood, notwithstanding the temporary removal of the eggs on a later occasion during further cultivating operations.

N. F. RICHARDSON.

RED-BREASTED SANDPIPER IN SUSSEX.

A MALE Red-breasted Sandpiper (*Macrorhamphus g. griseus*) was obtained at Rye on May 2nd, 1912. In the new *Hand-List of British Birds* mention is made on p. 179 of over thirty specimens obtained between August and October in various years in various counties, but this appears to be the first record for Sussex, and the first occurrence in spring.

THOMAS PARKIN.

LATE ARRIVAL OF COMMON TERNS AT
BREEDING-SITES.

THE Common Terns (*Sterna hirundo*) which usually arrive at their nesting-ground at Ravenglass, Cumberland, during the last week in April and first week in May, did not put in an appearance this year in any numbers, until the first week in June, and were not fully established there until the second week, when they immediately began laying.

The same thing happened on Walney Island in north Lancashire, there being no apparent reason for their late arrival at either site.

H. W. ROBINSON.

SANDWICH TERN AGAIN NESTING ON WALNEY,
NORTH LANCASHIRE.

IN the *Hand-List of British Birds* it is stated that the Sandwich Tern (*Sterna s. sandvicensis*) did not nest on Walney Island, North Lancashire, in 1901. Whether this statement also infers that it still does not nest there or not, I do not know, but it certainly nested there last year and is also doing so this (1912), for on my visit to the island on June 26th I found a fair number, one colony numbering over thirty nests, none of the eggs having then hatched.

At Ravenglass, Cumberland, a number had hatched off the week and fortnight previously, but both this year and last they have been very erratic, many not hatching off last year until well on in July. Previous to this they all hatched off in June.

H. W. ROBINSON.

[Mr. T. Hepburn could find none in June, 1901 (*Zool.*, 1902, p. 377). No more recent information was available.—EDS.]

COMMON GULL BREEDING ON THE FARNE ISLANDS.

IN view of what was said in my *Birds of Northumberland and the Eastern Borders* (p. 627), it may interest some of the readers of BRITISH BIRDS to know that Mr. Paynter writes

me that a pair of Common Gulls (*Larus canus*) are again nesting on the Farne Islands this year (1912), and that he saw their nest containing three eggs on June 24th.

GEORGE BOLAM.

[We have already referred to the record of a pair breeding in 1910 (see Vol. V., p. 29). In his book Mr. Bolam doubts the correctness of Mr. Fortune's observations of twenty-five years ago (*loc. cit.*).—EDS.]

SPOTTED CRAKE NESTING IN ROXBURGHSHIRE.

At a small but strictly preserved loch in Roxburghshire (where, besides numerous Mallards and Teal, several pairs of Pochard and Shovelers breed), a duck of the last-named species flapped up with studied lameness from a patch of yellow iris only a few yards out in the soft bog. The drake—as usual—then rose close beyond. On walking out towards the spot, I saw that the young Shovelers were in process of hatching-out, the date being May 17th, about a week later than their average. A few steps beyond, a small rail-like bird darted away like a rat among the low marsh-herbage. Within half a dozen yards it stopped twice to look back, and by its mottled neck and short bill, light-coloured, I saw it was not a Water-Rail, and came to the conclusion that it must be a Spotted Crake (*Porzana porzana*). While still watching it, barely a dozen yards away, I realized a movement almost beneath the binoculars, and at once saw several dark brown downy chicks creeping away through the moss. It occurred to me to catch one—they were still within a step or two—but the soft bog gave way, and before I recovered a footing, the chicks had disappeared. Later in the evening, while sitting by the loch-side, I heard the distinct double note that I have before associated with the Spotted Crake, both here, at Houxty in Northumberland, and also in Spain.*

On the morning of May 19th I returned to the loch, but could neither see nor hear anything of the Crakes and the young Shovelers had then left their nest. The note of the Spotted Crake—*wheet, wheet*—is rather vibrant, distinctly audible at some little distance. Therefore, should the Crakes breed regularly at this loch, the fact can be verified next spring.

It may be worth adding that in some young fir-plantations around this loch, I found two nests of Reed-Buntings (*Emberiza s. schæniclus*) in the tops of young spruces, quite four feet above the ground.

ABEL CHAPMAN.

* *cf. Bird-life of the Borders*, 2nd ed., pp. 137-8; also *Ibis*, 1894, p. 342.

RECOVERY OF MARKED BIRDS.

The following have kindly sent in subscriptions towards the expenses of the Marking Scheme since the last acknowledgment was made :— Messrs. R. O. Blyth, A. W. Boyd, N. Chaplin, T. A. Coward, Miss M. and Mr. D. G. Garnett, Sir Richard Graham, Messrs. J. F. Greenwood, J. M. Goodall, T. C. Hobbs, Miss S. M. Heysham, Miss A. C. Jackson, Captain W. Mackenzie, Messrs. R. E. Knowles, A. Mayall, Dr. H. J. Moon, North London Natural History Society, Messrs. F. W. Oliver, E. F. and J. K. Stanford, R. J. Ussher, and E. A. Wallis.

I may mention that subscriptions are especially welcome just now as the inquiry has grown to such large dimensions that it is impossible to proceed further without making a complete card-catalogue of all the rings used, and this will be a large additional expense.—H.F.W.

STARLINGS (*Sturnus v. vulgaris*).— B.B., No. 4973, marked by Mr.

A. H. M. Cox at Plymouth, Devonshire, on May 24th, 1911, as a nestling. Recovered at Peverell, Plymouth, about March 25th, 1912. Reported by Mr. A. Glanfield.

B.B., No. 7109, marked by Dr. N. F. Ticehurst at Huntbourne, Tenterden, Kent, on May 20th, 1911, while incubating in nesting-box No. 57. Recovered on April 21st, 1912, while incubating in the same nesting-box, and again while incubating her second lot of eggs in the same box. Ring replaced and bird released.

B.B., No. 19224, marked as No. 7109 on May 29th, 1912, as a nestling. Recovered at Woodchurch, Kent, on June 24th, 1912. Reported by Mr. M. E. King.

B.B., 19599, marked as No. 7109 on June 16th, 1912, as a nestling. Recovered at Appledore, Kent, on June 30th, 1912. Reported by Mr. H. Baker.

B.B., No. 13317, marked as No. 7109 on May 24th, 1911, as a nestling. Recovered as an adult male at same place on June 22nd, 1912. Ring replaced and bird released.

B.B., No. 14512, marked as No. 7109 on April 21st, 1912, as an adult female incubating in box H. Recovered at same place on June 6th, while incubating second clutch in box J. Ring replaced and bird released.

Ticehurst, Tenterden, No. 359, marked by Dr. C. B. Ticehurst at Huntbourne, Tenterden, Kent, on May 25th, 1910, as an adult female on nest. Recovered while incubating at the same place on May 31st, 1912. Ring replaced and bird released.

Ticehurst, Tenterden, No. 436, marked as No. 359 on May 17th,

1910, as a nestling. Recovered as an adult female incubating at the same place on May 30th, 1912.

Ticehurst, Tenterden, No. 11, marked as No. 359 on May 21st, 1908, as a nestling. Found dead at same place during last week in June, 1912.

B.B., No. C468, marked by Mr. J. Bartholomew at Torrance, near Glasgow, Stirlingshire, on May 29th, 1911, as a nestling. Recovered at the same place on April 24th, 1912.

B.B., No. 15489, marked by Mr. R. O. Blyth at Skelmorlie, Ayrshire, on January 27th, 1912, as an adult. Recovered at the same place on May 3rd, 1912.

B.B., No. 15058, marked by Mr. A. Bankes at Salisbury, Wiltshire, on December 22nd, 1911, as an adult. Recovered at the same place on May 3rd, 1912.

B.B., No. 6935, marked as No. 15058 on May 6th, 1911. Recaptured at same place on May 9th, 1912. Re-marked with ring 17404.

B.B., No. 15051, marked as No. 15058 on October 26th, 1911. Recaptured at same place on May 6th, 1912. Re-marked with ring 17407.

B.B., No. 2994, marked as No. 15058 on May 4th, 1911. Recaptured at same place on May 10th, 1912. Re-marked with ring 17413.

B.B., No. 15059, marked as No. 15058 on January 3rd, 1912. Recaptured at same place on May 10th, 1912. Re-marked with ring 17419.

B.B., No. 6923, marked as No. 15058 on May 15th, 1911, as an adult. Recaptured at the same place on July 10th, 1912. Ring replaced and bird released.

B.B., No. 5412, marked by Messrs. Robinson and Smalley at Silverdale, near Carnforth, Lancashire, on May 24th, 1910, as a nestling. Recovered one mile from the place where ringed on May 6th, 1912. Reported by Mr. J. Hindle.

CHAFFINCH (*Fringilla c. œolebs*).—B.B., No. F724, marked by Mr. M. Portal at Sandhoe, Hexham, Northumberland, on July 20th, 1911. Recaptured at the same place on April 17th, 1912. Re-marked with ring H709.

YELLOW BUNTING (*Emberiza c. citrinella*).—B.B., No. D290, marked by Mr. A. G. Leigh at Hampton-in-Arden, Warwickshire, on June 26th, 1911, as an adult. Recovered one mile from the place where ringed on March 15th, 1912.

NUTHATCH (*Sitta c. britannica*).—B.B., No. A380, marked by Mr. A. Bankes at Salisbury, Wiltshire, on May 12th, 1911, as an adult. Recaptured at same place on May 9th, 1912. Re-marked with same ring and released.

GREAT TIT (*Parus m. newtoni*).—B.B., No. F625, marked by Mr. J. Bartholomew at Torrance, near Glasgow, on August 4th, 1911, as an adult. Recovered at the same place on April 30th, 1912.

WILLOW-WARBLER (*Phylloscopus t. trochilus*).—B.B., No. F21, marked by Mr. J. D. Patterson at Goathland, Yorkshire, on June 26th, 1911, as a nestling. Recovered sitting on six eggs on June 18th, 1912, about two miles from place where ringed. Re-marked with ring J844 and released.

SONG-THRUSH (*Turdus p. clarkei*).—B.B., No. 10828, marked by Mr. J. Bartholomew at Kinnelhead, Dumfriesshire, on April 29th, 1911, as a nestling. Recovered at Clonakilty, co. Cork, on January 29th, 1912. Reported by Mr. D. McCarthy.

B.B., No. 13721, marked by Mr. A. Mayall at Bromsgrove, Worcestershire, on July 10th, 1911, as a nestling. Recovered at the same place on June 16th, 1912. Reported by Mr. Pillon.

BLACKBIRD (*Turdus m. merula*).—B.B., No. 14589, marked by Mr. T.C. Hobbs at Rock, near Alnwick, Northumberland, on August 1st, 1911, as a fledgeling. Recovered at Gosforth, near Newcastle-on-Tyne, Northumberland, on July 14th, 1912. Reported by Mr. J. S. T. Walton.

REDBREAST (*Dandalus r. melophilus*).—B.B., No. 5201, marked by Mr. R. O. Blyth at Skelmorlie, Ayrshire, on May 24th, 1911, as a nestling. Recovered at the same place late in March or early in April, 1912.

SWALLOW (*Chelidon r. rustica*).—B.B., No. F246, marked by Mr. H. W. Robinson at Stodday, Lancaster, on August 2nd, 1911, as a nestling. Recovered in Lancaster, on June 3rd, 1912, about one mile from the place where ringed.

B.B., No. C901, marked by Mr. C. T. Cobbold at Nursling, near Southampton, on August 2nd, 1911, as a nestling. Recovered at Mill Hill, London, N.W., in June, 1912. Reported by H. L. F. Guernanprey.

SPARROW-HAWKS (*Accipiter n. nisus*).—B.B., No. 10307, marked by Mr. E. A. Wallis at Rubery, Worcestershire, on July 3rd, 1911, as a nestling (one of six). Recovered at Belbroughton, Worcestershire, on May 17th, 1912. Reported by Mr. J. Willmot.

- B.B., No. 10305, marked as No. 10307. Recovered at Clent, Worcestershire, at the end of May, 1912. Reported by Mr. F. W. Riden. The recovery of two other birds of this brood was reported in Vol. V., p. 186.
- COMMON HERON (*Ardea cinerea*).—B.B., No. 50055, marked by Mr. J. R. B. Masefield near Cheadle, Staffordshire, on May 11th, 1912, as a nestling. Recovered at Thrupp Pool, near Daventry, Northamptonshire, on July 7th, 1912. Reported by Mr. G. Bannard.
- TEAL (*Anas c. crecca*).—B.B., No. 8651, marked by the Hon. G. Legge in the autumn, 1910, at Patshull, Wolverhampton, Staffordshire, as an adult. Recovered on the river Li, Dalarna, Sweden, on July 29th, 1911. Reported by Dr. Einar Lönnberg.
- RED-BREASTED MERGANSER (*Mergus serrator*).—B.B., No. 521, marked by Major H. Trevelyan on Rough Island, Lough Erne, co. Fermanagh, on June 12th, 1909, as an adult female. Recovered on the river Erne at Belleek, co. Fermanagh, on June 13th, 1912. Reported by Mr. B. Glynn.
- REDSHANK (*Tringa totanus*).—B.B., No. 18154, marked by Miss S. M. Heysham at Rockcliffe Marsh, Cumberland, on May 18th, 1912, as a nestling. Recovered at Dornock, by Annan, Dumfriesshire, on July 17th, 1912. Reported by Mr. J. Vernon.
- BLACK-HEADED GULLS (*Larus ridibundus*).—B.B., No. 3336, marked by Dr. C. B. Ticehurst at Llyn Mynyddlod, near Bala, Merioneth, on June 12th, 1909, as a nestling. Recovered at local gully at Hebden Bridge, Yorkshire, June 1st, 1912. Reported by Mr. T. F. Greenwood.
- B.B., No. 3434, marked by Messrs. Robinson and Smalley at Gull Moss, Winmarleigh, north Lancashire, on June 14th, 1909, as a nestling. Recovered at Bolton-le-Sands, near Carnforth, Lancashire, on January 5th, 1912. Reported by Mr. J. Lawrence.
- B.B., No. 30321, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 11th, 1910, as a nestling. Picked up dead on same breeding-place as where ringed on June 5th, 1912.
- B.B., No. 27373, marked as 30321 by Mr. H. W. Robinson on June 13th, 1912. Recovered at Weymouth, Dorsetshire, on July 5th, 1912. Reported by Mrs. A. E. Bennett.
- B.B., No. 27317, marked as No. 27373. Recovered at Beamish, Northumberland, on July 8th, 1912. Reported by Mr. W. Livingstone.

B.B., No. 29147, marked as No. 27373 on June 19th, 1912. Recovered at Heysham, Morecambe Bay, Lancashire, on July 12th, 1912. Reported by Mr. S. Cowan.

B.B., No. 28920, marked as No. 29147. Recovered at Workington, Cumberland, on July 20th, 1912. Reported by Mr. H. Oldfield.

B.B., No. 28883, marked by Mr. F. W. Smalley at Ravenglass, Cumberland, on June 17th, 1912. Recovered at Leece, near Ulverston, Lancashire, on July 4th, 1912. Reported by Mr. J. Brockbank.

B.B., No. 22983, marked by Mr. J. S. T. Walton, at Denton Fell, Cumberland, on June 11th, 1911, as a nestling. Recovered at Dornock, by Annan, Dumfriesshire, about the first week in July, 1912. Reported by Mr. J. T. McGlasson.

LESSER REDPOLL NESTING IN WILTSHIRE.—Mr. B. Young records in the *Field* (15.VI.12, p. 1219) that a pair of *Carduelis l. cabaret* have nested at Stratford-sub-Castle, Salisbury, this year. Mr. Young states that he has had excellent views of the birds, enabling him to identify them satisfactorily.

GREY WAGTAIL NESTING IN WEST SUSSEX.—Mr. H. M. Langdale records (*Zool.*, 1912, p. 228) that he found a nest of *Motacilla b. boarula* on April 30th, 1912, with three eggs, near Midhurst. It will be remembered that Colonel Feilden reported a nest from East Sussex in our June issue (p. 17).

NORTHERN WILLOW-WARBLER IN SOLWAY.—Miss A. C. Jackson, a most up-to-date ornithologist, records (*Scot. Nat.*, 1912, p. 163) that a Willow-Warbler taken at the Mull of Galloway Light on the night of May 16th-17th, 1911, has been identified by Dr. C. B. Ticehurst as a specimen of *Phylloscopus t. eversmanni*, which has not previously been detected on the western side of Great Britain.

CONTINENTAL SONG-THRUSH IN SOLWAY AND MORAY.—Miss A. C. Jackson records (*Scot. Nat.*, 1912, p. 163) the occurrence of two *Turdus ph. philomelus* at the Mull of Galloway Light-house on the night of March 30th-31st, 1911, and one on the same date at the Tarbatness Light. We have no previous record of actual specimens from the west coast of Great Britain, and up to the present no identified examples have been recorded from Ireland, although the bird undoubtedly visits that country.

GREENLAND FALCON IN OUTER HEBRIDES.—An adult male *Falco r. candicans* was taken on April 2nd, 1912, at Barra (W. L. Macgillivray, *Scot. Nat.*, 1912, p. 164).

INCREASE OF GREY LAG-GOOSE ON THE SOLWAY.—An increase in the numbers of *Anser anser* on both shores of the Solway has been reported during the last few years, and this seems to have been confirmed for 1911 so far as the English side is concerned in the reports received by Messrs. Hope and Thorpe (*Zool.*, 1912, p. 182). They were seen throughout January, and a gaggle of forty appeared so late as April 14th, while "Grey" Geese on July 4th and 25th may have been of this species; on November 21st a flock of one hundred and fifty is reported.

FLIGHT OF THE COMMON SNIPE.—Mr. F. J. Stubbs records (*Zool.*, 1912, p. 196) that while watching a Snipe (*Gallinago g. gallinago*) flying about, he very distinctly saw it on some six different occasions twist completely over and proceed for some yards with outstretched wings *belly uppermost*. This it did not only when descending in the "switchback" drumming movement, but also when flying straight along near the ground. Mr. Stubbs particularly noted that in its descent in the drumming attitude, but back downwards, no sound was produced and this one would expect, as the pressure of the air would in this case be on the upper side of the web of the tail-feathers. The observation is confirmed in a subsequent number of our contemporary by Messrs. H. Eliot Howard and J. S. Huxley.

COMMON SNIPE NESTING IN BEDFORDSHIRE.—On May 2nd, 1912, Mr. J. Steele Elliott found two nests of *Gallinago g. gallinago* in some marshy meadow-land in Bedfordshire in which county, he states, no satisfactory instance of the bird having nested has previously been recorded; (*Zool.*, 1912, p. 197).

BLACK TERN IN WIGTOWNSHIRE.—Mr. J. C. Gordon records (*Scot. Nat.*, 1912, p. 165) that he saw a single *Hydrochelidon n. nigra* in company with one or two Common Terns on June 2nd, 1912, on Souleseat Loch (Inch). The bird is a rare vagrant in west Scotland.

EARLY ARRIVAL OF SUMMER-BIRDS IN "CLYDE."—In his annual report on the arrival of migrants (*Glasgow Nat.*, Vol. IV., pp. 66-70) Mr. J. Paterson states that a result of the continuously fine weather in the spring of 1912 was that the summer-birds appeared undoubtedly earlier than usual. Mr. Paterson remarks that it is necessary to go back to the exceptional spring of 1893 to find a parallel to the "precocious appearance of several species."



REVIEWS

The Flight of Birds. By F. W. Headley, M.A., F.Z.S., M.B.O.U., x + 163 pp., with sixteen Plates and many text Figures. Witherby & Co., London, 1912. 5s. net.

THOSE who remember the excellent account of "Flight" given in Mr. Headley's *Structure and Life of Birds*, or who have read his other contributions to the subject in the pages of BRITISH BIRDS and other periodicals, may well expect something especially good when a whole book from his pen is devoted to the question. Nor will they be disappointed. Mr. Headley has not been too ambitious, but has confined himself to an account of what is known with some certainty, wisely refraining from entering realms of (at present) unprofitable speculation. He has tried to make his account simple for the ordinary reader—no easy task in view of the popular horror of anything savouring of mathematics! In this he has on the whole succeeded very well, and his style is usually as lucid as could be desired. He is perhaps not always very consistent, in that a simple point is often elaborated very carefully, while the explanation of a more difficult one is condensed. But if he errs in this it is within narrow limits, and there is no paragraph in the book which the most untechnical mind could find difficult—a fact which speaks for itself. The aviator's interests have been kept in view, but the book is mainly for the bird-lover.

The first chapter deals with "Gliding" as being a simple form of flight, and contains a lucid explanation of the principles involved in air-resistance. The next chapter deals with "Stability" and the adjustments necessary thereto. The third takes a step further, to propelled flight—"Motive Power." The principles of leverage and propulsion are clearly expounded, and the phases of the wing-stroke are fully discussed and well illustrated. The chapter on "Starting" discusses the question of the difficulty some birds have in performing that act, and from that goes on to speak of the degree to which different species can rotate the wing. The chapter ends by pointing out that large size is a disadvantage in most aspects of flight. The author adds that large birds are at a further disadvantage in the struggle for existence owing to their long period of immaturity, but it is questionable whether that is a *necessary* concomitant of large size, although the rule seems to hold for birds so far as we know.

Degree of specialization must be a factor in the rate of reaching maturity, apart from mere size; furthermore, greater longevity may exist as a partial compensation.

The chapter on "Steering" goes well into the different methods employed and the varying degrees of proficiency found. The same remark applies to "Stopping and Alighting." Then our author gives an anatomical chapter—on the whole very adequate to his purpose—in which "The Machinery of Flight" is described. "Varieties of Wing and of Flight" is an interesting chapter, while in "Pace and Last" we have some new observations and some old, familiar arguments—in some of these latter we feel, as we have felt before, that much of the evidence is only "circumstantial," and not very satisfactory. "Wind and Flight" is a long chapter, including as it does the problems presented by the phenomenon of soaring. On this point the author's explanations seem to us both clear and convincing. Finally, under the heading of "Some Accessories," a few lines are given to such questions as Digestion, Breathing, and Call-notes, in so far as they have a bearing on or a connexion with the subject of Flight.

Many of the photographs are beautiful, and all the illustrations are adequate to their purpose (but it is unfortunate that fig. 27 should be upside down). The book is clearly printed and of convenient size—in every way a welcome addition to the ornithologist's library. A.L.T.

LETTER

THE STOMACH OF A WATER-RAIL.

To the Editors of BRITISH BIRDS.

SIRS,—In reply to Mr. C. B. Ticehurst's suggestion (p. 72), that the small stomach found inside the ordinary stomach of a Water-Rail was "simply the mucous membrane of the stomach or gizzard which had become separated from the muscular coats"—no; it was not. It was a distinct stomach, which must have been attached by a pedicle; it was of cup-like formation, entirely separate from the walls of the stomach. Had the microphotograph of a section of the small stomach which I sent been inserted, it would have been seen that all structures found in the walls of a stomach were present, including muscle.

MARJORY GARNETT.

BRITISH BIRDS

EDITED BY H. F. WITHERBY, F.Z.S., M.B.O.U.

ASSISTED BY

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THE FIRST NESTING OF THE COMMON EIDER
IN IRELAND.

BY

H. W. ROBINSON, M.B.O.U.

THE Common Eider (*Somateria m. mollissima*) has not hitherto been recorded as a nesting species in Ireland, but two nests were found there this year by a friend of mine, and I have seen the eggs and down from one of them.

He found the nests on a small island off the coast of county Down, about three-quarters of a mile in extent and close to the mainland, on June 2nd, 1912, and also saw the two pairs of birds. The nests were situated at either extremity of the island, three-quarters of a mile apart, and were placed among large boulders. The clutches were only small ones of three and four respectively, being about fourteen days incubated, if not more.

The Eider Duck is only known in Ireland at any time of the year as a somewhat rare straggler, under forty, according to the *Hand-List of British Birds*, having been recorded in all, so that these two records of the species nesting there are doubly interesting. My friend, who did not know that the record was a new one, but thought it very unusual, has visited the same coast in June three years in succession, but saw no Eiders there during his previous visits, and they are a new species also to the local boatmen.

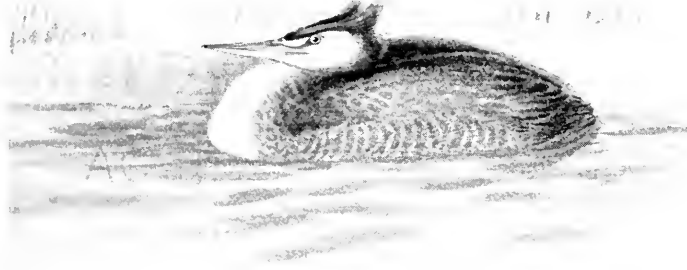
[This is a most interesting extension of the known breeding-range of the Eider, and we think it was a great pity that the eggs were taken. Careful diagnosis of the bird and a piece of the down from the nest, would have been amply sufficient for identification. Any action which tends to check a natural extension of breeding-range, or which is liable to endanger the successful rearing of its young by a rare breeding bird, is to be greatly deplored.—EDS.]

SPRING-NOTES ON THE BORDERS (1911-12).

BY
ABEL CHAPMAN.

IN view of the appearance within a twelvemonth of two new faunal works dealing with the Border regions—both written by far more competent ornithologists*—any further notes might seem superfluous and super-erogatory. The following subsequent experiences may, nevertheless, at least serve to illustrate the singular rapidity with which certain species are changing or extending their local distribution.

GREAT CRESTED GREBE (*Colymbus c. cristatus*). As late as April, 1911, I was unable to give Mr. A. H. Evans (then issuing his *Fauna of Tweed*) a single instance



GREAT CRESTED GREBE.

First ever seen in Northumberland in summer-dress, Colt Crag, April 15, 1911.

(NOTE.—No visible tail and no white showing along water-line.)

(*Drawn by A. Chapman.*)

of the occurrence of this species inland; but within the *fourteen* succeeding months, I had discovered it breeding in no less than *three* of the seven Border counties that I regard as falling within my “jurisdiction”! Two of the three instances (in Northumberland and Roxburghshire

* (1) *A Fauna of the Tweed Area*, by A. H. Evans; (2) *Birds of Northumberland and the Eastern Borders*, by George Bolam.

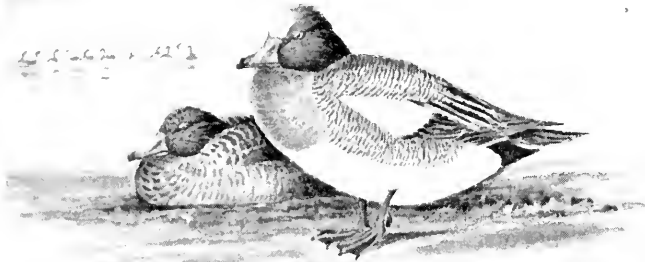
respectively) I was luckily able to notify Mr. Bolam in time for inclusion in his newly-published work. The third occurred during the present spring—in May, 1912—at a moorland loch in Selkirkshire, where I was told that a pair had nested in the previous year also. It only remains to add that the two stations colonized in 1911, were both re-occupied in the present spring, though only by single pairs.

LITTLE GREBE (*Colymbus r. ruficollis*).—In this connexion it may be worth adding that during the two past springs, I have found the Dabchick breeding in—I think*—all the seven Border counties within my survey, including one instance in the highlands of Selkirkshire, where Mr Evans (*Fauna of Tweed*, p. 242) had, at that time, no direct evidence of its nesting.

RINGED PLOVER (*Charadrius h. hiaticula*).—Up to a few years ago, I had never met with this species nesting inland on any of the Border moorlands. It is, of course, possible that, in so wide an area, an odd pair or two may have done so unobserved. The first river colonized was the Coquet (see BRITISH BIRDS, Vol. V., p. 53), then the upper Breamish, and several other spots as set out by Mr. Bolam (*tom. supra cit.*, pp. 513-4), on some of which it now abounds. During the present spring (1912) it has yet further extended its range to the twin Border-rivers, North Tyne and Redewater, on neither of which had it ever appeared before; as well as to, at least, two moorland loughs in my neighbourhood (Houxty). Should the invasion continue on its present scale, the Ringed Plover promises to rival the Common Sandpiper in local ubiquity.

* Throughout the wilder regions of the Border, county boundaries (often, in fact, the Anglo-Scottish march) are frequently very ill-defined. There may, or may not, be a sheep-fence: sometimes it is merely the "watershed"—"where the waters from Heaven divide"—or an imaginary line drawn from cairn to cairn. Thus one may not know, within hundreds of yards, in which county (or country) one may happen to be, without reference to the Ordnance map and a compass. I admit I pay no attention to these minor details.

WIGEON (*Anas penelope*).—Although the extension of its breeding-range to the northern confines of the Border area had already been recorded, yet, by sheer ill-luck, I had personally failed to see a single Wigeon actually nesting in this region, despite prolonged search during several springs. This year, however, I succeeded in



WIGEON IN MAY — WILL THEY STAY?

(Grindon Lough, Northumberland, May 9.)

(Drawn by A. Chapman.)

discovering it breeding at *nine* different moorland lochs—four in Roxburgh, five in Selkirkshire. Several of these lochs had but a single pair each: others two or three: while certain larger sheets boast quite considerable colonies. These, however, include many immature

Wigeon of both sexes, non-breeders, unpaired, and associated in coterries of fives and sixes. Similar conditions obtain among the Tufted Ducks, but—so far as I remember—in no other member of the tribe.

One Wigeon's nest was in a soft moss quite near the loch-side; the majority among bents, or stunted heather, some little distance away. I was assured that young had been hatched as early as April 28th; the first I saw afloat myself were some ten days later. Mid-May seems to be the average date; but broods varied greatly in size, as well as in numbers—from three or four up to as many as nine.

So soon as the young take the water, the female Wigeon adopts a harsh croaking sort of quack, quite different from all her well-known notes as heard in winter. This note deceived me at first (despite the negative evidence of a 25-diameter "deer-stalker" telescope) so far that I began to cherish—for brief moments—a wild hope of having found a Gadwall breeding!

COMMON POCHARD (*Nyroca f. ferina*).—I observed Pochards this spring at four new points, as well as at two others in 1911—none of these six hitherto recorded—and making, with the three mentioned in my book, *nine* breeding-stations on the Borders, to wit: six in Roxburgh, two in Berwick, and one (a single pair) in Selkirkshire. Possibly, however, all these nine stations were not occupied simultaneously.*

The favourite site for Pochards' nests is in the centre of a tall clump of dead flags†—the remnant of the previous year's growth—standing on the outer verge of the wettest and most dangerous bog—often six or

* Thus, in 1911, a pair bred on a small lochan on Kale-water, but did not return in 1912. Again, Yetholm Loch (where, first of all, I found Pochards breeding in 1887) was utterly abandoned by them in 1911, and this spring I did not think it worth a visit. Similarly Tufted Ducks had, in 1911, abandoned Whitton Loch where I had first observed them breeding in 1906. (*cf. Fauna of Tweed*, p. 165.)

† Just such situations as its cousin, the White-eyed Pochard, selects in Spain.

eight feet deep, and possibly more, of rotten ooze, semi-liquid. Their nests are usually *near* the open water, say only a yard or two inside the fringing jungle of dense swamp-vegetation, and often amidst those of Black-headed Gulls which nest by hundreds in such situations, and are compactly constructed of dead reeds, etc.



POCHARD DIVING.

(Greenlee Lough, February 23.)

(*Drawn by A. Chapman.*)

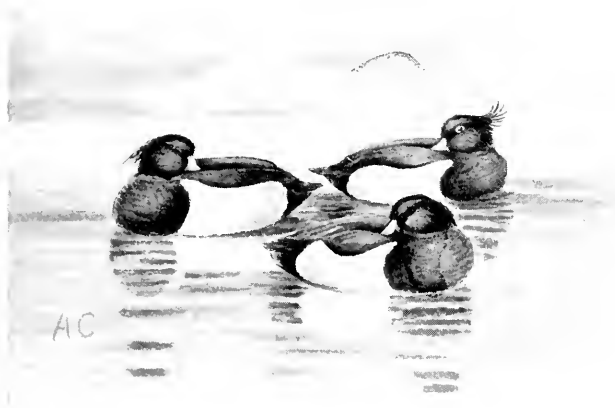
Pochards' eggs are distinctly larger, paler, and, to my eye, less green than those of Tufted Ducks, and are laid a trifle earlier. We found a full clutch on May 10th, and saw the first young afloat on June 9th. The nests at first contain little or no "down" till incubation has commenced, say about May 18th. Two nests, with eggs already half-incubated (as tested in water), had no "down" at all; in another, examined this spring, and from which the young had just been hatched, no sign of "down" could be found. Exceptionally, a single nest (occupied both last year and this) was situate on firm ground ashore, in the midst of a clump of tall rushes. It was composed of very scanty materials, but had a lot of "down."

The above note on the comparative colours in the eggs of Pochard and Tufted Duck respectively, was written down on the spot, and while the unblown eggs of both species lay before me. The distinctions, however, are slight, and perhaps need more accurate colour-perception than my eye possesses. I therefore send, for the Editors' judgment, the two specimens actually taken (one of either kind), only remarking that the delicate green shades appear the more evanescent.*

TUFTED DUCK (*Nyroca fuligula*).—Respecting the Tufted Duck, which to-day nests on half the lochs, loughs, and mosses of the Borders—in several abundantly—it is worthy of recall that at the date of the first edition of my *Bird-Life of the Borders* (1889), the species was all but unknown as a breeding-duck. Surely a remarkable change? The nests of the Tufted Duck are always on the dry—among bog-grasses, sedge or low scrub, heather for choice. In stating (*Bird-Life*, 2nd ed., p. 92), that, owing to the feeble pedestrian powers of this, and other, diving-ducks, the nest-site is *exclusively* confined to the water's edge, I now find I had somewhat overstated the habit. Such is very frequently the case—as where some winding marsh-channel gives access far away into recesses of bogs and mosses: but I have since seen many nesting-places well away from water and which could be reached only on the wing. Especially favoured resorts are flat mosses clad in deep heather and interspersed with peat hags and small pools. Immediately adjacent to such pools is the favourite site, and alongside each nest (or even under it) will usually be found the egg-shells and relics of a previous year's occupation.

*After examining the two specimens forwarded by Mr. Chapman, I find that in this case the Pochard's egg *is* less green than that of the Tufted Duck. All duck's eggs vary to some extent in colour, but the ordinary type of Pochard's eggs has a decided green tinge which combined with the large size and broader shape render it easy to distinguish from the egg of the Tufted Duck, which is typically more olive-brown in colour, smaller and more elongated and elliptical in shape. Out of over fifty Pochard's eggs examined this year in the nests, not one lacked the characteristic green tint.—F. C. R. JOURDAIN.

By mid-April the Tufted Ducks are thoroughly localized on their selected lochs; yet they are not all paired, and the glass reveals that many are non-breeders, being in one or other of the slow stages of immaturity. These, nevertheless, associate freely with the paired adults up to the date—about April 25th—when the latter separate to breed. Some commence laying early in May, for we have found clutches of seven and eight



TUFTED DUCKS—MAY.

(Adult Drakes, showing distribution of colours)

(*Drawn by A. Chapman.*)

eggs on May 15th; another of eight, quite fresh and with hardly any "down" on the 20th; one with seven, also fresh, but with a lot of "down," as late as June 11th: on which identical date we have also observed the first young birds out on the water. After that period, the adult drakes begin to form little bachelor coterie, and by July are losing their crests, preparatory to the eclipse.

Personally, I have never noticed a clutch exceeding eight eggs—more the bird, one would think, could hardly cover—yet it is not unusual to see a female Tufted Duck* convoying ten, twelve, even fourteen young—singular little downy squabs, darkish, with pale yellow eyes—while, close by, other adults float broodless. It almost suggests a system of “baby-farming”! This one notices every July.

SHOVELER (*Spatula clypeata*).—Mr. A. H. Evans demonstrates that Shovelers have bred on the Borders “probably from time immemorial” (*Tweed Area*, p. 157). All the same from thirty to forty years ago they were so extremely rare that one might spend a decade without seeing more than an odd pair, or possibly two. Nowadays they are fairly distributed on most suitable mosses or loughs. Shovelers arrive in pairs at the latter part of March, and go straight to their selected station—usually a single pair at each, less commonly three or four—commencing to nest almost immediately, as early as the native wild Mallards. By April 8th I have found seven eggs; another nest on the 11th, eleven; good-sized young seen on water May 18th (eight yellowish chicks, marked with black, following their mother who swam very deep, her head and back almost awash). Young near full-grown by June 2nd.

The nest itself is usually a fairly compact mass of reeds and flags, raised a foot or two above bog-level, and often placed (like the Pochard's) in the centre of a clump of flags or sedge. But since at that early period there is, as yet, no new growth, the Shoveler is restricted for concealment to the wreckage of the previous year—a dangerous choice which maternal instinct seeks to

* On the other hand the late T. E. Buckley found clutches of sixteen and seventeen eggs in Caithness; R. J. Ussher once found a nest with fourteen; R. H. Read found one with twenty; and I have myself seen nests with ten, eleven, fifteen, sixteen and eighteen eggs, but in the case of the two latter it is probable that two ducks were laying together. A pile of no fewer than twenty-eight eggs from which a duck shuffled off, was certainly the produce of several couples.—F. C. R. JOURDAIN.

counteract by selecting the wetter and "squashier" spots where few human foes dare to venture. Still these nests are always further "inland"—that is, not nearly so far out in the dangerous floating-bog as are those of Pochards a month later. Other sites are in



SHOVELERS—NEWLY ARRIVED.

(An impression at Grindon Lough, March 28.)

(*Drawn by A. Chapman.*)

the mosses and flocs; among heather, bents, or dwarf-willow—exceptionally in a young fir-plantation, one such nest being over a quarter-mile from the loch.

All the above references to Wigeon and Pochard, it will be noticed, refer exclusively to the Scottish side of the Border. In Northumberland I have hitherto failed to establish the breeding of either of these, though feeling assured it is only a matter of a year or two, since both species have latterly lingered on our moorland loughs till well on in spring. In 1911, several separated pairs of Wigeon (as well as one pair of Pintails—the latter species *never once* observed on the Scottish side) remained on Grindon Lough until May 9th—by which date they were already overdue to have eggs. This year (1912)

the spring drought drove them both away (the Pintails having again appeared) by April 25th.* Three weeks later (on May 14th) I observed single Wigeon-drakes, fully adult, at two other loughs a few miles distant, and half-assumed that their mates would then be incubating close by. There were also at that date a pair of adult Wigeon, besides two, if not three, Pochards, on Greenlee Lough—the latter being the remnant of a pack of some twenty-five which had wintered there. The two single drakes first mentioned were never seen again, but those on Greenlee all remained until May 22nd, and on the 28th I was assured by the keeper that they were still there—he having seen the drakes of both species on the previous day. A prolonged search that morning however, revealed no sign of either, nor have they, old or young, been seen since. The above dates, it will be observed, are later than those at which both Wigeon and Pochard breed just over the Border. Two separated pairs of Pochard also remained on another Northumbrian lough all through April and up to May 14th, 1912. Since that date they have not been seen, though whether gone right away, or lying *perdus*, is “not proven.”

In the above notes I have perhaps been unconsciously preoccupied by my personal observations, but must not overlook Mr. George Bolam's careful records on the same subject. The evidence he adduces as regards Wigeon breeding in Northumberland is strong; yet hardly, perhaps, conclusive. That respecting the Pochard appears to me to amount to proof. The particular loughs mentioned (near Wooler) lie so near the Roxburghshire stations already occupied by Pochard,

* It may interest to add that though this small lough was all but dried up in May, yet the subsequent heavy rainfall had completely filled it up in June, and by the end of that month it was as big as in mid-winter. All the reed-beds with their nesting-colonies of Black-headed Gulls were submerged, and on June 28th, when Mr. Witherby and I visited the lough, a solitary youngster appeared to be the only survivor of the season's hatching. A single pair of Gulls had then established a home, two miles away, on Broomlee Lough, where I had never known them nest before. The same cause probably explained an untimely Snipe sitting on four eggs at that late date.

that their nesting thereat would almost appear a corollary, yet it has not been my luck to observe them there. Moorland loughs however, when remote from a base and often surrounded by belts of sedge and soft quaking-bog, do not necessarily reveal all their denizens in a short survey. In thus extending their area, moreover, Pochards—and other ducks—may and do occupy for a year, or two, sites afterwards abandoned or exchanged for others found more suitable. After all, the extension of area seems now merely a question of a season or two; but who would have believed that, say twenty years ago?

Such is the vast extent of wild heathery mosses and marshy moorland in this region that scarce the full force of the B.O.U. could effectively search it out in a single season—far less two or three belated observers, however hard they work. In conclusion, may I add (apropos of a footnote at p. 386 of Mr. Geo. Bolam's excellent work), that last year I motored—solely in this study—1,824.5 miles—distances walked, climbed, waded and bog-trotted not registered! This year the record is less—under 1,400 miles—largely owing to the bad weather (one can't use a glass in rain or fog, especially on high ground), and also to extraneous detail such as a law-suit in London!

OBSERVATIONS ON MANX SHEARWATERS AND
STORM-PETRELS AT THE SCILLY ISLES.

BY

NORMAN H. JOY.

ON June 18th, 1912, I visited Annet, Scilly Islands, to observe the Manx Shearwaters (*Puffinus p. puffinus*) and Storm-Petrels (*Hydrobates pelagicus*) breeding there. I hoped to stop the whole night, but unfortunately, starting in a hurry, a very insufficient supply of refreshment was taken, and I was obliged to leave with the boatman at 11.15 p.m. The whole island is undermined by the burrows of Shearwaters, and one's foot often accidentally broke through a thin roof, sometimes on to a sitting bird below. In this way many birds were captured and ringed. The eggs seen were evidently hard set, but only one young bird was found. There were also numerous Puffins on the island, but these invariably occupied burrows on the side of a distinct slope, generally close to the sea, or were nesting under large boulders on the beach.

The sun set at about 8.17 p.m., after which time I waited close to a ridge of large boulders, where a few Storm-Petrels were known to breed. At about 9.30 a peculiar purring noise, which I at first mistook for a distant Nightjar's song, was heard. This proved to be the note of a Storm-Petrel nesting under the boulders. It was rather more highly pitched than the Nightjar's, and ended abruptly after a few seconds in a higher note resembling "Wit." In a short time birds were heard uttering this and another sharp double-note at a distance of every two or three feet of one another, under the boulders of the whole ridge. At about 10 p.m. the first Storm-Petrel was seen on the wing, and a few were observed to creep up from among the boulders and flutter off. By 10.30 there were numbers flying up and down this boulder-ridge, keeping fairly strictly to its limits, the flight reminding one most forcibly of that of the Swallow.

The flight was curiously silent, and no note was uttered, although there were still numbers of birds "singing" under the boulders. It was hard to believe that they were not taking some insect on the wing, as they darted about so rapidly, but I heard no snap of a beak. We



BOULDERS UNDER WHICH STORM-PETRELS BREED, WITH TWO SHEARWATERS' HOLES IN THE FOREGROUND.

tried to capture a bird, with a rather cumbersome beetle "sweeping net," but although many times they passed within a foot of our heads we failed to secure one.

The following quotation from the *Birds of Devon* (p. 402) is of some interest here: "Mr. E. H. Rodd also states that on fine summer evenings at sunset small flocks of Storm-Petrels may be seen five or six miles out in Mount's Bay, flying and hawking about in pursuit of small insects, in the manner of the Swallow tribe." The Storm-Petrel has a wide gape to its mouth which of course would help it greatly in the capture of a flying insect.

The next day a few nests with quite fresh, or slightly incubated eggs were examined, and old birds were found to utter a shrill, screeching note when handled. About 10.40 p.m. a Shearwater was seen to pass, and we then turned our attention to the burrows close by. As there was no moon, it was of course by then quite dark. With

the help of an "electric torch" and the beetle-net we captured and "ringed" about twenty-five birds in as many minutes, as they fluttered along the ground before rising into the air. It was most unfortunate that I had to leave the island then, as I wished to observe when the Shearwaters and Petrels returned to their nests. Mathew writes (*op. cit.*, p. 405): "At the first streak of dawn the noise of the birds (Shearwaters) gradually ceased, and when the sun was up silence again reigned, and all had returned to their burrows." The sun rises at 3.44 on July 19th. The Shearwaters did not come out of their burrows until two-and-a-half hours after sunset, so that if we suppose they return one-and-a-half hours before sunrise, they only have about three-and-a-half hours to obtain their food, a time which would be still more restricted further north. There is evidently a very good reason why the Shearwaters do not leave or enter their nesting-holes during the daytime, although they are certainly not inconvenienced by sunlight. On one occasion I took a Shearwater, which I had extracted from its burrow, down to the sea to watch its action on the water. On returning to the neighbourhood of its burrow a short time after, I found a quite freshly killed Shearwater with a wound in its side, which had no doubt been inflicted by a Lesser Black-backed Gull. The Manx Shearwater is so clumsy and defenceless when on land, that were it not entirely nocturnal during the breeding-season, it is certain that it could never have established itself on an island like Annet, where Gulls abound. Puffins are suffering severely here from the attacks of Lesser Black-backed Gulls, which Mr. Dorrien-Smith tells me are much on the increase, and they would undoubtedly suffer more if they nested in burrows on flat ground more than a few yards away from the sea, as most of the Shearwaters do.

I have to thank Mr. Dorrien-Smith for kindly allowing me to examine the birds' nests, as Annet is strictly preserved.

NOTES

RED-BACKED SHRIKE IN WIGTOWNSHIRE.

ON August 14th, 1912, on the edge of a moor near Leswalt, seven miles from Portpatrick in Wigtownshire, I saw an adult male Red-backed Shrike (*Lanius c. collurio*). When I first saw the bird, it was within twenty yards of me in a black-thorn bush, the grey of the head, with a black stripe across the eye and the chestnut-brown of the back, showed up most distinctly. The bird was fairly tame, and finally flew across to some other thorn trees. I watched it for some minutes but failed to see a hen bird.

M. PORTAL.

BRITISH REDBREAST IN ITALY.

IT may be worth recording that on January 24th, 1910, I obtained from Castiglion del Lago (Central Italy) a Redbreast which in every character, colour and measurements was indistinguishable from the British form; but before labelling it *Dandalus rubecula melophilus* I submitted it to Dr. E. Hartert to whom I am indebted for confirming my identification. He wrote me that in the Museum of Tring there was a similar specimen from Rome, October, 1899. As far as I am aware these are the only authentic specimens recorded from Italy till now, but it is not improbable that other unidentified specimens have occurred. I have examined the specimen in the Florence Museum that Prof. E. H. Giglioli supposed was a British Redbreast (*cf. Avifauna Italica*, p. 159, 1907), but this is undoubtedly a typical *D. rubecula rubecula*. In my collection I have Italian specimens much darker than that mentioned by Prof. Giglioli.

CECILIA PICCHI.

CONTINENTAL HEDGE-SPARROW IN YORKSHIRE.

ON October 9th, 1911, I shot a Hedge-Sparrow at Spurn, and as I did not feel satisfied about it, I submitted it to Mr. Witherby, who showed it to Dr. Hartert. Mr. Witherby considers that it is the Continental form, *Prunella m. modularis*. He says: "The wing formula is right, the seventh primary being 5 mm. shorter than the second, which equals the sixth. The bill is less wide at the base than in *occidentalis*." Dr. Hartert confirms his identification. During my stay at

Spurn there were many Hedge-Sparrows about the lanes and hedgerows, but it was only on the 9th that I saw any number on the ridge.
T. A. COWARD.

EARLY LAYING OF CUCKOO.

REFERRING to the note by Mr. Selous in the last number of BRITISH BIRDS (p. 90) *re* "Early Laying of Cuckoo," I can quite confirm his remarks as to the scarcity of records for Great Britain for April. In my series of 307 British-taken eggs of Cuckoos (extending over a period of forty-eight years), I have only one taken in April, *viz.* Sussex, April 30th, 1905, in a nest of a Hedge-Sparrow; and in a series of 370 eggs from the Continent I have only three, *viz.* South Dalmatia, April 23rd, 1885, in a nest of an Eastern Orphean Warbler; Malaga, April 29th, 1894, in a nest of an Orphean Warbler; and Seville, Spain, April 16th, 1898, in a nest of a Dartford Warbler.

Regarding the deep, rich red-brown type of egg, they are not so uncommon as Mr. Selous imagines. I have ten of these, *viz.* two with Spotted Flycatcher, one with Reed-Warbler, one with Wood-Warbler, one with Meadow-Pipit, four with Tree-Pipit, and one with Robin—all fine-coloured eggs, but getting a trifle duller each year.

HERBERT MASSEY.

LONG-EARED OWL ENTERING A BUILDING.

ON July 19th, 1912, a Long-eared Owl (*Asio o. otus*) entered the school building at Felstead (Essex), and created some disturbance by flying up and down one of the dormitory corridors about 9.15 p.m. It was captured by Mr. J. E. Montgomery after some trouble, and was very savage. This is the fourth example I have seen near the school, and for such a purely woodland species to enter a building seems to me sufficiently extraordinary to be worthy of record.

J. H. OWEN.

SQUACCO HERON IN NORFOLK.

I LEARN on good authority that an adult male Squacco Heron (*Ardeola r. ralloides*) was taken near Horning, Norfolk, on July 5th, 1912.

H. W. ROBINSON.

NIGHT-HERON IN SHROPSHIRE.

I LATELY examined an adult example of the Night-Heron (*Nycticorax n. nycticorax*) which had been obtained early in May, 1912, on the Severn, near Shrewsbury. The species is

very rare in the western midlands; the only previous occurrence in Shropshire being an immature bird shot at Wroxeter, about 1836. H. E. FORREST.

LITTLE BITTERN IN SOMERSET.

A FEMALE Little Bittern (*Ixobrychus minutus*) was captured by a dog in one of the water-courses of the North Marsh between Puxton and Banwell, in north Somersetshire, on May 20th, 1912. It was identified by the Rev. C. R. Blathwayt, who has had it preserved, and it is now on view in the Exeter Museum. F. H. L. WHISH.

BRENT GOOSE IN ANGLESEY.

I RECENTLY examined a female Brent Goose (*Branta bernicla*) which had been obtained at Valley, Anglesey, on August 3rd, 1912. The species is not uncommon on the west coast of north Wales as a winter visitor, but its occurrence in summer is very remarkable. H. E. FORREST.

SCAUP IN CHESHIRE IN SUMMER.

ON July 19th, 1912, I watched an adult drake Scaup, *Nyroca m. marila*, which was swimming with a drake Tufted Duck on Oakmere, Delamere. Its large size, compared with the Tufted drake, as well as its grey back and absence of crest, at once attracted my attention. I did not see anything of it when I visited the mere three days before. On the 21st Messrs. A. W. Boyd and Urquhart saw a drake Scaup in Marbury Mere, near Northwich; possibly it was the same bird, for the two meres are only a little over seven miles apart. Ten days later, on the 31st, Mr. Boyd and I saw one on Rostherne Mere.

The Scaup is a fairly regular visitor to the Cheshire estuaries in spring and autumn, but the only birds which we have observed at rare intervals on the inland waters have been seen during winter. T. A. COWARD.

SOOTY SHEARWATER IN ORKNEY.

ON October 18th, 1911, I received, in the flesh, an adult female Sooty Shearwater, killed by Dan Sutherland off the Island of Graemsay, Orkney. This makes the second record of *Puffinus griseus* in Orkney waters (cf. *Hand-List of British Birds*, pp. 152-3). The bird was exceedingly fat. F. W. SMALLEY.

NUMBER OF FULMARS ON HANDA.

ON June 10th, 1912, I visited the island of Handa, and of course saw the usual birds which habitually breed there in great numbers. I also saw a good number of Fulmars (*Fulmarus g. glacialis*) mostly at the northern end of the island. One local boatman who visits the island regularly, told me that there were about sixty pairs breeding there this year, others, including the Scourie keeper, put the number of nesting couples as between forty and fifty.

Personally I did not see so many as I was unable to reach a good point of observation. But everyone, from whom I could gather information, agreed that there now exists a large and flourishing colony on the island.

The last occasion on which I was on Handa (previous to this year) was at the end of August, 1900. Then I saw nothing of the Fulmars. But this year an old cragsman, who had acted as a ghillie for me in 1900, remarked that on my previous visit there were only one or two couples on the island. As, however, I do not suppose that the old man reckoned accurately the date of my previous visit, but only spoke in general terms, I have no reason to suppose that any record of the Fulmar on Handa, previous to the reliable one of 1902, is in any way trustworthy. A. MAYALL.

[In the summary of Mr. Harvie-Brown's recent paper, it should have been noted, on p. 94, that Eilean Mor is one of the Flannan Isles.—Eds.]

GREAT CRESTED GREBE BREEDING NEAR LONDON.

ON June 26th, 1912, I discovered a Great Crested Grebe (*Colymbus c. cristatus*) sitting on a nest on the Metropolitan Water Board reservoir at Lordship Road, Stoke Newington, a few minutes' walk from Finsbury Park. I visited the nest nearly every day and finally the young birds made their appearance on July 9th. The nest was situated a few yards from the edge of the reservoir, about fifty yards from Lordship Road, in full view of the considerable number of people who frequent this road.

I have on several occasions noticed anglers fishing close to the nest, and sometimes the float or bait would fall into the water a few feet from the nest, yet the bird stuck to its post. This seems a very remarkable instance of boldness in what is supposed to be a timid bird.

It is not improbable that the pair of birds in question came over from the Walthamstow Reservoirs, where a colony of

these birds has been under the observation of the Ornithological Research Committee of the North London Natural History Society, of which I am a member, for some years.

WILLIAM E. GLEGG.

UNUSUAL FLOCKS OF GREEN SANDPIPERS.

My experience of the Green Sandpiper (*Tringa ocropheus*) is limited to the district of south Holderness, Yorkshire, where it occurs fairly regularly in spring, though in far larger numbers in autumn, being especially numerous from the last week of July to the middle of September. It is most commonly seen singly, some times in small parties, five or six being mentioned (*Birds of Yorks.*) as an unusually large number together. The following may therefore be of interest : On August 6th, 1912, while driving along the bank of a "drain" which usually holds one or more Green Sandpipers at this season, I set up eight from a little mud island in the middle of the drain ; these flew on about 100 yards and apparently joined others, as there appeared to be quite twenty when the whole party rose again and disappeared round a bend, a few of them flying right away. As I had been too far off to count them, I made a slight circuit on foot, in order to come up to the drain close to them, by which means I was able to count thirteen go away. At the same place I had previously seen flocks of eight (August 25th, 1907), and seven (August 29th, 1911). I paid another visit on August 12th when there were only three in company with a Greenshank.

M. WINZAR COMPTON.

SNIPE'S AND YELLOW-WAGTAIL'S HASTY CHOICE OF NESTING-SITES.

A SMALL meadow, under two acres, occupied by my keeper at Cloughton-on-Brock, Lancashire, was mown in the course of the previous week, and the mown grass was spread on June 24th and 25th. Owing to the weather nothing further was done to the hay until the 29th, when the nest of a Snipe (*Gallinago g. gallinago*), with its full complement of four eggs, was found in a small depression on the top of the mown grass.

To have got its four eggs laid by the 29th the Snipe must have started its proceedings on the evening of the 25th, almost immediately after the haymakers left the field, and quite regardless of the disturbance inseparable from mowing and hay-making in such a small area.

I have a record of another hasty and unusual choice of a nesting-site by a Yellow Wagtail (*Motacilla f. raii*). On July 8th, 1909, the hay in the meadow in front of my house was put into cocks and, owing to wet weather, the cocks



YELLOW WAGTAIL'S NEST IN A HAY-COCK.
(Photographed by Miss Fitzherbert-Brockholes.)

were left untouched for some days. On the 15th a Yellow-Wagtail's nest, containing three eggs, was found in the side of one of the cocks about eighteen inches from the ground. A fourth egg was laid on the 16th, and on the 17th the bird had begun to sit. As the first egg must have been laid by the 13th, the nest must have been completed by the 12th, which leaves a very short interval available for the Wagtail to have selected the site and made her nest.

Yellow Wagtails are very plentiful here, but this is the only instance I have seen or heard of when the nest has not been actually on the ground itself.

W. FITZHERBERT-BROCKHOLES.

[F. B. Whitlock states that in Leicestershire the nest of the Yellow Wagtail is sometimes found on stumps in osier beds.—F.C.R.J.]

WHITE-WINGED BLACK TERNS IN ESSEX.

ON May 28th, 1912, as I have already briefly recorded in the *Field* (8.VI.1912, p. 1170), I saw four White-winged Black Terns (*Hydrochelidon leucoptera*) at Burnham-on-Crouch,

Essex. They were adult birds, and flew several times within a few yards of my boat, which was sailing most slowly as there was very little wind at the time. I thus had an excellent view of the birds. The points which particularly attracted my attention were the white tail and upper and under tail-coverts. The light grey on the wings, almost white at the shoulder, was also noticeable. The mantle and rest of the body appeared to me a deep black.

HARRY BECHER.

COMMON TERN IN SHROPSHIRE.

ON August 3rd, 1912, a Common Tern (*Sterna hirundo*) was found floating on the Severn at Shrewsbury. It was an adult, dead, but quite fresh and in good plumage. It was probably blown inland by the rough wind the preceding day.

Another example was found dead at the Gatten, Pontesbury, a few days later. It was floating on a pond and had evidently been dead some time.

H. E. FORREST.

EARLY DEPARTURE OF COMMON TERNS FROM NESTING-SITES.

IN the last number of BRITISH BIRDS (p. 95) I pointed out how the Common Terns were a full month late in arriving on their breeding-grounds in Cumberland and north Lancashire, and now find that, notwithstanding their late arrival, they have all departed nearly a month earlier than usual. On July 18th we visited the Ravenglass colony to find quite half the eggs still unhatched, and only succeeded in ringing eighty-eight young ones, yet on revisiting the place on August 7th, less than three weeks afterwards, I was astonished to find the ground deserted, only four pairs of adults, two feathered young and an immature bird on the wing, being seen on the whole ground. Since then I have heard that they had practically all gone by August 1st.

Thinking that there might be some local cause for their early departure, I visited Walney Island two days later, on August 9th, to find the same state of things there also, only that I failed to see a single Tern either old or young. The eggs had evidently hatched off, and the young taken flight during the interval of twenty days between my two visits, for no eggs remained either at Ravenglass or Walney, although an unusual number of feathered young were found dead at Ravenglass. As many of the eggs were quite fresh on

July 18th, it is impossible for these to have hatched off, so that on the departure of the parents such must have been destroyed by Gulls, Jackdaws, and other feathered thieves, to account for none being seen at either place.

A few old and immature Terns were seen on the shore adjacent to the Ravenglass colonies, but I failed to see a single bird of this species on the shores of Walney Island.

Last year, when they hatched off earlier than they have ever done before, there were numbers still on the ground on August 9th when I marked eighty-five, and in 1909 on August 10th, 13th and 17th, I marked seventy-four, forty-six and thirty respectively and also a few up to as late as August 26th.

To whatever cause their late arrival was due, that of their early departure is undoubtedly the extremely cold and wet weather, and especially the bitterly cold nights with frost prevalent during part of July.

H. W. ROBINSON.

SANDWICH TERNS AT RAVENGLASS.

MR. H. W. ROBINSON'S statement (*supra*, p. 95) that previous to 1911 all Sandwich Terns' eggs at Ravenglass hatched off in June, is not correct. In both 1909 and 1910 I noted eggs which had yet to hatch, in July. Probably a few chicks emerge in this month every year.

Mr. Robinson notes that a number had hatched out the week and fortnight previous to June 26th, 1912; young were to be seen more than a month before that date.

ERIC B. DUNLOP.

REDSTART'S REMARKABLE NEST.—The May-June number of the *Zeitschrift für Oologie und Ornithologie* (p. 89) contains a note by Herr R. Schlegel, of Leipzig, on the discovery of a nest of Redstart (*Phœnicurus ph. phœnicurus*) with the extraordinary number of twenty-five eggs. It was found in September, 1909, while the roof of a summer-house was being repaired, and Herr Schlegel was assured that it had not been tampered with in any way. The largest clutches of which we have any note have consisted of nine and ten eggs, so that apparently not less than three hens must have made use of this one nest.

REPORTED BREEDING OF THE LONG-TAILED DUCK IN ORKNEY.—With reference to our note on this subject (Vol. V., p. 203), in reply to requests for further information Mr. O. V. Aplin states (*Zool.*, 1912, p. 195) that "the duck was

flushed from her nest containing seven eggs by an observer who is well acquainted with this species." But Mr. Aplin does not say who the observer was, and this is all-important information in a record of this kind. In our judgment it has yet to be satisfactorily proved that *Clangula hyemalis* has nested in the British Isles.

"COURTSHIP" ACTIONS OF THE GOOSANDER.—Mr. S. E. Brock gives (*Scot. Nat.*, 1912, p. 116) a brief description of the display of *Mergus m. merganser* which commences in November and becomes more fully developed later. One of the actions is very much like that described and figured as action No. 2 by Mr. H. Wormald in his paper on the "display" of the Mallard (*antea*, Vol. IV., pp. 2-7). In another, the bird while swimming makes a spasmodic movement with the feet, throwing up a jet of water. Both these are performed by the duck as well as by the drake, but less frequently by the former. In a third action, only observed by Mr. Brock in the case of the drake, the head and neck are very suddenly stretched perpendicularly upwards to their fullest extent with the bill gaping and then with equal abruptness the bird assumes its normal position. This is performed while it is swimming rapidly in company with one or more females. Dr. Townsend's description in the *Auk* of the actions of the Red-breasted Maganser should be compared (see *antea*, Vol. V., p. 85).

GREAT CRESTED GREBE NESTING IN "LAKELAND."—In the report for 1911 for Cumberland and Westmorland by Messrs. L. E. Hope and D. L. Thorpe, we find that Mr. E. B. Dunlop records (*Zool.*, 1912, p. 183) the nesting of *Colymbus c. cristatus* "on a certain quiet sheet of water" in "Lakeland," in 1911. Two pairs were seen and one of them was observed in company with two young. Mr. Dunlop remarks that he has "good reason to suppose that they bred in this locality in the two previous seasons." It is curious, considering the bird's well-marked extension in Scotland, that its presence as a breeding species in the Border counties had not been notified before.

BLACK-TAILED GODWIT IN CUMBERLAND.—Mr. W. Nichol reports (*Zool.*, 1912, p. 187) that he saw four *Limosa limosa* on August 15th, 1911, near Silioth, and three on August 22nd at the same place. With this record should be compared those from Skinburness later in the same month (*antea*, Vol. V., p. 320).

CORRECTION.—In the note by “F.C.R.J.” under “Early Nesting of Dotterel” (*supra*, p. 94), in the first line for “Mr. J. Watson Kendal” read “Mr. J. Watson, of Kendal,” and in the sixth line for “Mr. Kendal’s statement” read “Mr. Watson’s statement.”

LETTER.

SPORADIC NESTING.

To the Editors of BRITISH BIRDS.

SIRS.—In your August issue Mr. P. F. Bunyard writes, in a note on “Crossbills Breeding in Suffolk for the Third Year in Succession,” as follows (p. 89): “I do not consider it [the Crossbill] is more sporadic in its nesting than many other British birds such as the Hobby, Hawfinch, Grasshopper-Warbler, etc. etc.” I should have thought that the Hobby and Grasshopper-Warbler were particularly unhappy examples of sporadic breeders, in fact that they were the very reverse; and it would be interesting to know what are the grounds for this assertion, more particularly as the food-supply of both such species would remain pretty constant in any given area. C. S. MEARES.



REVIEWS

Birds of Northumberland and the Eastern Borders. By George Bolam. xvii + 726 pp., with 27 Plates. Alnwick: H. H. Blair, 1912. 20s. net.

To state that Mr. Bolam's volume is the result of some forty years of keen observation and methodical recording, is enough to show that it is a work which no ornithologist can afford to pass over. Judged only as an avifauna it is somewhat unsatisfactory, since the area is not exactly defined. It trenches upon most of the ground covered by several other books, viz. Mr. Abel Chapman's *Bird-Life of the Borders*, Mr. A. H. Evans's recently published *Fauna of the Tweed Area*, besides Muirhead's *Birds of Berwickshire* and Hancock's *Birds of Northumberland and Durham*, and it goes even further afield including, for example, many records from the Forth "area." To discover what fresh information Mr. Bolam has to give, or what omissions he may have made regarding the distribution of the birds of these parts, is thus a very difficult task. Had Mr. Bolam restricted his area and been less discursive in his narratives, we think that his book would have been even more welcome, but, as we have already indicated, its great value lies in its mass of personal observation by a keen observer who has spent much of his life in the field.

Throughout the book there are many valuable notes on nesting-habits, and we may draw particular attention to that of a number of *Swallows* nesting in 1877 "in near proximity to the Martins, on ledges of the cliffs between Berwick and Marshall Meadows."

Among breeding-records of particular interest from a distributional point of view, we may mention the following: Young *Crossbills* being fed by their parents in Kylee Wood (Northumberland) on June 1st, 1889 (the date of the "Cheviot" nest should be 1898, not 1908); a number of breeding-records of the *Hawfinch*, some of which are new; the note that the *Lesser Whitethroat* was heard singing at Fallodon by Sir Edward Grey in May, 1897, and in June, 1900, though no nest was actually found; breeding of the *Green Woodpecker* near Morpeth, in 1890; some records of the nesting of the *Water-Rail* in Northumberland, and especially of a number of pairs in Canno Mill Bog near Kirknewton. We may here mention that the *Honey-Buzzard's*

nest in Durham in 1899, mentioned in our last volume (Vol. V, p. 85), and also in our *Hand-List* (p. 119) was in the same locality as that mentioned under Northumberland in 1897 in the latter work. This was at Gibside in Durham near the boundary, and it is believed, so Mr. Bolam states, that there was a nest there also in 1898. The nesting of the *Sandwich Tern* on Holy Isle in 1883 and 1894, and even as recently as 1900 should be noted.

In Mr. Bolam's records of rarities for the area, we find some which appear to be new, while there are several important corrections. In the former category we have, for instance, a record of a *Reed-Warbler* seen by the author near Berwick in May, 1888, but of this he does not seem very confident, since in his next paragraph he states "there is no satisfactory evidence of the occurrence of the Reed-Warbler actually within our district." There is a useful catalogue of winter occurrences of the *Ring-Ouzel*, while one or two similar occurrences of the *Chiffchaff* and *Willow Wren* may be mentioned. A *Bluthroat* obtained at Belhaven, East Lothian, in May or June, 1868,* is of importance, considering how few records there are for the mainland of Scotland. Additional records of the *Roller* are given, and some interesting recollections of the author's father concerning the *Kite*. Of identified *Grey Lag-Geese*, Mr. Bolam mentions more than Mr. Evans, but still very few (the statement that this Goose "rarely, if ever, shows any white on the face" is hardly correct); concerning *Bean-Geese* the author makes some interesting observations, while he considers the *Pale-breasted Brent Goose* the less common of the two in this district, though Mr. Abel Chapman, who doubtless has had more experience in the matter of these Geese, holds a contrary opinion. With regard to the *Harlequin-Ducks* seen at the Farnes in 1886, Mr. Bolam remarks that all three were subsequently shot. The account of the extension of the *Stock-Dove* by an eye-witness should be carefully read by those who hold the opinion that it was an overlooked bird on the Borders previous to 1870. Like Mr. Evans, Mr. Bolam considers that the *Turtle-Dove* has been more frequent of recent years in the Border Counties, and he adduces proof of this which was lacking in Mr. Evans's work, but there are still no breeding-records. Attention must be drawn to an overlooked record of *Baillon's Crake* near Swalwell in Durham, on or about July 12th, 1874, and to a previously unrecorded one of a *Stone-Curlew* shot near Tynemouth on January 1st, 1897,

* This was recorded by Mr. W. Evans (*Zool.*, 1886, p. 249), but was omitted from our *Hand-List*.

another individual being in company with it. There is a useful list of Northumberland records of the *Great Snipe*, and a new record of *Temminck's Stint*. That the *Lesser Black-backed Gull* is one of the commonest of the Gulls along the shore *at all seasons* (the italics are ours), is a somewhat surprising statement. A new record of an *Ivory-Gull* shot in Northumberland in 1897 may be mentioned, as well as a *Brunnich's Guillemot* shot near the Farnes in the winter of 1883-4. The occurrence of *Manx Shearwaters* in the neighbourhood of the Farnes in July should also be noted.

We may note the following as the most important of the corrections: The supposed case of the interbreeding of a *Merlin* and *Kestrel* mentioned by Mr. Evans (*Fauna of Tweed*, p. 135) is disposed of, as is the recorded occurrence of *Sand-Grouse* in Northumberland in 1872 (*cf. op. cit.* and *Hand-List Brit. Birds*, p. 163). In like manner the *Night-Heron* said to have been shot on Holy Isle in 1909 is evidently a bad record, while a *Spoonbill* said to have been shot at the same place in December, 1908, is also an error, though one was seen there in August of that year and another in May, 1904. Mr. Bolam also gives good evidence to show that the *Kittiwake* has probably never deserted St. Abb's Head, as was supposed both by Mr. Muirhead and Mr. Evans.

But everyone is liable to error, and Mr. Bolam himself is not free from it; thus we find the record of a supposed *American Bittern* in the Pentland Hills in 1861 resuscitated, although Howard Saunders did his best to give it the death-blow in the appendix to the first edition of his *Manual*. Nor do we believe in either the Lanarkshire or Shetland breeding-records of the *Red-backed Shrike*. There are, too, some careless quotations; thus, on p. 52, a *Yellow-browed Warbler* recorded by the Misses Rintoul and Baxter in the *Annals of Scottish Natural History* (1908, p. 15), as seen on the Isle of May on September 29th, 1907, is ascribed to Mr. John Paterson, who was only the compiler of the records for the year, and in mentioning the occurrence on p. 135 (not 134) of the same volume of our contemporary, Mr. Paterson gave a reference to the original record. There are several similar mistakes in the book. Mr. Bolam is also often much behindhand in his summaries of distribution outside his own area.

The book contains many interesting notes (though not quite systematic enough to have great value) on migration, and we may draw special attention to the account of the immigration of *Wood-Pigeons*, and to the remarks on the immigrations of *Tawny Owls* and of *Barn-Owls*, the latter probably being of the dark-breasted race though the

description given is not sufficiently exact to make this quite certain.

Mr. Bolam's accounts of the habits of the birds he has observed are so true to nature that we do not like to take exception to any of his remarks under this head, but had he heard Dr. Bahr imitate the drumming of a *Snipe* by means of the outer tail-feather fastened into a cork, we do not think he would have persisted in ascribing the sound to "the rapid beating of the wings." We think, too, that it is a mistake to refer to the "love-songs" of the *Wood-Sandpiper* and *Dunlin* (which are surely vocal) as "drumming," a word which is generally only used in connection with the "instrumental" sound made by the *Snipe*.

In the matter of local races, Mr. Bolam forestalls criticism, for his work in the district was done before the question became to be regarded as of importance. In nomenclature he follows Saunders's *Manual*, though why he should choose as an exception the Nightingales—a "violent transfer"—it is difficult to say.

We cannot leave this book without drawing attention to the interesting observations on moult, which are to be found scattered throughout the work. This is a much-neglected subject, and we are delighted to find that in this Mr. Bolam has followed the example set by his fellow countryman, Adamson. In most of what he says we are in agreement, but we must dispute the statement that any of the Tits have a spring-moult. We have examined most carefully large series of British Tits in every month of the year (*vide antea*, Vol. IV., p. 98), and it may be mentioned that Dr. Dwight also found no spring-moult in the American Tits. We think that Mr. Bolam must have been misled by finding a few feathers being renewed in an occasional specimen as a result of accidental loss, which frequently occurs, but cannot be termed a moult. Special attention must here be drawn to some important remarks about white-breasted examples of the *Cormorant*. Mr. Bolam writes:—

In a considerable number of cases, the whole under-parts become whiter, instead of darker, during the second and subsequent years, till, before the final change to black, the breast, and often the belly also, is of a pure and shining white; the upper plumage, with the colour of the bill and eyes, by that time differing but little from the adult state. Such white-breasted birds are, of course, not uncommon on our coast, and were for long regarded by some of our more observant local naturalists as a distinct race of the *Cormorant*: they may be seen anywhere—even occasionally upon the nesting rocks—but I have never observed that any but full black-breasted birds actually breed.

To this Mr. Bolam adds a footnote to the effect that since the above was written his attention has been called to Mr. Frohawk's remarks (*Brit. Birds*, Vol. III., p. 385), and the controversy on the subject, but he is confident that these are not young birds in their first plumage. That the Cormorant does breed in this stage of plumage has been proved already (*cf. op. cit.*, Vol. IV., p. 25).

In conclusion, we must repeat that Mr. Bolam's book deserves a lasting popularity among ornithologists, if only by reason of its author's most excellent personal observations.

H.F.W.

Fra Fuglemaerkestationen i Viborg. By H. Chr. C. Mortensen, with nine text-figures and an English summary: Reprint from *Dansk Ornithologisk Forenings Tidsskrift*, 1912, pp. 98-127.

THIS interesting paper on bird-marking opens with a few general historical remarks, beginning with the marking of the young of tame White-fronted Geese by V. der Heyden Baak early last century, and coming down to the various inquiries of the present day. Mr. Mortensen's inquiry is the oldest of those run on scientific lines: he started in 1890, but his present methods date from some years later. He was the first to mark great numbers of birds of different kinds, and the first to use separate identification numbers on his rings in place of mere date-marks. We note, however, that he uses a separate series of numbers for each well-known species; this we regard as a pity. If one uses a single series for all species (and all sizes of ring), one is not dependent on learning the species of a reported bird (or even the size of the ring); while if one does learn it, it serves as a valuable check on the accuracy of the reported number. But Mr. Mortensen uses certain checks not generally employed: he notes on which foot the ring was placed, and whether with inscription erect or inverted. Sometimes, also, in the case of young Starlings, he has supplemented the ring by a notch in the tail, or by cutting off a claw (with the end of a phalanx). A considerable section is devoted to patterns of rings and to ring-inscriptions: Mr. Mortensen has sometimes placed a ring on each foot of a small bird to get a larger inscription, and he condemns numbering on the inner surface as being very liable to wear away. He goes on to give a very decisive negative answer to the question as to whether rings may

injure or hamper the birds. His routine as regards marked birds reported from abroad is then outlined: he prefers, we notice, to receive an *impression* of the ring, and to leave the ring itself (or the stuffed specimen with ring) in the foreign country as a proof that the bird was found there.

His lists of his own marked birds and of the recoveries are instructive: Up to 1st March, 1912, he had marked 3,540 birds of 24 different species (15 species had less than 20 each, and 13 of these 6 or less). Out of these 69 had been recovered at home (i.e. Denmark) and 154 abroad (the former figure exclusive of the many Starlings recovered in and around Viborg). Some of the contrasts are very striking, e.g. :—

SPECIES.	TOTAL MARKED.	RECOVERED	
		IN DENMARK.	RECOVERED ABROAD.
Starling (<i>Sturnus vulgaris</i>) ..	2080	.. many	.. 6
Raven (<i>Corvus corax</i>) ..	3	.. 1	.. 1
Buzzard (<i>Buteo buteo</i>) ..	59	.. 23	.. 5
Goshawk (<i>Accipiter gentilis</i>) ..	13	.. 10	.. 0
Stork (<i>Ciconia ciconia</i>) ..	532	.. 2	.. 17
Heron (<i>Ardea cinerea</i>) ..	127	.. 11	.. 23
Teal (<i>Anas crecca</i>) ..	201	.. 4	.. 44
Wigeon (<i>Anas penelope</i>) ..	51	.. 0	.. 2
Pintail (<i>Dafila acuta</i>) ..	320	.. 4	.. 46
Common Gull (<i>Larus canus</i>) ..	52	.. 5	.. 4
Black-headed Gull (<i>Larus ridibundus</i>) ..	62	.. 1	.. 3

Thus we have every gradation between Teal with about 22 per cent. of birds marked recovered abroad, and Starlings with about 0.3 per cent. (foreign recoveries only). Again, the Goshawk has about 77 per cent. of Danish and 0 per cent. of foreign recoveries, as compared to the Teal with about 2 per cent. of Danish and 22 per cent. of foreign recoveries.

The section on results is very brief, these having formed the subject of separate papers, many of which have already been noticed in these pages (for Teal, *cf.* Vol. III., p. 252; for Stork, *cf.* Vol. IV., pp. 357-60; and for Heron, *cf.* Vol. V., p. 77).

A.L.T.



BEARDED TIT: THE RESTLESS MOTHER.

(Photographed by Miss E. L. Turner.)

BRITISH BIRDS

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NOTES ON THE BEARDED TIT.

BY

E. L. TURNER, HON. MEM. B.O.U.

[PLATE 4.]

IF the bird-photographer is ever in the unlikely position of being in want of work during the few brief weeks at his disposal, time spent in watching Bearded Tits (*Panurus biarmicus*) and their fascinating ways, is never wasted. They are so absolutely absorbed in the details of their own domestic life to the exclusion of all outside interests ; and in addition to their natural beauty and grace, so full of surprises and devoid of fear : that one can always find out something new concerning their habits. Perhaps, however, these characteristics are more prominent in the female than in the male, for the latter is less confiding, unless robbed of his mate, and very shy of the camera.

This last June I put up my tent beside a nest about a week before attempting to photograph its occupants. So long as the tent alone was there, neither of the adult birds showed any fear, but when once the lens appeared the male bird's courage vanished. He was the first to return as soon as I had settled in, and always brought a very large green caterpillar, which he himself eventually swallowed in sheer fear, and would not repeat his visits, though diligent in collecting flies for his mate, who showed no alarm. This cowardice on the part of the cock was obviously a source of annoyance to the hen, for, when weary with the extra exertion entailed upon her by his defections, she would brood over the young, during which time she evidently expected the cock to bring supplies. However, he did nothing but run to and fro behind the nest. This caused her to ruffle up her feathers and make sundry short, sharp remarks in answer to his grumbling, finally darting at him and driving him away. Having thus relieved her feelings, she set to work with redoubled energy. This little by-play occurred about every hour.

I have never seen any other species pay such attention to the toilet of her young as is the case with the hen Bearded Tit. Not satisfied with the ordinary sanitation of the nest, she will, when brooding, restlessly peck at the lining, apparently removing and swallowing those minute



BEARDED TIT: A SHY MALE.

(Photographed by Miss E. L. Turner.)

insects which usually infest nests. She will often stand up and carefully comb the tiny sprouting head-feathers of each youngster in turn, by gently drawing the little bristles through her bill. Doubtless this helps to remove the feather-scales; at any rate, the little ones seem highly to appreciate the process. I have never seen other parent-birds fuss over their young in this manner;

as a rule they have no time for such delicate attentions ; but the hen Bearded Tit is even more full of compressed energy than the Common Wren, and can hardly be said to rest even when brooding.

The cock, however, does not permit his masculine mind to be perturbed by these cares, though he is a curious mix-



BEARDED TIT: INSPECTING THE NURSERY.

(Photographed by Miss E. L. Turner.)

ture of virility and feminine attention to detail. Both sexes build the nest, but it is the male that adds the lining, *after* the first eggs are laid, carefully selecting the brown feathery panicles of the reed *Arundo phragmitis* for this purpose. Amongst other birds—warblers especially—the rough work is done by the male while minute

details of furnishing are left to the female. It is evident from the many cases that have been brought to my notice, that the cock Bearded Tit sometimes makes a muddle of this, and in adding the lining occasionally covers up one or two eggs altogether, which may be found embedded in the nest after the young have flown.



BEARDED TIT: CLEANING THE NEST.

(Photographed by Miss E. L. Turner.)

I once rescued two pairs of Bearded Tits from a London dealer and transferred them to an outside aviary until I could take them to Norfolk. During the three months I kept these birds in captivity they seemed to me quite the most affectionate species imaginable. They roosted side by side, and the cock always spread one wing over

the hen, so that when their heads were tucked away and the contour feathers fluffed out, they looked like one little feathery ball. When feeding they frequently scratched on the aviary floor after the manner of barn-door fowls; perhaps because in nature they so often hunt for food amongst the ooze. They bathed every day, and always together. Their method of drying themselves was amusing. They would sit huddled up together till dry on the sides touching each other; then reversing their respective positions they proceeded to dry the other side, mutual warmth evidently assisting the process.

Unfortunately I lost both the hens. I then put the two cocks together, and they lived in the same loving fashion, roosting and bathing in exactly the same way as the pair had done. One was a very handsome bird, but the other, in addition to a generally dishevelled appearance, was minus a tail. They continued to live in perfect harmony until one evening, when I introduced a foreign hen. Then came discord. In less than five minutes the hen showed a decided preference for the more handsome male, and he began to chase and bully his rival with such vigour that I had to interfere and rescue the weaker bird. The accepted lover then went through a beautiful display. The grey head-feathers were raised so as to form a kind of crest, the black "beard" was puffed out in an obviously irresistible manner, while the long tail was spread fan-wise and held erect in such a way that the jet-black under-coverts were brought into prominence. Meanwhile the female sat preening herself with a very self-conscious air, and continued to do so till satisfied that her personal appearance was beyond reproach. Having completed her toilet she spread out her tail and danced a "pas seul," which seemed to inflame her admirer to yet greater ardour. Finally, after much posing on the part of both birds, they nestled close together and settled down quietly.

The flight of the Bearded Tit is usually laboured, undulating and slow, and as a rule they merely flit from one

reed-bed to another. But on one or two occasions it has been my good fortune to witness what must have been part of the courting display. Both birds slowly leave the sheltering reed-beds and with metallic call-note rise gradually into the air. There is no undue haste, when once the couple begin to "soar." With expanded tail and quivering wings they float upwards; sometimes the male will be uppermost, sometimes the female; so they rise alternately until both are mere specks in the blue—then suddenly they drop like stones into the reeds. The tail plays a prominent part in the mechanism of the Bearded Tit's flight, for whether moving quickly or slowly, there is always a rhythmic double-movement going on. The tail is spread fan-wise, and at the same moment is given a swift, spiral twist; this double-movement is extremely rapid, but very apparent, especially in windy weather. The twist is due to voluntary muscular action and must somehow assist in steadying these birds, which dislike a rough breeze and often require all their strength and skill to battle against the wind. The movement may be akin to the swift spiral twist a squirrel gives its hind legs when taking an extra long jump. This "rifling" certainly imparts steadiness to the squirrel and enables it to alight with unerring accuracy on any given spot.

During the winter my captive birds would tunnel some distance into the coarse herbage and disappear from view for hours. One of these tunnels was over a foot in length, and the first time I lost sight of the birds I thought they had been carried off by a rat, but on examining this tunnel I found them nestling together at the far end, out of the wind.

I could never induce them to eat seed of any kind, but in addition to insect-foods, supplied them daily with loose tufts of matted vegetation, consisting chiefly of canary seed which sprouts rapidly, but has no depth of root. So fond were the birds of this material, that they would perch on my hands and attack the tufts before I could strew them on the ground; instantly tearing away the

loose mould with beak and claws, and picking out the minute white larvæ with which it was infested.

In the natural state their principal food consists of the larvæ of *Laverna phragmitella*, which commence to burrow into the reed-mace during August, and remain there all the winter, causing the "poker" to burst out and become fluffy. They also feed upon another grub which burrows into the reed-stalks. The fact that these frail-looking birds can endure the rigours of a Broadland winter, tends to prove that their diet must be a catholic one; yet their numbers are undoubtedly lessened by a spell of hard weather, for the actual pairs of breeding birds in any given area are considerably reduced after a severe winter. An unkind spring too, will work havoc amongst the newly-fledged Bearded Tits. On May 5th, 1910, I came upon fifteen young birds, dotted around the edge of a little inland lagoon which was surrounded by a stubbly fringe of reeds. A narrow dyke ran alongside and by holding on to the vegetation I edged my canoe close to the birds and watched. The air was full of the hum of insect life, and scores of delicate winged flies were seized by the busy parents for their respective broods; which, by the bye, were not clamorous as are the young of so many other species, but appear quite contentedly to await their turn. Up in the blue sky Redshanks were whistling, while Lapwings called to one another or hurled themselves towards the earth and rose again in an ecstasy of love and madness; Snipe bleated dreamily, and peace reigned. Suddenly the hitherto brilliant sun became overclouded, the wind arose, and away over the broad there came a sound of lashing hail upon the open water. In two minutes I was back in my house-boat behind closed doors; while less than twenty minutes later my man was shovelling away ice from the stern-sheets before the doors could be opened. I cannot tell what became of the young Bearded Tits. It seems to me that such sudden changes of temperature, together with the tremendous downpour of stinging hail-bullets, must surely destroy numbers of half-grown birds.

At any rate, I did not again see so many Bearded Tits in that one feeding-ground. While yet in the nest they are so well hidden amongst dense overgrowth, that they do not suffer much from exposure. But sudden storms shatter birds' nerves, and inexperienced young cannot always be rounded into a place of safety by half-distracted and anxious parents.

HYBRIDS BETWEEN BLACK-GAME AND
PHEASANT.

BY

THE REV. F. C. R. JOURDAIN, M.A.

IN the *Zoologist* for 1906, pp. 321-330, I gave a list of the known specimens of this cross which had occurred in the British Isles. The total number of instances then amounted to fifty, of which forty-one were recorded from England, one from Wales, and seven from Scotland, while one was of unknown origin. This list was supplemented by a further note in the *Zoologist* for 1906, pp. 433-4, in which five other occurrences were clearly established, two from Nottingham and three from Brecon.

Since that time some further information on the subject has come to hand, and the number of recorded specimens of British origin has been raised to sixty. Particulars of those not included in my previous papers in the *Zoologist* will be found below.

[A small figure is given in the *Field* for January 28th, 1905, p. 151, of a supposed hybrid between Pheasant and Black-game shot by Sir Arthur Grant at Monymusk in Aberdeenshire, in November, 1895. This bird is really a hybrid between the cock Pheasant and hen Capercaillie, and as such is figured in Sim's *Vertebrate Fauna of Dee*, pl. - , p. 163 (*cf.* also *Ann. Scot. Nat. Hist.*, 1896, p. 123 : and 1898, p. 19).]

56. Mr. J. R. B. Masefield (*in litt.*) informs me that there is a specimen of this cross in Mr. F. A. Monckton's collection at Stretton Hall, near Stafford. It is said to be the produce of a cock Pheasant and Grey-hen.

57. A hybrid, stated to be a cross between a cock Pheasant and Grey-hen, was shot at Rachan in Peeblesshire, in November, 1883. This was originally recorded by Mr. John Thomson, *History of the Berwickshire Naturalists' Club*, Vol. XI., p. 556. See G. Bolam, *Birds of Northumberland and the Eastern Borders*, p. 456, and A. H. Evans, *A Fauna of the Tweed Area*, p. 185.

58. A male of, this cross was shot in a plantation at Blidworth Nottinghamshire, in January, 1875 (J. Whitaker, *Notes on the Birds of Nottinghamshire*, pp. 230-231).

59. On January 10th, 1912, Dr. H. Hammond Smith exhibited at a meeting of the British Ornithologists' Club the skin of a bird supposed to be of this cross. It was a young male and was shot on Halsanger Down near Barnstaple, Devon, in company with Black-game, by Mr. Murry George, in October, 1911. A full description of this bird is given in the *Bulletin of the British Ornithologists' Club*, Vol. XXIX., p. 59, and three photographs of it are reproduced in an article by "H.H.S." in the *Field* for August 17th, 1912, Suppl., p. iv., vii. Mr. Ogilvie-Grant thought it more probable that it was a cross between a cock Pheasant and a domestic fowl, and could see no reason for supposing that it was a hybrid between Pheasant and Black-game. I have not been able to handle this specimen, but after a careful study of the description and photographs, it appears to me to agree extraordinarily well with other undoubtedly genuine specimens of this cross, and I have no hesitation in recording it as such, in which view Dr. Hammond Smith, after comparing it with specimens of hybrid Pheasant and fowl at Tring Museum, quite coincides.

60. Dr. Hammond Smith has ascertained that the specimen in the Tring Museum, referred to in my paper (*Zool.*, 1906, p. 329) as of unknown origin, was obtained in Devonshire.

The following revised table shows the origin of the recorded specimens:—

ENGLAND.

No. definitely recorded.	COUNTY.	NOTE.
10	Shropshire (Nos. 5, 6, 26, 32, 33, 34, 35, 47, 48, 49)	Some evidence of other occurrences.
7	Devonshire (Nos. 2, 12 ?, 15, 28, 30?, 59, 60)	Possibly two other occurrences.
5	Derbyshire (Nos. 17, 20, 21, 22, 23).	

No. definitely recorded.	COUNTY	NOTE
5	Nottinghamshire (Nos. 24, 25, 51, 52, 58).	
4	Cornwall (Nos. 3, 4, 11, 19) ..	Possibly other occurrences.
4	Northumberland (Nos. 9, 10, 13, 14).	
3	Hampshire (Nos. 1, 31, 40) ..	No. 1 may have been killed on the Sussex border.
2	Yorkshire (Nos. 44, 45).	
2	Staffordshire (Nos. 18, 56).	
1	Surrey (No. 16).	
1	Norfolk (No. 27).	
1	Dorset (No. 37).	Probably other occurrences in the same season.
1	Warwickshire (No. 38).	
1	Suffolk (No. 46).	
47—	[Worcestershire ?]	Probably one occurrence.

WALES.

3	Brecon (Nos. 53, 54, 55).	
1	Merioneth (No. 7).	
—	[Carmarthen ?]	Said to have occurred: no details given.
4—		

SCOTLAND.

3	Wigtownshire (Nos. 8, 41, 42).
1	Peeblesshire (No. 57).
1	Lanark ? (No. 39).
1	Ayrshire (No. 36).
1	Mull (No. 43).
1	Kirkcudbrightshire (No. 50).
8—	
1	Origin unknown (No. 29).
1—	
60	Total.

A rough test which will serve to distinguish hybrids between Pheasant and domestic fowl from those between Pheasant and Black-game is the shape of the tail. In the former cross some of the tail-feathers are always considerably elongated, whereas in the latter the tail is shorter and rounded in shape, the middle feathers being only slightly longer than the rest. In three cases, at any rate (Nos. 37, 46, and 47 or 49), the male hybrid is described as having a lyrate tail, like the Black-cock, but it is never Pheasant-like in shape. The Pheasant

and domestic-fowl cross is illustrated in the article in the *Field* referred to above (August 17th, 1912, Suppl.), and another figure of the same hybrid will be found in Professor Heinrich Poll's valuable paper on Hybridity in Birds (*Über Vögel-mischlinge*) in the *Verhandlungen des V. Internat. Ornithologen-Kongress in Berlin*, pp. 399-468. See also the *Field*, January 28th, 1905, p. 151, where a Jungle-fowl and Pheasant hybrid is illustrated. I may add that Mr. G. Bolam gives a good figure of the specimen recorded as No. 9 in my list (*Birds of Northumberland and the Eastern Borders*, Pl. XV.).

It is much to be desired that the information available with regard to the other game-bird hybrids in the British Isles could be tabulated and rendered available for study. With the exception of Mr. Eagle Clarke's paper on Capercaillie and Pheasant hybrids in the *Annals of Scot. Nat. Hist.* for 1898, p. 17-21, most of the information is scattered in various periodicals. The fullest account yet published is to be found in Mr. J. G. Millais's magnificent monograph on the British Game Birds, but this work is unfortunately beyond the means of most people.

NOTES

THE WEATHER AND EARLY MIGRATION.

THE abnormally cold and rough weather which we experienced during August will probably be found to have affected the movements of the autumn migrants all round the coast. On the north Norfolk levels large numbers of Black Terns (*Hydrochelidon n. nigra*) arrived during the first week in August and stayed several days, and one or two Spoonbills (*Platalea l. leucorodia*) were noticed at the same time. Unusually large numbers of waders arrived during the month, parties of Golden Plover following each other on passage, and Curlews were seen by Mr. Pashley of Cley, in really immense flocks.

Towards the end of August several Bluethroats (*Luscinia svecica*) turned up, an unusually early date for them.

CLIFFORD BORRER.

ADDITIONAL RECORDS FOR FAIR ISLE AND ST. KILDA.

IN his *Studies in Bird-migration*, Mr. Eagle Clarke gives a good deal of hitherto unpublished information about the rarities observed in Fair Isle and St. Kilda, and a few new facts about those in the Flannans and Sule Skerry.

The most important additions thus made to the details given in our *Hand-List of British Birds* are as follows:—

22. GREENLAND REDPOLL (*Carduelis l. rostrata*).—*Fair Isle*: Extremely abundant in 1905, small numbers in October, 1911. *St. Kilda*: One, September 9th; two, September 10th; one, September 21st, and one September 29th, 1911. *Flannans*: Several, October and November, 1905. *Sule Skerry*: One, October, 1911.

25. COUES'S REDPOLL (*C. h. exilipes*).—*Fair Isle*: Three, autumn (October 26th, November 3rd and 5th), 1910 (1900 in the *Hand-List* is a misprint).

31. SCARLET GROSBEEK (*Carpodacus c. erythrinus*).—*Fair Isle*: One, September 4th and one, September 29th, 1908, and one seen "autumn," 1908. *St. Kilda*: Two, September 8th, and one, September 19th, 1910.

45. BLACK-HEADED BUNTING (*Emberiza melanocephala*).—*Fair Isle*: In addition to the one recorded in 1907 (which was a female) a young male was obtained on August 25th, 1910.

48. ORTOLAN BUNTING (*E. hortulana*).—*St. Kilda* : Several September, 1910, one September, 1911.

52. LITTLE BUNTING (*E. pusilla*).—*Fair Isle* : Regular in autumn in small parties, as many as six having been seen in one day. Occurs from September 18th to November 11th. Three times spring, viz. April 14th, 1907, May 12th, 1908, and two May 18th, 1909. *St. Kilda* : Two seen September 15th, 1911.

55. LAPLAND BUNTING (*Calcarius l. lapponicus*).—*St. Kilda* : Several September, 1910, and in some numbers September, 1911.

59. SHORT-TOED LARK (*Calandrella b. brachydactyla*).—*Fair Isle* : One June 18th, 1908, and one November 28th, 1910, making three occurrences.

67. TREE-PIPIT (*Anthus t. trivialis*).—*St. Kilda* : A good few in September and early October, 1910.

69. RED-THROATED PIPIT (*A. cervinus*).—*St. Kilda* : One seen September 21st, 1910, and another October 8th, 1911.

102. CONTINENTAL GOLDEN-CRESTED WREN (*Regulus r. regulus*).—*Fair Isle* : Regular on both passages but more plentiful in autumn. The dates given are : spring, earliest March 25th, average April 6th to early May ; autumn, earliest September 8th, average September 19th and throughout October, latest November 15th.

120. SCANDINAVIAN CHIFFCHAFF (*Phylloscopus c. abietinus*).—*Fair Isle* : Regular on both passages. The dates are given as May 7th to June 1st, chiefly mid-May, and September 26th to October 24th. *St. Kilda* : One October 11th, 1911.

121. SIBERIAN CHIFFCHAFF (*P. c. tristis*).—*Fair Isle* : Has appeared regularly in the autumns of 1907 to 1911. The earliest on October 8th, the latest on November 6th. Once in spring, May 7th, 1909.

123. NORTHERN WILLOW-WARBLER (*P. t. evermanni*).—*Fair Isle* : This form is common and regular on both passages. Vast numbers appeared from May 12th-15th, 1911, all with one exception being of this form.

125. WOOD-WARBLER (*P. s. sibilatrix*).—*Fair Isle* : Quite a number appeared on May 12th, 1910, and were present until May 18th. One occurred August 21st, 1911.

131. SAVI'S WARBLER (*Locustella l. luscinioides*).—*Fair Isle* : Two were seen when the one was obtained. The date is May 14th.

136. REED-WARBLER (*Acrocephalus s. streperus*).—*Fair Isle* : Two were obtained in September, 1908. The one recorded for September 24th, 1906, is now believed to be a *Marsh-Warbler*.

141. ICTERINE WARBLER (*Hypolais icterina*).—*Fair Isle* : Three occurred between June 3rd and 5th, 1911. The one already recorded for 1908 was found on June 1st.

143. BARRED WARBLER (*Sylvia n. nisoria*).—*Fair Isle* : Twelve in all have occurred, the earliest on August 3rd, and the latest on September 16th. *St. Kilda* : One seen September 1st, 1910.

145. GARDEN-WARBLER (*S. borin*).—*St. Kilda* : Small numbers were present September 2nd to 21st, 1910.

148. LESSER WHITETHROAT (*S. c. curruca*).—*Fair Isle* : With the Willow-Warbler the commonest Warbler visiting the island. Spring April 23rd-June 9th, autumn August 20th-October 17th. *St. Kilda* : One September 13th, several 14th, one 15th, one 17th, 1910, one October 7th, 1911.

150. SUBALPINE WARBLER (*S. c. cantillans*).—*Fair Isle* : The bird was an adult male, and was obtained on May 6th.

157. CONTINENTAL SONG-THRUSH (*Turdus p. philomelus*).—*Fair Isle* : Occurs both passages and some winter specimens have been examined.

170. WESTERN BLACK-EARED WHEATEAR (*Enanthe h. hispanica*).—*St. Kilda* : A female obtained on September 21st, 1911.

184. CONTINENTAL REDBREAST (*Daudalus r. rubecula*).—*Fair Isle* : Common on both passages and some winter. In spring from second week of April to first week of May, and even as late as May 23rd, and once June 9th. In autumn from September 20th, to November 8th and even to 24th.

187. CONTINENTAL HEDGE-SPARROW (*Prunella m. modularis*).—*Fair Isle* : All Hedge-Sparrows examined are of this form. They occur regularly on both passages but are much commoner in spring. In spring the earliest date is March 29th, usual first week of April, to mid-May, and latest May 29th. In autumn the earliest is September 25th, usual the last week of October and first week of November, and the latest November 16th.

213. WRYNECK (*Jynx t. torquilla*).—*St. Kilda* : One September 6th, 1910.

408. GREAT SNIBE (*Gallinago media*).—*St. Kilda* : One September 6th, 1910, apparently first record for Outer Hebrides.

ROSE-COLOURED STARLING IN SUSSEX.

AFTER being seen in the locality for three weeks, a Rose coloured Starling (*Pastor roseus*) was obtained at Sewers Bridge, Pevensey, Sussex, on June 22nd, 1912. I examined it in the flesh on June 23rd, when it proved to be a male in adult plumage.

H. W. FORD-LINDSAY.

EASTERN LARGE-BILLED REED-BUNTING
IN SUSSEX.

A MALE Large-billed Reed-Bunting was shot at Rye, Sussex, on April 23rd, 1912. This bird was lighter on the back than the one which is now in my possession recorded by Mr. M. J. Nicoll on page 88, Vol. II. of BRITISH BIRDS, and it also has a smaller bill. J. B. NICHOLS.

[I have received, by the kindness of Mr. Nichols, both the above-mentioned Reed-Buntings.

The specimen from Romney Marsh, May 26th, 1908 (*cf. Brit. B.*, Vol. II., p. 88) is certainly *Emberiza palustris*, but it must be said that the bill is an unusually large one.

The specimen above recorded by Mr. Nichols as obtained at Rye on April 23rd, 1912, is a different bird, by reason of its light upper-parts and smaller bill, as noticed by Mr. Nichols. It agrees in every way with *Emberiza schœniclus tschusii*. I am however uncertain about the correct nomenclature of these forms. My note on p. 194, note 2, in *Vög. pal. Fauna*, Vol. I., shows the difficulties with which I was faced in 1904. I then did what was undoubtedly correct to some extent—namely, united into two groups or species the various forms separated as species by some, placed in two genera by others, and lumped all together by still other ornithologists. It was however very difficult to say to which of the two species certain intermediate races belonged, and to decide about them. I was guided by the supposed distribution during the breeding-season, but the question was, and is, whether the distribution is fully understood. Since 1904 I have seen many more Reed-Buntings, and it seems to me most unlikely that the forms now before us, i.e. *palustris* from Italy and *tschusii* from south Russia and the Dobrudscha, belong to different species. As the former appear to breed in the same areas as *E. schœniclus schœniclus*, and the latter apparently together with *E. pyrrhuloides pyrrhuloides*, we cannot call them geographical representatives of either, and I therefore suggest now to admit three species :—

1. *Emberiza schœniclus* (subspecies *schœniclus*, *pallidior*, *canneti*, *pyrrhulinus*, *zarudnyi*).
2. *Emberiza palustris* (subspecies *palustris*, *tschusii*, *othmari*).
3. *Emberiza pyrrhuloides* (subspecies *pyrrhuloides*, *centralasiæ*, *reiseri*, *korejewi*, *harterti*).

E. HARTERT.

The scientific name of No. 54 in our *Hand-List* is thus altered to *Emberiza palustris palustris* Savi., and the new bird should be added thus:—

54a. *Emberiza palustris tschusii* Reiser and Almasy—

THE EASTERN LARGE-BILLED REED-BUNTING.

EMBERIZA SCHÆNICLUS TSCHUSII Reiser and Almasy, *Aquila*, v, p. 122-25 (1898—Typical locality: Dunavat, Dobrudscha).

Emberiza palustris tschusii Reiser and Almasy, E. Hartert and J. B. Nichols, *Brit. B.*, vi, p. 153.

DISTRIBUTION.—*England*.—One. Male, Rye (Sussex), April 23rd, 1912 (*ut supra*).

DISTRIBUTION. — *Abroad*. — Delta of the Danube and southern Russia to Lenkoran on the Caspian Sea.

AUTHORS OF THE HAND-LIST.

ATTEMPTED BREEDING OF THE GREY WAGTAIL
IN SURREY.

THE pair of Grey Wagtails (*Motacilla b. boarula*) recorded by me last year (*British Birds*, Vol. V., p. 24) as having successfully brought off young, attempted to breed again this year, but unfortunately the water-wheel had to undergo repairs just as the nest was completed and ready for eggs. I failed to locate the new nesting-site, and the birds were not again seen anywhere near, but I hope they will return to the old quarters next year. P. F. BUNYARD.

PROBABLE NESTING OF THE PIED FLYCATCHER
IN MORAY.

ON August 17th, 1912, when fishing in the Moriston River, Inverness, I found a nest in a hole of an old birch-tree on the bank of the river, which appeared to be that of the Pied Flycatcher (*Muscicapa h. hypoleuca*). The hole was about three feet six inches from the ground, and about one foot deep. There was one egg in the nest, lying to one side. I replaced it in the middle of the nest. On revisiting the spot five days later the nest and egg were as I had left them. I took the nest and found on attempting to blow the egg that it had evidently been laid for some considerable time, probably since the end of June or mid-July. The nest bore traces of having held a brood, and the egg had apparently been incubated but proved infertile. The nest was a typical Pied Flycatcher's, a rather slight structure of moss and numerous strips of the characteristic honeysuckle

bark. The only other species with which it could be confused is the Redstart, but Redstart's nests as I have invariably found them—with the exception of one which was placed on the branch of a pear-tree trained against a wall—are in a more or less horizontal hole, whereas this was a vertical hole and fairly deep too, as stated above. During my fortnight's stay in the neighbourhood, I saw nothing of either species, but the feather lining mixed with a few horse-hairs, which is characteristic of the Redstart, was entirely wanting in this case, and the appearance of the egg furnished confirmatory evidence. In Mr. Jourdain's work on *The Eggs of European Birds*, p. 246, it is stated that Hargitt obtained eggs of the Pied Flycatcher from Inverness in 1864, and it probably bred in the Moray area in 1890 and 1891, so that nesting-records from this district are evidently scarce.

C. E. STRACEY CLITHEROW.

[Captain Stracey Clitherow has kindly submitted the nest to me, and after examination it certainly seems to have all the characteristics of that of the Pied Flycatcher. The appearance of an infertile egg and the nesting-site would not be enough in themselves to distinguish the Pied Flycatcher with certainty from the Redstart, but taken in conjunction with the nest they render identification in this case as certain as it is possible to be in the absence of the parent birds.—F. C. R. JOURDAIN.

WREN BREEDING IN OLD NEST.

IN connexion with the note in a recent number of *BRITISH BIRDS* (p. 90) relating to a pair of Wrens (*Troglodytes t. troglodytes*) returning to breed in a deserted nest, the following may be of interest. During the spring of 1911 a pair of Wrens took possession of a Swallow's nest of the previous year and built a "cock's nest" inside it, entirely filling the space between the nest and the roof of the shed. It was deserted, but the birds remained in the neighbourhood the whole of the following winter, and on May 27th, 1912, I found that they had lined the nest with feathers and the hen was incubating. The young were safely hatched (May 31st) but on June 8th I found them dead in the nest, one of the old birds lying crushed beneath.

A. GEOFFREY LEIGH.

CUCKOO LAYING IN NESTS OF MARSH-WARBLER AND ROCK-PIPIT.

ON June 11th, 1912, I found the nest of a Marsh-Warbler (*Acrocephalus palustris*) on a river-bank in west Gloucestershire. The nest was placed among tansy, about one foot

from the ground and about eight feet from the water. It contained three eggs (fresh) and one Cuckoo's egg of the light Sedge-Warbler type. ROBERT P. WILD.

[Only five instances appear to have been definitely recorded hitherto in which the Marsh-Warbler has been adopted as the foster-parent of the Cuckoo. The localities are remarkably widely distributed, but probably in each case the normal foster-parent was the Reed-Warbler. The counties from which it has been recorded are Oxfordshire (W. Warde Fowler), Worcestershire (P. F. Bunyard), Buckinghamshire (G. W. Kerr and E. Pettitt), and Cambridgeshire (W. Farren).—F.C.R.J.]

THE Rock-Pipit (*Anthus spinoletta obscurus*) is one of the rarer foster-parents of the Cuckoo (*Cuculus c. canorus*), and only about five instances appear to be recorded in which the egg or young of the Cuckoo has been found in the nest of this species. In the *Birds of Yorkshire*, Vol. I., p. 135, it is stated that there is only one recorded instance in which the Rock-Pipit has acted as fosterer to the Cuckoo in Yorkshire, viz. near Scarborough in 1881. It is interesting to note that a Rock-Pipit's nest found by Mr. J. Morley on May 18th, 1912, near Scarborough, contained in addition to five eggs of the Pipit, a single Cuckoo's egg. The entrance to this nest was so narrow that the Cuckoo's egg must have been inserted by the bill, and probably this circumstance also prevented the removal of one of the fosterer's eggs.

F. C. R. JOURDAIN.

NIGHT HERON IN CHESHIRE.

ON July 31st, 1912, I saw an adult Night-Heron (*Nycticorax n. nycticorax*) at Marbury Mere, near Northwich. The bird, when I first noticed it, was standing on a dead branch overhanging the water, on a small evergreen-covered island close to the edge of the mere, and its yellow legs and greyish-white breast and under-parts showed up very conspicuously against the dark background formed by the evergreens. I distinctly saw the white forehead and eye-stripe, but as the bird was facing me I was unable to see any plumes, nor could I discern any when I afterwards saw the bird for a few seconds on the wing. When disturbed, it flew round a short distance, disappearing among some trees bordering the mere, and I had not time to search further for it. When on the wing, however, the black of the top of the head and the back, and the grey wings and tail, left no doubt as to the species. I did not hear the bird utter any note. J. MOORE.

ABNORMAL BREEDING-HABITS OF THE
SHELD-DUCK.

THE Sheld-Ducks (*Tadorna tadorna*) which frequent the shore of the Bristol Channel for some miles north and south of the mouth of the river Avon appear to have rather peculiar breeding-habits. They usually lay their eggs in hollow pollards in the adjoining marshes, often several miles inland. On most parts of the coast, however, the usual nesting-site is,



EXPOSED NEST OF SHELD-DUCK.

(Photographed by D. Munro Smith.)

I believe, an old rabbit-burrow. The marshes consist of flat fields, intersected by brackish ditches. Most of the rabbit-burrows are in the sides of these ditches, hidden and roofed over by tall, double hedges, which may account for the choice of the more obvious pollards as nesting-sites. This June I found a Sheld-Duck's nest in rather an exceptional place. It was on the ground, quite exposed, in an osier-bed, and is shown in my photograph. Whether the old bird was merely feigning lameness or really experienced difficulty in rising amidst the surrounding undergrowth, I do not know, but I caught her easily, as she was shuffling off the

eggs. She soon returned and, I think, brought off her brood.

I imagine the old birds carry their ducklings to the water, often a distance of several miles. It would be interesting to see them performing this feat.

D. MUNRO SMITH.

TUFTED DUCK AND TEAL BREEDING IN SURREY.

WHILE watching some Great Crested Grebe on a large Surrey pond on April 29th, 1912, I was surprised to see a couple of Tufted Duck (*Nyroca fuligula*). On May 25th the drake was alone, swimming about close to the bank, and from its behaviour I felt certain that the duck must be sitting at no great distance. However, a diligent search for the nest resulted in failure. On June 8th I again visited the locality, and found both birds together in the middle of the pond, and by the aid of my glasses I could see that they were accompanied by nine young which looked about a week old. I believe this to be the first authenticated record of their breeding in the county. Mr. John A. Bucknill, in the *Birds of Surrey*, p. 239, states that "although the bird has nested in some of the adjacent counties, I am not aware of any record of its having done so in Surrey in a wild state."

During my search for the nest of the Tufted Duck I flushed a Teal (*Nettion crecca*) from ten eggs, and on revisiting the spot on June 2nd, found that all with the exception of two had successfully hatched-out. The young left the nest on my approach. There was a plentiful supply of down and flank-feathers (a sample of which I took) both of which I found quite typical. Apparently there are few records of this bird breeding in the county, and as far as my experience goes it must be regarded as a rare occurrence. The nest was in long old heather, and was about one hundred and fifty yards from water.

P. F. BUNYARD.

MOVEMENTS OF COMMON SCOTERS OFF THE NORTH COAST OF WALES IN SUMMER.

THE months of June and July and the first week in August, 1912, were remarkable for the large numbers of non-breeding Common Scoters (*Oidemia n. nigra*) which summered off the north coast of Wales, and I think that since the occurrence appears to be so exceptional on at least that portion of the western seaboard during those three months, the following report may be of interest.

The first party of Scoters came under my notice shortly after 4 p.m. on June 22nd; and until 5.30 p.m. flock after flock, large and small, passed every few minutes westward along the north-easterly side of the Great Orme's Head, their

course lying towards the eastern coast of Anglesey. Between 4.30 and 6 p.m. on the 29th similar flocks, the largest of which contained upwards of eighty birds, were again observed passing westward. On thirteen different afternoons and evenings in July, and on the 1st, 2nd, 3rd, 7th and 8th of August, the same diurnal movement was observed, but despite continual vigilance nothing was seen of it after the latter date, for the four birds which I saw on the wing in the Conway estuary on August 18th were quite five miles south of the route. The abnormally low barometric pressure which prevailed in the early part of August may have contributed to the cause of the disappearance from the north coast of those birds which thought well to summer off its shores.

The ducks were never observed to alight on the sea off the promontory of Gogarth, but passed, as was generally the case in the late afternoon and evening, westward, whilst as a rule they travelled eastward in the early morning.

The movement appears to have been one from feeding-grounds to some convenient locality off the Anglesey coast where the birds could assemble to spend the short summer nights; and it would be interesting to know whether they were observed during the day-time by other ornithologists in the neighbourhood of Liverpool Bay, where it is thought they obtained their food.

RICHARD W. JONES.

SOOTY SHEARWATER OFF KENT.

IN crossing the Channel from Calais on August 28th, 1912, I saw a Sooty Shearwater (*Puffinus griseus*) several miles out from Dover. It was skimming over the water in typical Shearwater manner, thus showing the upper and under surface alternately, and it crossed in front of the boat near enough for me to see its colours quite satisfactorily. It was flying down Channel.

I may add that I also saw several Arctic Skuas (*Stercorarius parasiticus*), all of them quite dark birds. It was a very fortunate day for observation of such birds, as it was very fine and fairly smooth after weeks of stormy weather. It seems a pity that there is no one to make proper ornithological observations out at sea in the early autumn.

H. G. ALEXANDER.

STOCK-DOVE LAYING AGAIN WITH YOUNG STILL IN THE NEST.

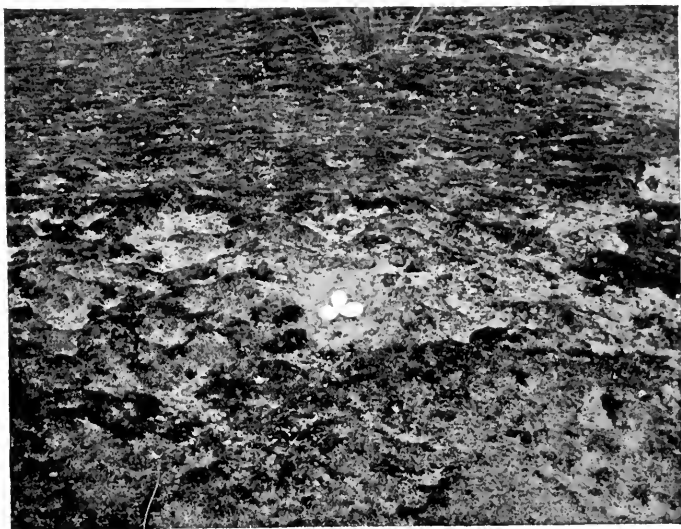
It is well known that domestic pigeons will lay again before the young have left the nest, but it may be worth putting on record that the Stock-Dove (*Columba oenas*) will do the

same. I found the nest of a Stock-Dove at Felsted, Essex, during the last week in June, 1912, and it then contained two eggs. On July 2nd I visited the nest again and found that one egg had been sucked and the shell pushed on one side. The other egg hatched on July 6th. On July 21st when I examined the nest again the young pigeon was fairly well fledged but unable to fly, and there were two more eggs in the nest.

J. H. OWEN.

UNPIGMENTED EGGS OF THE RINGED PLOVER.

BLAKENEY POINT is a long shingle-spit on the north coast of Norfolk. Except for the occasional presence of two house-boats, the place is uninhabited, and for miles the ceaseless screaming of countless Terns, with the occasional plaintive whistle of a Ringed Plover is all that disturbs the peace of shingle and dune. Here, on the moss-grown saltings,



NEST OF RINGED PLOVER WITH WHITE EGGS.

(Photographed by W. Rowan.)

behind the dunes, a pair of Ringed Plovers (*Charadrius h. hiaticula*) had continually been seen and heard, but no nest had been found till this day when my friend almost walked into a clutch of three white eggs in a little sandy cup. They were certainly Ringed Plover's, for no other

birds were there, and on the round end could be discerned a few light, bluish-grey spots; and in shape and size they were plovers' eggs. It was late, but I took a photograph nevertheless, intending the next day to expose a Lumière colour-plate. On my return, however, the eggs were gone. Unfortunately I had not shown the clutch to the watcher (for the birds on Blakeney Point are protected) that evening, and when I took him there the next morning, nothing remained but the little sandy cup that had previously contained them. Of course he thought I had lost the place, but



UNPIGMENTED EGGS OF RINGED PLOVER.

(*Photographed by W. Rowan.*)

though we examined every sandy hollow within thirty or forty feet, in this alone was the sand stuck together like a cake, showing that it contained something sticky that the others did not. That morning a few Jackdaws had been over from the mainland, and the watcher had no doubt that they were the thieves. Two days later we found two of the broken shells in the adjoining salt-marsh. Enough remained to show the shape, so I took a picture of them as they were. The third was never found. They were the first unimpigmented Ringed Plover's eggs which the watcher had ever seen, and he could suggest no reason for the abnormality. He seemed certain that the Jackdaws were the culprits, as neither rats nor stoats would have taken them into the marsh, which was then covered by high tides, although a bird might have dropped them there.

This led to a discussion on abnormally-coloured eggs. He had a number of freak terns' eggs in his possession at the time, found during many years, chiefly in 1911, when unimpigmented terns' eggs were common.

The story is an interesting one. In the fall of 1910, about the middle of October, a dead whale was washed ashore on this shingle-spit, where it remained for three or four months before being buried. By this time the smell was already offensive, and rats had assembled in numbers at the carcase. But the next high tides washed the whole thing out again, leaving it stranded till May, 1911. The place was now swarming with rats. Two days were spent in burning all that could be destroyed of the carcase by this means, the rest being chopped up into small pieces and re-buried. Attention was next turned to the extermination of the rats.

By this time terns were already laying. Their eggs were good food for the rats, and almost every egg that was laid was eaten. The watcher was no idler, however, and soon countless poisoned hens' eggs were distributed all over the spit; traps were set in large numbers, and guns were used unceasingly, but May, and then June slipped by, and still rats were preying on the terns' eggs. The effect was startling. All over the shingle unpigmented, coloured but unspotted, and misshapen eggs were found. The abnormalities seem to be attributable mainly to exhaustion and also to the constant worry of the birds, for the excitement of a whole colony of terns, even at the approach of a single strange bird, is familiar to everyone. Apparently no old birds were attacked by the rats.

This colony consists of Common and Lesser Terns only. No Arctic were noticed, this year at all events.

W. ROWAN.

ON REMOVING LAPWING'S EGGS.

IN reference to Mr. N. F. Richardson's recent note on this subject (*supra*, p. 94) the following may prove of interest. On May 9th, 1912, I took a clutch of perfectly fresh eggs of the Lapwing (*Vanellus vanellus*) in a grass-field, and at almost the same moment a boy who was with me, found another clutch some eighty yards off in the same field. These he brought across to me but they proved to be hard set, so I decided to replace them at once. It is none too easy to find a Lapwing's nest with eggs; to find one without eggs is far harder, and all our efforts to locate the nest were unavailing. We therefore made a slight hollow as near as possible to where we thought they had been taken from, and laid the eggs therein.

I revisited the spot on the morning of May 10th. The eggs lay in the hollow I had made, but a scanty layer of dead grasses had been used to line it. The eggs must of necessity have been rolled out, the hollow lined, and then the eggs rolled back again. The following morning (May 11th) the lining had been very considerably added to. On May 14th one egg was chipping and by the morning of the 16th a few little bits of shell was all I could find.

A farmer who has been many years on the estate (Elton Hall, Hunts., Col. D. G. Proby), and from whom I have gleaned many interesting notes concerning local birds, informed me that when harrowing, etc., nests are constantly disturbed. If seen in time the eggs are lifted while the harrow passes, and then replaced as near to where the nest was as possible; and he assures me that the bird almost invariably returns to the eggs and *makes a new nest to hold them*. He was most careful to preserve the Lapwings on his land as they "fed on the beetles that come out of wireworms."

LEWIS R. W. LOYD.

GREAT SKUA IN CARNARVONSHIRE.

WITH one exception, apparently much doubt is reflected upon the accuracy of the reports of the occurrences of the Great Skua (*Stercorarius s. skua*) in North Wales so that it may be of interest to state that on August 25th, 1912, I watched one in the Conway estuary for well over an hour as carefully and closely as circumstances permitted. I was better able to form an idea of its size when it joined a small party of Herring-Gulls, from the young of which it differed considerably in the intensity of its brown feathers; indeed, from a distance it had every semblance of being wholly black. The shape of its short tail was rounded, and its wings, which appeared to be more pointed than those of the Gulls, reminded me of the Manx Shearwater and Gannet, but it did not come near enough for me to see its hooked bill. Its presence in the estuary was a source of considerable annoyance to the terns, from which it purloined fish. It settled on the water some three or four times whilst I watched it but did not remain there more than a minute or two at a time. The bird is apparently an addition to the avifauna of the county.

RICHARD W. JONES.

[Mr. H. E. Forrest, in the *Fauna of N. Wales*, p. 393, apparently overlooked the record of a Great Skua seen in Holyhead Harbour on July 20, 1903, by Professor C. J. Patten (*cf. Zoologist*, 1904, p. 75).—F.C.R.J.]

THE 1912 "WRECK" OF THE LITTLE AUK.

MIDDLESEX.—Dr. R. Main, of 24, Alexandra Villas, Finsbury Park, informs me that about the beginning of February, 1912, a Little Auk (*Alle alle*) entered his surgery door. Dr. Main states that the bird was not in the least emaciated, and snapped at anyone who tried to handle it. It was sent to the Zoo, but died a few days after admission to the Gardens.

WILLIAM E. GLEGG.

LAND-RAIL CALLING IN AUGUST.

At the end of July, and up to August 5th, 1910, I heard a Land-Rail (*Crex crex*) craking daily at Halston, not far from Oswestry. Such a late date seems worth putting on record. This year I have not heard the bird anywhere, although it is more plentiful here now than in August, 1910. J. H. OWEN.

[Although the Land-Rail only calls up to about the end of June as a rule, it may occasionally be heard till the end of July and even in August. It is noted as still calling on August 6th at Glasgow, and in Ayrshire (*Ann. S.N.H.*, 1907, p. 200). Exceptional cases are also on record of craking in winter (January).—F. C. R. JOURDAIN.]

QUAILS IN SHROPSHIRE.

It is interesting to note that Quails (*Coturnix c. coturnix*) are more common in the Oswestry district than they have been for many years. Specimens have been noted near Whittington, Halston and at Sandford, among other places.

J. H. OWEN.

LESSER WHITETHROAT IN SOLWAY.—Mr. G. Stout observed a Lesser Whitethroat (*Sylvia c. curruca*) on July 31st, 1912, at Lockerbie, Dumfriesshire. The date seems to indicate the probability of its having nested in the neighbourhood (*Scot. Nat.*, 1912, p. 210).

GREAT SPOTTED WOODPECKER BREEDING AT LOCH LOMOND.—Mr. C. Kirk records (*Scot. Nat.*, 1912, p. 185) that a pair of *Dryobates major anglicus* nested and reared young in 1912 in a birch-tree on the side of Loch Lomond.

BREEDING-HABITS OF THE TAWNY OWL.—Mr. J. Steele Elliott gives an interesting description (*Zool.*, 1912, pp. 293-7) of a particularly aggressive pair of Tawny Owls (*Strix a. aluco*) which appear to have attacked him with great violence almost every time he went near their young in the nesting-hole. Mr. Elliott was repeatedly struck by the birds both at night and in daylight; his face was torn open on one occasion and an

umbrella with which he protected himself was twice ripped up, while one of the birds struck a straw hat, which was held out, with such violence that it stunned itself and fell to the ground.

HYBRID EIDER AND WILD DUCK.—Mr. W. Eagle Clarke (*Scot. Nat.*, 1912, p. 198, Pl. V.) gives a minute description and a figure of a hybrid between an Eider (*Somateria m. mollissima*) and a Wild Duck (*Anas p. platyrhyncha*). It is a drake, and was shot by Mr. Laidlaw on the island of Auskerry, Orkneys, early in 1912. This hybrid is believed to be previously unrecorded, but Mr. Eagle Clarke and Dr. C. B. Ticehurst believe that they saw a similar specimen on the Pentland Skerries in May, 1912.

PLUMAGE OF THE FULMAR.—Mr. W. Eagle Clarke gives some interesting notes (*Scot. Nat.*, 1912, pp. 102-4) on the juvenile plumage of *Fulmarus g. glacialis* from specimens obtained at St. Kilda. He states that the upper-parts of the juvenile are of a decidedly paler grey than in the adult and more uniform in tint, while the head, neck and under-parts of the juvenile are pure white and silky in appearance, whereas in the adult these parts have a yellowish hue. Mr. Clarke also mentions that in the adults some feathers of the mantle and scapulars are edged with ashy-brown as also are some of the wing-coverts on their outer webs. A full description of the coloration of the bill and a few remarks on the pale and dark forms are added.

FULMARS BREEDING AT STRONSAY, ORKNEY.—Mr. T. Sinclair writes from Stronsay to say that he saw about a dozen Fulmars (*Fulmarus g. glacialis*) circling about Burghead in the spring of 1912, and on July 11th succeeded in obtaining one of their eggs. This is apparently a new breeding-station (*Scot. Nat.*, 1912, p. 214).

FULMARS BREEDING IN IRELAND.—In our last volume (pp. 141-2) we referred to the important discovery made by Mr. Ussher and others of the Fulmar breeding in Ireland. Mr. Ussher now reports (*Irish Nat.*, 1912, p. 181) that the Mayo breeding-colony appears to be increasing, and that in July, 1912, he saw "at least forty birds sitting on their ledges, besides those wheeling in the air." On the same page of our contemporary Mr. C. V. Stoney reports about twelve pairs breeding on some cliffs on the west coast of Donegal, but Mr. Ussher states that this is the same locality as the "Ulster cliff" visited by Messrs. Malcolmson and Green last year.

IMMATURE BLACK-NECKED GREBE IN SOLWAY.—An immature Black-necked Grebe (*Colymbus n. nigricollis*) obtained near Skinburness on July 29th, 1912, was sent to Mr. H. Mackay for identification, and proved on dissection to be a male bird of the year. Its occurrence at this period is of great interest, and it seems possible that it may have been bred somewhere in the neighbourhood (*Scot. Nat.*, 1912, p. 213).

TURTLE-DOVE NESTING ON THE BORDERS.—Mr. J. B. Cairns writes to the *Scottish Naturalist* (1912, p. 186) from Carlisle to say that the Turtle-Dove (*Streptopelia t. turtur*) is "at present (22nd June) nesting within three miles of Gretna Green, and a fledged young one is in the nest." It is not stated on which side of the border the nesting-place is situated but presumably the Cumberland side is intended.

BROAD-BILLED SANDPIPER IN TAY.—Mr. W. Berry records in the *Scottish Naturalist*, 1912, p. 212, the first Scottish specimen of the Broad-billed Sandpiper (*Limicola p. platyrhyncha*). It was shot on August 12th, 1912, at the Morton Lochs, near Tentsmuir, Fifeshire, and was in company with another bird which appeared to be of the same kind. Mr. Berry believes that he saw one of these birds on August 1st. The specimen obtained was identified in the flesh by Mr. Eagle Clarke, and has been presented by Mr. Berry to the Royal Scottish Museum.

GREEN SANDPIPERS IN TAY AND SOLWAY.—A specimen of *Tringa ocropus* was seen by the Misses Baxter and Rintoul on June 28th, 1912, at Morton Loch, Fife (*Scot. Nat.*, 1912, p. 186). At the same locality in August, 1912, Mr. W. Berry noticed several Greenshanks (*Tringa nebularia*) and at least three Green Sandpipers (*tom. cit.*, p. 212), Mr. J. G. Gordon flushed a pair of Green Sandpipers on the afternoon of August 5th at Soulseat Loch, Inch, Wigtownshire (*tom. cit.*, p. 211).

CORRECTION.—Mr. H. W. Robinson writes to us that the first recorded instances of the nesting of the Common Eider in Ireland (*supra*, p. 106) took place on a small island off the coast of co. Donegal, and not co. Down as there stated.



REVIEWS



Report on Scottish Ornithology in 1911, including Migration.

By Evelyn V. Baxter and Leonora J. Rintoul, pp. iv. + 80,
1912. Edinburgh: Oliver & Boyd. 1s. 6d. net.

THIS Annual Report which has appeared for many years in the *Annals of Scottish Natural History* now figures as a separate publication. After some useful introductory sections under headings such as "Species new to Scotland"; "Birds new to Faunal Areas"; "Extension of Breeding Range"; "Migration" (under months), we come to the main body of the Report, which is treated under species headings—a feature which we are delighted to see restored, for the value of last year's Report was greatly minimized by its omission. Moreover, this publication is provided with a full index, so that its usefulness as a work of reference is assured.

A most gratifying feature is the use throughout of the nomenclature adopted in our *Hand-List*. This Report was published very shortly after the *Hand-List*, and it is most encouraging to find by this and other signs that the International Rules by which our names are governed are obtaining such quick recognition. It would seem that the long-desired uniformity in nomenclature is really in sight.

The main value of the Report is in its carefully collated information on the movements of birds in Scotland. Of records of rarities, there are few which have not already been published, but we may note the following:—

It is stated (p. 8) that a nest and eggs of the Common Scoter (*Oidemia n. nigra*) were found in Shetland in the summer of 1911, but no particulars are vouchsafed.

Two Hawfinches (*Coccothraustes c. coccothraustes*) were reported from Cape Wrath, on October 15th, 1911.

An immature Northern Bullfinch (*Pyrrhula p. pyrrhula*) is recorded from Lerwick (Shetland), on October 19th, 1911.

A Wood-Lark (*Lullula a. arborea*) was procured on Pentland Skerries on October 21st, 1911.

Yellow-browed Warblers (*Phylloscopus s. superciliosus*) were noted on Fair Isle on October 11th and 16th, 1911, the only records for Scotland for the year.

A Hoopoe (*Upupa e. epops*) was obtained in Inverlaur deer forest (W. Ross), in October, 1911.

Two Pink-footed Geese (*Anser brachyrhynchus*) were noted at the Flannan Isles (Outer Hebrides) on April 18th, 1911.

Numbers of Green Sandpipers (*Tringa ocropus*) are recorded from the Flannans (Outer Hebrides), three on September 1st, and one on the 7th; one from near Rodel, South Harris, on August 3rd; one from the Pentland Skerries (Orkney) on July 30th; a good many single birds from Fair Isle in May, and on July 31st and August 1st, 2nd, 3rd, 4th and 5th.

H.F.W.

LETTERS.

SPORADIC NESTING.

To the Editors of BRITISH BIRDS.

SIRS,—Mr. C. S. Meares's criticism with regard to my inclusion of the Hobby and Grasshopper-Warbler as sporadic breeders is somewhat vague—and, moreover, he makes no attempt to suggest a better definition. Why he objects to the use of these two species and not the Hawfinch I do not know. I adopted the term "sporadic" because it had already been used by Mr. Witherby in his note on the breeding of the Crossbill (Vol. IV., p. 333). If the Crossbill is rightly described as a sporadic breeder I maintain that many other species, including those mentioned, are equally so. The grounds for the assertion I made, rest entirely on the actual field-experience of my friends and myself, extending over thirty years.

P. F. BUNYARD.

THE BIRDS OF WIGTOWNSHIRE.

To the Editors of BRITISH BIRDS.

SIRS,—I should be very grateful if anyone who has any records of Wigtownshire birds, old or recent, would kindly communicate with me, in order to make my forthcoming book as complete as possible.

J. G. GORDON.

Corsemalzie, Whauphill, Wigtownshire.



THE TAIL IS IN CONSTANT MOTION.



ON HER FAVOURITE PERCH.
THE NIGHTINGALE.

(Photographed by N. F. Ticehurst.)

BRITISH BIRDS

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SOME NOTES ON THE BREEDING-HABITS
OF NIGHTINGALES.

BY

N. F. TICEHURST, M.A., M.B.O.U.

THERE must be but few of our ordinary British nesting birds that have hitherto evaded the efforts of the photographer.



NIGHTINGALE'S NEST IN GARLIC AND NETTLES.

(Photographed by N. F. Ticehurst.)

Beautiful pictures of some species, as for instance the Terns and several of the Warblers, have been published many times over, but the Nightingale, favourite though it is, would appear to be one of the less-frequent subjects of the naturalist-photographer. Indeed, I can

call to mind but very few Nightingale pictures out of the very large number of all species that I have seen. It cannot be that this species offers any special difficulty of itself, for during the past two breeding-seasons I got on intimate terms, so to speak, with two pairs of birds and found that with ordinary precautions they were no more difficult to make exposures on than say any of the members of the genus *Sylvia*. I say make exposures advisedly, because there is all the difference between making exposures and getting successful pictures, and herein lies the real difficulty. The nest-site is frequently so overgrown that a longish exposure is nearly always necessary even with the fastest plates and the widest admissible lens-aperture, and there are many nests where a successful picture of the bird in any other position than the brooding one is well nigh impossible. From this cause the whole of the plates which I exposed in 1912 were failures; and I must crave the indulgence of readers for the imperfections of the accompanying pictures, though I trust they may be not without interest.

The nests of both pairs were in the same wood, consisting of oak-trees standing in mixed coppice of birch, ash, hornbeam, etc., four and five years old, the birches which predominated being from eight to ten feet in height. The situation of the nests was normal in every way. In 1911 a shelter was erected three days before the eggs were due to hatch and I spent two days at the nest when the young were three and four days old. In 1912 the shelter was not put up until the young were six days old and photography was attempted on the following day.

In neither case was the female in the least shy, she came to the nest for the first time after a comparatively short wait and thenceforward fed the young at short intervals throughout the day. The male, as with many species, appeared to be much less trustful of the shelter and projecting lens than his mate, and I derived the

erroneous impression in 1911 that the feeding was done exclusively by the female. During two days he did not feed the young once, but would bring food to within a few yards of the nest and deliver it to the female. On these occasions there were several times scufflings and loud harsh chatterings as though the hen were trying to make him perform his duty properly, but while I was watching he did not come right up to the nest once.



HER BILL FULL OF CATERPILLARS.

(*Photographed by N. F. Teehurst.*)

The 1912 male was also more nervous than his mate but, although her visits to the young were four or five times more frequent than his, he carried out all the duties incidental to the care of the young, and it is therefore probable that under quite normal conditions these duties are shared equally by the sexes.

The food brought to the young consisted entirely of caterpillars, those of the Green Oak-moth, that were devastating the oak-trees in both years, predominating.

The supply was of course inexhaustible at close range so that foraging at any distance was unnecessary. The birds approached the nest by flying in short stages from twig to twig of the birches at a height of two or three feet from the ground and always arrived eventually at the same perch four or five feet on the far side of the nest, thence dropping to the ground he or she would creep through the tangled twigs, grass, brambles, etc.,



CREEPING THROUGH THE TANGLE.
(*Photographed by N. F. Ticehurst.*)

to the side of the nest. During the pauses in the flight, when perched on the birch twigs, the bird's tail is in constant motion with a characteristic upward flick and a slower subsidence to the horizontal; at the height of the flick the tail stands at less than a right angle with the body-line, and this constant motion adds not a little to the sprightly charm and grace of this delightful bird. The upper figure in Plate 5 is an attempt at the

portrayal of the attitude at the height of the flick, but lacks success owing to the aforementioned light and exposure difficulty.

The 1911 male was singing most of the day except when actively searching for food, and it often seemed that he signaled his arrival with food to the hen by a burst of song, and it was curious to see him pouring out his flood of melody with his bill crammed with green caterpillars. The generally-quoted statement that the song ceases directly the young are hatched, is certainly not strictly accurate. The prolonged nocturnal serenade certainly does so, but the bird sings intermittently at night until the young are beginning to fledge, the amount of song decreasing nightly. Until the young are five or six days old the male sings pretty constantly also by day, and perhaps therefore normally *does* take less part in the rearing of the young up to that time than he does later; the song is perhaps less loud than before the young are hatched, but it is difficult to judge of this at very close range and I could not be sure that it was so. Occasional snatches of song may be heard during the day-time up to the time when the young are fledging (about the eighth or ninth day). The harsh "swearing" note seems to be little, if at all, used until the young are actually out of the nest. There is another note, however, which seems to be indicative of alarm or anxiety and with which I was previously unacquainted. It is a single, plaintive whistling-note, similar to that of the Willow-Wren and is indeed common to several other warblers. The Nightingale's is singularly loud and penetrating, but I could detect no difference between it and that of the Garden-Warbler. It is made use of by both sexes, though it seems to be more the peculiar property of the female. I first heard it at night, while listening to a male singing; each separate verse, so to speak, of his song was heralded by this loud note, and it occurred to me the next day when I found a hen Nightingale making constant use of it that perhaps the

mate of the former bird had been encouraging him to resume his song whenever he stopped. It may have been, however, an individual peculiarity of the song of that particular male.

The sanitation of the nest is carried out by both sexes after feeding the young, if it is required. When the young are small the faeces at the bottom of the nest are eaten by the parent, the bird's head and neck



AFTER CLEANING THE NEST.
(*Photographed by N. F. Ticehurst.*)

being hidden by the wall of the nest during the process. When the young are larger (6th day onwards) the faeces are received by the parent, as in many other species, on the rim of the nest or straight from the body of the young, being then either swallowed or carried away to a distance and dropped.

The young birds feather with great rapidity: the quills appear on the fourth day and already show

sprouting barbs by the sixth. Thenceforward growth is rapid and the young bird is sufficiently fledged to leave the nest on the twelfth day; the primaries are hardly more than half-grown and the tail not more than an inch long when this takes place, so that life for the next few days is mainly a creeping one amongst the undergrowth in the immediate vicinity of the nest. All young Warblers are very skulking in habits, and juvenile Nightingales are if possible more than usually so; it is exceedingly difficult, therefore, to get a glimpse of them in their tangled retreats. This spring I spent an hour or more every day watching in the vicinity of the nest for ten days after the young had left it. The old birds were constantly visible and very anxious, frequently giving vent to their whistling and harsh notes, often within a few yards, but I only once caught a brief glimpse of one of the young.

THE "BRITISH BIRDS" MARKING SCHEME.*

PROGRESS FOR 1912 AND SOME RESULTS.

BY

H. F. WITHERBY.

It is with great pleasure that I have to report that the seventy odd "ringers" in 1912 have again eclipsed the records of former years by placing no fewer than eleven thousand four hundred and eighty-three rings. The following table shows a remarkable progressive enthusiasm in the scheme:—

NUMBER OF BIRDS "RINGED."

In 1909	2,171
In 1910	7,910
In 1911	10,416
In 1912	11,483
Grand total	31,980

As will be seen below Mr. H. W. Robinson again heads the list, and has beaten his former records with the splendid total of two thousand one hundred and seventy-five; Mr. N. H. Joy again comes second with eleven hundred and nineteen; Mr. J. Bartholomew and Dr. H. J. Moon each contribute over five hundred, Mr. M. Portal, Miss A. C. Jackson and Mr. J. D. Patterson are all over four hundred, while there are three totals of over three hundred, five of over two hundred, and no less than eleven of one hundred and over. Not only are all these totals most satisfactory, but we must also congratulate ourselves upon an increase in the total number of "ringers."

Turning now to results: I hope shortly to give some statistics with regard to the recoveries of ringed birds, but this is not possible at present owing to the fact that the inquiry has outgrown the method originally adopted of keeping the records, and it has been found necessary to remodel the system entirely. This work, which is now in active progress, has caused a very

* For the 1911 report, see Vol. V., pp. 158-162.

considerable extra expense, but no less elaborate system could be devised with so many separate records to deal with, and it is above all necessary that the records should be accessible and correct. I may here again thank those who have contributed towards the expenses, but, as these are now necessarily considerable, I hope that further subscriptions will be forthcoming, so that the scheme may not be handicapped for lack of funds.

Although the proportion of recoveries seems on the whole fairly satisfactory, the recoveries of small birds ringed in the nest are still, and I am afraid always will be, disappointingly few. The mortality among birds immediately after they leave the nest and before they can fly properly must necessarily be enormous, and consequently, as most of the birds ringed are nestlings, the number which reach the age say of two months, must be small in comparison with the number ringed. For this reason much better results are to be obtained by ringing adults, and I sincerely hope that more of our "ringers" will adopt the methods so successfully practised by Mr. N. H. Joy, of catching birds in cage-traps.* I should also much like to see more of the cliff-breeding birds ringed as we really know little about their movements, and this might be done in place of Black-headed Gulls of which we have I think ringed nearly sufficient to obtain a good idea of their movements.

Attention may here be drawn to a few of the most interesting and striking recoveries reported during the year, but I must warn the reader that these records are only mentioned for their individual interest and must not be regarded as necessarily typical of the species concerned.

The two most striking long-distance records are the Black-headed Gull, ringed as a nestling in Yorkshire in July, 1911, being found in Flores, Azores, in February, 1912, and the Starling ringed in Berkshire in January,

* For instructions for capturing birds to ring, see Dr. C. B. Ticehurst's article in Vol. IV., p. 236.

1912, reaching Helsingfors, Finland, in April. Among other recoveries reported from abroad the following may be mentioned: a Teal ringed in Staffordshire in autumn, 1910, found at Dalarna, Sweden, in July, 1911; a Starling ringed in Berkshire in November, 1911, found in Ostfriesland in April, 1912, and another ringed in Lincolnshire in October, 1910, found in Holland in October, 1912, and a Whinchat ringed in Dumfriesshire in June, 1912, found in Gironde in September. A Pied Wagtail ringed in Sussex as a nestling in June, 1912, and reported from Gironde in October, is of particular interest when compared with a record of one ringed in the same place in June, 1910, and reported from Portugal in the following winter.

Some of the Starlings, Blackbirds, Song-Thrushes, Redshanks, Curlews, Lapwings, Woodcock, and Black-headed Gulls ringed as nestlings in the summer in the north of England and Scotland, have been found in the autumn or winter in Ireland, while other individuals have been recovered near at home, and yet others of Song-Thrush, Lapwing, and Black-headed Gull in France.

Attention should also be drawn to further records of Cormorants migrating to the French coast in autumn from Ireland and Cornwall.

The records of Starlings, both nestlings and adults, ringed in Kent and returning to nest in the same place one and two years afterwards, are most interesting, while we have had two records from which it would appear that sometimes in any case birds nest at a considerable distance from their birthplace. One of these was a Swallow ringed as a nestling near Southampton in 1911 which was found at Mill Hill in June, 1912, and the other a Black-headed Gull ringed as a nestling in North Wales in 1909 and found in a gully in Yorkshire in June, 1912.*

*A large number of "Recoveries" recently reported are unavoidably held over for want of space, and will be published in our next issue.

NUMBER OF BIRDS "RINGED."

Messrs. H. W. Robinson (2175), N. H. Joy (1119), J. Bartholomew (547), Dr. H. J. Moon (519), Mr. M. Portal (452), Miss A. C. Jackson (445), Messrs J. D. Patterson (417), F. W. Smalley (364), J. R. B. Mascfield (331), A. Bankes (320), W. E. Suggitt (282), C. T. Cobbold (281), J. K., E. F., and H. M. Stanford (244), A. W. Boyd (232), Mr. R. O. and Miss Blyth (214), Dr. N. F. Tiechurst (189), Messrs H. W. Ford-Lindsay (186), W. Rowan (159), T. F. Greenwood (145), R. M. Barrington (134), B. Starley (134), W. T. Blackwood (133), T. C. Hobbs (129), R. E. Knowles (127), A. Dann (107), Capt. W. F. Mackenzie (100), Messrs. T. A. Coward (96), G. R. Starley (94), H. Bentham (90), A. Greg (87), A. Mayall (87), North London Nat. Hist. Society (C. L. Collinette, Sec.) (87), Messrs. E. W. Hendy (85), A. G. Leigh (83), G. P. Hony (81), Miss C. M. Aeland (80), Messrs. A. B. Fletcher (75), H. S. Gladstone (73), Miss M. Heysham (67), Messrs. G. R. Humphreys (67), J. Hutton (gamekeeper to Mr. J. Bartholomew) (67), J. Steele Elliott (58), H. L. Popham (54), Lord Lucas (51), Miss J. Crookes (48), Mr. G. Atelison (48), Miss M. and Mr. D. G. Garnett (42), Messrs. J. L. Bonhote (40), W. A. Nicholson (40), E. Page (40), H. F. Witherby (36), E. A. Wallis (35), C. K. Parker (33), J. H. Owen (31), Mrs. Patteson (25), Messrs. C. Hyslop (gamekeeper to Mr. H. S. Gladstone) (24), W. Davies (24), Capt. J. W. H. Seppings (23), Messrs. J. S. T. Walton (22), C. F. Archibald (18), J. H. Milne-Home (16), W. W. Lowe (13), Miss M. Greg (11), Mr. Sibbering Jones (10) and others who have ringed less than ten birds each.

	'09	'10	'11	'12	Total.
Crow, Carrion ...	—	11	6	—	17
Rook ...	—	1	64	35	100
Jackdaw ...	11	5	15	6	37
Magpie ...	—	7	4	4	15
Jay ...	—	5	3	4	12
Starling ...	21	428	1109	1469	3027
Hawfinch ...	—	—	6	—	6
Greenfinch ...	28	100	208	439	775
Goldfinch ...	—	8	2	—	10
Redpoll, Lesser ...	—	8	—	19	27
Linnet ...	20	65	63	64	212
Bullfinch ...	—	8	16	18	42
Chaffinch ...	6	103	271	360	740
Brambling ...	—	—	3	—	3
Sparrow, House ...	8	109	85	60	262
Sparrow, Tree ...	17	49	24	33	123
Bunting, Corn ...	—	—	—	1	1
Bunting, Yellow ...	4	13	31	127	175
Bunting, Reed ...	2	8	40	17	67
Lark, Sky ...	1	20	39	138	198
Lark, Wood ...	—	—	1	—	1
Pipit, Tree ...	14	26	19	38	97
Pipit, Meadow ...	27	32	75	120	254

	'09	'10	'11	'12	Total.
Pipit, Rock ...	—	6	3	3	12
Wagtail, Yellow...	1	—	—	—	1
Wagtail, White	—	—	6	5	11
Wagtail, Grey ...	5	6	13	23	47
Wagtail, Pied ...	12	29	42	100	183
Creeper, Tree ...	—	3	3	6	12
Nuthatch ...	—	4	5	1	10
Tit, Great ...	16	127	154	73	370
Tit, Blue ...	12	54	144	124	334
Tit, Coal ...	—	12	26	9	47
Tit, Marsh ...	—	25	3	3	31
Tit, Willow ...	—	1	—	—	1
Tit, Long-tailed...	—	3	—	5	8
Wren, Golden-crested ...	—	16	15	—	31
Shrike, Red-backed ...	2	15	13	9	39
Flycatcher, Spotted ...	23	65	64	54	206
Flycatcher, Pied ...	—	—	5	1	6
Chiffchaff ...	2	16	5	5	28
Warbler, Willow ...	50	107	139	266	562
Warbler, Wood ...	—	12	27	7	46
Warbler, Reed ...	—	4	10	14	28
Warbler, Sedge ...	1	4	12	21	38
Warbler, Garden ...	3	9	13	17	42
Blackcap ...	—	7	12	4	23
Whitethroat ...	22	53	33	21	129
Whitethroat, Lesser ...	1	19	5	15	40
Warbler, Dartford ...	—	5	—	2	7
Fieldfare ...	—	48	30	7	85
Thrush, Mistle ...	2	48	40	83	173
Thrush, Song ...	71	625	693	739	2128
Redwing ...	—	7	20	4	31
Ouzel, Ring ...	—	—	9	22	31
Blackbird ...	83	505	421	448	1457
Wheatear ...	1	15	1	34	51
Whinchat ...	7	30	28	21	86
Stonechat ...	—	10	19	8	37
Redstart ...	1	15	35	26	77
Redstart, Black ...	—	5	—	—	5
Nightingale ...	—	11	4	—	15
Redbreast ...	41	217	322	282	862
Sparrow, Hedge ...	18	117	198	226	559
Wren ...	9	38	62	76	185
Dipper ...	4	9	22	23	58
Swallow ...	113	463	594	421	1591
Martin ...	13	128	73	104	318

		'09	'10	'11	'12	Total.
Martin, Sand ...	...	—	25	66	1	92
Swift ...	...	—	—	5	1	6
Nightjar ...	...	3	—	3	11	17
Woodpecker, Green	...	—	8	—	—	8
Woodpecker, Great Spotted ...	...	2	2	—	—	4
Wryneck ...	...	14	16	1	12	43
Cuckoo ...	...	4	4	13	23	44
Little Owl ...	...	—	1	4	5	10
Owl, Long-eared	...	—	2	3	4	9
Owl, Short-eared	...	—	—	—	3	3
Owl, Barn ...	...	—	10	—	19	29
Owl, Tawny ...	...	—	13	6	18	37
Hobby ...	...	1	—	—	—	1
Merlin ...	...	1	4	2	9	16
Kestrel ...	...	1	—	5	8	14
Buzzard, Common	...	—	—	—	2	2
Hawk, Sparrow ...	...	—	5	19	11	35
Heron, Common	...	14	13	22	30	79
Grey Lag-Goose	...	—	—	6	—	6
Sheld-Duck ...	...	1	24	2	10	37
Mallard ...	...	11	20	139	52	222
Teal ...	...	1	21	3	1	26
Wigeon ...	...	—	3	1	—	4
Shoveler ...	...	—	2	—	—	2
Pintail ...	...	—	13	—	—	13
Duck, Tufted ...	...	3	—	2	—	5
Eider ...	...	3	—	—	—	3
Merganser, Red-breasted	...	1	—	—	—	1
Cormorant ...	...	—	3	25	54	82
Shag ...	...	—	4	—	23	27
Petrel, Storm ...	...	1	—	—	8	9
Shearwater, Manx	...	—	—	—	60	60
Grebe, Great Crested	...	1	—	—	—	1
Grebe, Little ...	...	—	1	—	—	1
Wood-Pigeon ...	...	3	20	22	33	78
Dove, Stock ...	...	1	4	6	7	18
Dove, Turtle ...	...	1	11	11	—	23
Oyster-Catcher ...	...	7	16	8	6	37
Curlew, Stone-	...	1	4	—	5	10
Plover, Ringed ...	...	—	35	12	20	67
Plover, Golden ...	...	—	2	2	13	17
Lapwing ...	...	56	254	280	676	1266
Dunlin ...	...	5	1	—	3	9
Sandpiper, Common	...	5	10	29	36	80

	'09	'10	'11	'12	Total.
Redshank	5	19	12	68	104
Avocet	—	5	—	—	5
Godwit, Black-tailed	—	4	—	—	4
Curlew, Common	14	10	34	55	113
Snipe, Common	1	23	21	34	79
Woodcock	6	10	68	57	141
Tern, Sandwich	57	79	24	22	182
Tern, Common	786	836	669	380	2671
Tern, Arctic	25	—	1	1	27
Tern, Common or Arctic	—	25	5	57	87
Tern, Little	—	31	13	85	129
Gull, Black-headed	417	1828	2949	2660	7854
Gull, Common	—	184	248	27	459
Gull, Herring	5	117	48	178	348
Gull, Lesser Black-backed	12	137	62	122	333
Gull, Herring or Lesser Black-backed	—	—	—	4	4
Gull, Great Black-backed	1	8	13	1	23
Kittiwake	4	11	—	—	15
Skua, Arctic	—	2	4	—	6
Razorbill	—	31	3	—	34
Guillemot	—	23	—	—	23
Puffin	4	15	12	108	139
Rail, Land	3	—	4	—	7
Moor-Hen	—	34	23	24	81
Coot	1	4	1	3	9
Grouse, Black	2	—	2	—	4
Grouse, Red	7	3	19	156	185
Pheasant	7	6	30	1	44
Partridge, Common	1	1	20	12	34



NOTES

RARE BIRDS IN SUSSEX.

A PAIR of Lesser Grey Shrikes (*Lanius minor*) were shot at Hollington, St. Leonards, Sussex, the male on May 5th, the female on May 7th, 1912. They were examined in the flesh by Mr. W. H. Mullens and Mr. Ruskin Butterfield respectively. *L. minor* has occurred fourteen times before in Britain, according to the *Hand-List*.

A male Grey-headed Wagtail (*Motacilla f. thunbergi*) was shot at Scotney near Rye on April 28th, 1912. It was examined in the flesh by Mr. Ruskin Butterfield.

Two Western Black-eared Wheatears (*Enanthe h. hispanica*) were obtained near Winchelsea, the first a male, near Dogshill Coastguard Station, on May 16th, 1912, which was examined in the flesh by Mr. L. Curtis Edwards. The second, also a male, but much darker on the back and I believe a younger bird, was shot near Winchelsea on May 19th, 1912, and examined in the flesh by Mr. T. Parkin. Both these specimens are of the black-throated form, of which four previous specimens have been obtained in Britain. The above are now in my collection.

J. B. NICHOLS.

HOODED CROW IN STAFFORDSHIRE.

As it is seldom that we get authentic records of this bird in our county (although there is no doubt that it annually passes along our larger river-valleys on migration), it may be worth while to note that two Hooded Crows (*Corvus c. cornix*) were recently sent to me, one shot at Cresswell, near Cheadle, on Monday, October 7th, 1912, and the other, probably its mate, was shot near Leigh, about two miles distant from Cresswell, a few days later. Both these birds have been preserved for the North Staffordshire Field Club Museum at Hanley.

JOHN R. B. MASEFIELD.

LESSER REDPOLL BREEDING IN KENT.

WHEN wandering through an orchard at Ashford, Kent, on June 3rd, 1911, I discovered a nest of the Lesser Redpoll (*Carduelis l. cabaret*) in the branch of a pyramid pear-tree about five feet from the ground. The five eggs were highly incubated, and four of them were hatched in the next three days. I left the district on the 11th, but was later informed that the young birds were successfully reared. I saw another

pair carrying nesting-materials on the 11th, but the tall, thick trees made observation of their movements difficult, and the time at my disposal did not admit of a thorough search.

Again, this year (1912) I was at Ashford in May, and on the 25th a nest with three typical eggs was found about a quarter of a mile from the orchard, but the lining had been disturbed and partially loosened, and further observation proved it to be forsaken. Not more than a hundred yards from this was a second nest, situated at the top of a hawthorn hedge, some fifteen or sixteen feet high, and bordering a stream, on the opposite bank of which was a row of alders. The bird flew off as I climbed, and came quite near during my examination of the nest. There were four newly hatched young ones and one addled egg.

My friend, Mr. C. F. Stedman of Ashford, has not heard of the breeding of this species for many years, and can only recollect one former nest. Their recurrence in two successive seasons seems to point to an increase of the bird in a south-easterly direction. In this connexion I may mention that I saw three nests at Farnborough, Kent, in May, 1910, where they have bred annually for a few years. H. R. TUTT.

TITS AND HUMBLE-BEES.

THIS summer I had amongst other birds nesting in nesting-boxes a pair of Blue Tits and a pair of Coal-Tits. The Blue Tits' eggs were about due to hatch when I found the nest deserted, but taken possession of by a large female humble-bee (*Bombus terrestris*), which was proceeding to make its own nest in the box, and it seems that the buzzing of the bee had scared away the Blue Tits. In the case of the Coal-Tits nine young ones were hatched and were several days old when I found them all dead, and in this case the nest was occupied by a humble-bee. I could find no trace of injury on the young birds or of their having been stung by the bee, and I surmise that the mother bird had also in this case been scared away. A similar instance occurred in 1910 in the case of a Wren's nest in a nesting-box here, and the humble-bee made her nest of moss in the Wren's nest and a family of humble-bees were brought up in the box.

JOHN R. B. MASEFIELD.

BARRED WARBLER IN IRELAND.

So far only two specimens of the Barred Warbler (*Sylvia n. nisoria*) have been recorded from Ireland: one obtained

September 24th, 1884, in co. Mayo, and another on September 25th, 1896, at Rockabill Lighthouse, co. Dublin.

I have to-day received in the flesh a third specimen, caught striking at Rockabill, September 17th, 1912, 2 a.m.

RICHARD M. BARRINGTON.

BLACK REDSTART IN SURREY.

ON September 25th, 1912, I saw a male Black Redstart (*Phoenicurus o. gibraltariensis*) which was frequenting a barren tract of ground on the North Downs near Caterham. The bird showed a decided preference for the bare down-land rather than the hedges and thickets, and was noticeably shyer and more difficult to approach than a Common Redstart which I had under observation at the same place. There appear to be very few satisfactory records of the occurrence of the Black Redstart in Surrey.

HOWARD BENTHAM.

LAPLAND BLUETHROAT IN FORTH.

THE Misses L. J. Rintoul and E. V. Baxter, while examining their series of skins of Bluethroats, were struck by the shorter and less pointed wing and lighter upper-parts of a specimen procured by them on the Isle of May in 1909. After careful comparison Dr. E. Hartert has identified it as an example of the Lapland Bluethroat, *Luscinia svecica svecica* L., and Misses Rintoul and Baxter now record it in the *Scottish Naturalist*, 1912, p. 236. This race was not included in the *Hand-List*, as no specimen had then been identified, and should be added thus:—

182a. *Luscinia svecica svecica* (L.)—THE LAPLAND BLUETHROAT.

MOTACILLA SVECICA Linnaeus, *Syst. Nat.*, ed. x, i, p. 187 (1758—"In Europæ Alpinis." Restricted typical locality: Sweden and Lapland).

Ruticilla svecica (Linnaeus), Yarrell, 1, p. 321 (part).

Cyanocula svecica (Linnaeus), Saunders, p. 35 (part).

Luscinia svecica svecica, L. J. Rintoul and E. V. Baxter, *Scottish Naturalist*, 1, p. 236 (1912).

DISTRIBUTION.—*Great Britain*.—One, Isle of May, September 14th, 1909 (*ut supra*).

DISTRIBUTION. — *Abroad*. — Breeds in Sweden, Lapland, north Russia and the tundra of west Siberia, east to the Yenisei (66° N. lat.); wintering in north-east Africa and occasionally also western India, and visiting eastern Europe and Transcaucasia on passage.

AUTHORS OF THE HAND-LIST.

WHITE-SPOTTED BLUETHROAT IN SUSSEX.

ON the afternoon of September 22nd, 1912, Mrs. E. D. Compton, of "Summerfields," St. Leonards-on-Sea, found a small bird lying dead on the floor of her drawing-room. Seeing that it appeared to be something unusual, she sent it the next day to be stuffed. It turned out to be an immature male Bluethroat, and it seems probable that it must have been caught by a cat, as the right half of its tail is missing. The bird has completed its first autumn moult and the silky-white patch above the lower blue of the gorget is quite well marked. On one side of the white spot there are two or three faint rusty flecks, but the spot itself is so evident that in spite of the great variation that is found in the gorget of young autumn Bluethroats, and the great difficulty and often impossibility of assigning a specimen to a definite race, I have little hesitation in the present instance in recording the bird as a specimen of the Central European form (*L. svecica cyanecula*). "Summerfields" is a large house standing in its own grounds in the centre of the town.

N. F. TICEHURST.

BIRDS BREEDING IN OLD NESTS.

ON a triangular nesting-bracket, fixed some fifteen years ago under a projecting beam outside my house, about eight feet from the ground, Spotted Flycatchers regularly bred for many years; then a pair of Swallows took possession of the shelf, and after adding a mud front, nested there. The next year a pair of Wrens built a nest of leaves filling up the whole space of the shelf. The following year a pair of Swallows built a nest, partly upon the shelf, and the following winter the Wrens' nest fell to pieces and disappeared. Since that date (two years ago) Swallows have regularly nested and brought up broods of young on the shelf. Another pair of Spotted Flycatchers have nested this year on a bracket only six feet from the ground. Another nesting-bracket on this house has been almost continuously used by Spotted Flycatchers for upwards of twenty years.

JOHN R. B. MASEFIELD.

RETURN OF MARKED SWIFTS AND HOUSE-MARTINS
TO THEIR BREEDING-PLACES.

IN BRITISH BIRDS, Vol. V., p. 165, I quoted the interesting results achieved by Herr A. Gundlach and Ritter von Tschusi in proving that marked Swifts returned to the same nesting-places. Two adult Swifts (*Apus a. apus*) marked at a

nesting-box at Neustrelitz, in Mecklenburg, in 1910, by Herr Gundlach, returned to the same box in 1911. Now Dr. Thienemann informs us in the *Ornithologische Monatsberichte*, 1912, p. 156, that in 1912 the same two birds were again found in the box, and that Herr Gundlach was able to handle both specimens and check the numbers on their rings. Like Ritter von Tschusi's female Swift referred to in my previous note, these birds have successfully reared young in three consecutive seasons without any ill effect from the presence of the rings.

Dr. Thienemann also mentions that a House-Martin (*Hirundo u. urbica*) ringed by him as a breeding bird at the nest in July, 1911, at Rossitten, in East Prussia, was again found at the same spot in the same colony in 1912.

F. C. R. JOURDAIN.

A FURTHER EXTENSION OF THE BREEDING-RANGE OF THE LITTLE OWL.

A CURIOUS point in the spread of the Little Owl (*Athene n. noctua*) seems to be the apparently slow extension that seems to take place in some directions and the very rapid spread that takes place in others from the same original locality. It almost looks as though in some districts the extension of range took place by the migration of one or more pairs from a centre to a new locality at some considerable distance, and the subsequent formation of a subsidiary centre there from which the spread has taken place locally with considerable rapidity. The early establishment of the north Kent centre about Dartford, with very few intermediate steps, would seem to be an instance of this, and now the same thing appears to be happening in Sussex. In Vol. I., p. 341, we pointed out how a considerable area was then populated on the Kent and Surrey border with extensions some distance into Surrey and north-east Sussex, while on the other hand the extension eastward into the Weald had been slow and not nearly so extensive. So far as information is available the direct spread does not seem to have yet reached further than Tonbridge and Cranbrook (*Birds of Kent*, p. 258). On page 19 (*supra*) Mr. S. V. Clark recorded an extension to south-west Sussex and stated that the birds were getting numerous, so that it seems probable that the pioneers must have arrived a year or so previously, while there are no intervening records between Worthing and the Ashdown Forest district.

I now have to record a similar event in south-east Sussex. Until recently nothing was known of the species in this district from nearer than Cranbrook in west Kent. On September 8th and 17th, 1909, two immature birds were sent to Mr. Catt of Iden for preservation, having been picked up under the telegraph wires at East Guildford on the border of Romney Marsh near Rye, and these are the first specimens so far as I know ever obtained in this district. On May 22nd, 1912, Mr. Catt informs me he received an adult male that had been shot by a keeper at Peasemars, where a second bird was seen at the same time. I have since ascertained from an independent source that this is quite correct, and I have little doubt that the birds were nesting there. In July I heard from Mr. R. P. Mair at Udimore (the adjoining parish to Peasemars), who knew the species well in Northamptonshire, that he had seen a pair on his farm "some two years ago" and that this year (1912) they or another pair nested, in April, in his orchard and successfully reared their young. It will be interesting now to trace with what rapidity the spread of the Little Owl takes place in this district.

N. F. TICEHURST.

KESTREL EATING A BAT.

ABOUT 5 p.m. on October 12th, 1912, Mr. W. D. Dovaston of West Felton, Salop, while engaged in gathering apples in his orchard, noticed a Kestrel (*Falco t. tinnunculus*) hovering overhead. Presently it swooped downwards at a Pipistrelle Bat which was flitting about amongst the trees. The bat turned swiftly and avoided the hawk. The latter pulled itself up as quickly as possible and again ascended into the air. It swooped at the bat time after time, the latter dodging it nimbly just at the critical moment; the Kestrel was not to be balked however, and eventually it seized the bat just as it was taking refuge amongst the boughs of an oak. The Kestrel then alighted on the tree and proceeded to devour its prey. Although certain other hawks are recorded as preying on bats, the Kestrel is not known to do so; at least, none of the standard authors that I have consulted mention the fact.

H. E. FORREST.

[A similar instance of a Kestrel capturing a Pipistrelle was recorded in the *Glasgow Naturalist* (Vol. II., p. 137), and noticed in our Volume IV., p. 222.—EDS.]

ABNORMAL BREEDING-HABITS OF SHELD-DUCK.

To Mr. D. Munro Smith's interesting note on the above subject (*supra*, p. 157), I may be permitted to append a

somewhat similar observation. In May, 1908, the late John Cottney discovered an exposed nest among the herbage on one of the maritime islands of co. Down. This nest contained nine eggs of the Sheld-Duck (*Tadorna tadorna*), and two eggs of the Red-breasted Merganser (*Mergus serrator*). It was copiously lined with down, all of which was undoubtedly Sheld-Duck's. A photograph of this nest is in my possession.

NEVIN H. FOSTER.

NESTING OF TEAL IN SURREY.

WITH regard to Mr. Bunyard's observations in BRITISH BIRDS (*supra*, p. 158) on the nesting of the Common Teal (*Anas c. crecca*) in Surrey. I am rather inclined to think that it is not so rare as a nesting species in that county as is generally supposed. I think that very probably there are a few localities all through Surrey and the adjoining counties where Teal breed. Personally, I know of one little moor, in Surrey, or rather half moor and half marsh, where at least five pairs, possibly more, breed annually. In fact, they remain there the whole year round. I may mention that some of the nests are placed in long heather, and some are amongst coarse grass, short heather, etc.

G. K. BAYNES.

COLOUR OF IRIDES OF TUFTED DUCKLINGS.

IN Mr. A. Chapman's paper on *Spring notes on the Borders* (*supra*, p. 114), the young in down of the Tufted Duck (*Nyroca fuligula*) are described as "darkish with pale yellow eyes." The late Lord Lilford in his *Notes on the Birds of Northamptonshire*, Vol. II., p. 194, described the recently hatched young as covered with smoky coloured down and having "brilliant golden yellow irides."

As this differed from my own recollection of the appearance of the young, Mr. E. G. B. Meade-Waldo, on being appealed to by me, kindly furnished me with the following particulars, and as he sees young in scores every year and has done so for thirty-five years past, it seems impossible for there to be any mistake in the matter. Mr. Meade-Waldo himself describes the downy young as "dark brown with dark eyes." A number were reared in the Zoological Gardens this summer, and both Mr. Seth-Smith and Macdonald, the keeper who reared them, describe the irides as dark. This is also confirmed by Mr. W. H. St. Quintin's keepers, who describe the colour as "very dark brown" and "darkish hazel." I may add that Pastor Kleinschmidt figures the young in the *Neuer*

Naumann, Vol. X., as having brown eyes. When the young are about half grown the irides become whitish, and Mr. Meade-Waldo informs me that the full-grown young have now (October) dull white irides. F. C. R. JOURDAIN.

UNRECORDED SNOW-GEESE IN GLOUCESTER-SHIRE.

In the second edition of his *Manual* (p. 406) Mr. Howard Saunders stated that three Snow-Geese (*Anser h. hyperboreus*) appear to have visited Berkeley on the Severn, but no examples were obtained. This was prior to 1885, but for about four days (October 9th-12th) in 1901 five immature birds in greyish plumage and three adults with black primaries visited the same district (cf. *A Treatise on the Birds of Gloucestershire*, p. 55). This information was obtained from Lord Fitzhardinge's head decoy-man, who also watched over the movements of the wild geese on the Severn near Berkeley, and arranged the shoots. His name was Nicholls, but he is now dead. I often used to see him personally, and could trust his statements so far as they went. He was a good observer, and used field-glasses. These eight visitors came about the time of the usual visit of the first lot of winter-geese to the Severn. The latter arrived early in October, in daily increasing numbers until there were calculated to be some two thousand present about October 12th, and as far as could be judged they were chiefly or all Pink-footed. The eight visitors however, kept together and quite apart from the other geese in flight, although they settled down with them to a certain extent when grazing or watering. Suddenly all the geese of every species departed on the 11th, 12th and 13th, except about forty Pink-footed.

In November, 1906, three birds again appeared, and this information was given to me at a personal interview with Purcell, the well-known shore-gunner, who lives close to the river, and against whom Lord Fitzhardinge brought the famous action with regard to the shooting-rights along the Severn. Purcell is a man of superior intelligence and observation. On this occasion all the birds seen were adults, and were present for several weeks. In this case (as also in 1901) great efforts were made to get a specimen, but without avail. An interesting point which indirectly confirms the truth of these reports is that the two witnesses were not merely independent, but were naturally enemies of one another and it is remarkable that all three occurrences were reported from about the same district. W. LOCK MELLERSH.

WADERS INLAND IN SOUTH LANCASHIRE.

AN unusual number of waders and other birds were attracted during the autumn migration by several stretches of mud and water on a Sewage Farm in the Irwell Valley in South Lancashire. This farm lies in the valley at Clifton, between four and five miles from the centre of Manchester and about thirty miles from the Lancashire coast. Between August 18th (when Mr. T. Baddeley first noticed them) and October 13th waders were present whenever the locality was visited.

Below I give details of the birds I noticed, most of which were also seen by Mr. T. Baddeley, whose notes I include. Mr. T. A. Coward on August 29th and September 23rd, and Mr. A. Urquhart on several occasions in August and September, also visited the locality and saw the birds recorded.

RINGED PLOVER (*Charadrius h. hiaticula*).—Usually present; in greatest numbers in August: twenty-five on August 18th, thirty on August 22nd, fifteen to twenty on August 26th, 28th and 29th, five on September 2nd and 4th, seven on September 5th and 7th, nine on September 6th, and in small numbers throughout September—six on the 27th and 29th one or two on October 6th.

GOLDEN PLOVER (*Charadrius aprivarius*).—Remarkably few; two on August 27th, six on September 29th, three on October 1st, and two on October 13th.

TURNSTONE (*Arenaria i. interpres*).—I saw a single bird on August 26th.

RUFF AND REEVE (*Machetes pugnax*).—Two birds on August 28th and 29th—evidently ♂ and ♀ from the obvious difference in their size.

KNOT (*Canutus canutus*).—Single birds on September 2nd, 4th, 5th, 10th and 16th.

DUNLIN (*Erolia a. alpina*).—From one to four usually present from August 26th to October 13th; six on September 26th.

CURLEW-SANDPIPER (*Erolia ferruginca*).—Present for five weeks in unusual numbers. On September 7th I saw a single very tame bird. On the 9th there were twelve, fourteen to sixteen on the 10th, nineteen on the 11th and 12th, fourteen on the 14th, 15th and 16th, eleven on the 17th, ten on the 21st and 23rd, five on the 26th and October 1st, two on October 6th, and one on October 13th.

COMMON SANDPIPER (*Tringa hypoleuca*).—About eight on August 26th, two or three on August 28th and 29th, four or five on September 2nd, and one or two about till September 12th.

GREEN SANDPIPER (*Tringa ocropus*).—A single bird seen on September 4th, 5th, 7th, 8th and 10th.

REDSHANK (*Tringa totanus*).—In large numbers from August 18th to October 13th. About fifty on August 22nd, twenty on August 26th, 28th, 29th. In numbers varying from four to fifty throughout September—seventy on September 29th. Between fifty and sixty on October 6th.

GREENSHANK (*Tringa nebularia*).—Single birds on August 26th, 27th and 28th, and on September 7th (a very tame bird) and September 11th.

BAR-TAILED GODWIT—(*Limosa l. lapponica*). One on September 9th.

Among other birds I observed two Black Terns (*Hydrochelidon n. nigra*) and an Arctic Tern (*Sterna paradisaa*) together on September 5th, and an immature Kittiwake (*Rissa t. tridactyla*) on the same day. The Black Tern does not seem to have been recorded from South Lancashire for some time, though it has occurred fairly regularly of late on the Cheshire meres.

Two Sheld-Ducks (*Tadorna tadorna*) appeared on September 16th. A. W. BOYD.

BAIRD'S SANDPIPER IN SUSSEX.

ANOTHER example of Baird's Sandpiper (*Erolia bairdii*) was obtained at Rye Harbour on September 16th, 1912. This makes the fourth example obtained in the British Isles, and of these, two have been obtained at Rye Harbour. I examined the bird in the flesh on September 17th, when it proved to be a female. The bird is the size of a Dunlin, but the markings are almost the same as a Curlew Sandpiper in immature plumage; the legs, toes, and bill, are also shorter than a Dunlin, and the wings project beyond the tail.

H. W. FORD-LINDSAY.

BLACK-TAILED GODWIT IN CORNWALL.

I SHOULD like to put on record the occurrence of a Black-tailed Godwit (*Limosa limosa*) at Fowey, Cornwall. It was shot on August 26th, 1912, and given to me the following day. I have had it set up. F. JAFFREY.

ARCTIC SKUA IN SHROPSHIRE.

ON September 13th, 1912, an adult Arctic Skua (*Stercorarius parasiticus*) was observed flying down the Severn at Shrewsbury, by a competent ornithologist who reported it to me. He saw it at close quarters, and noticed the long tail-feathers and that it belonged to the dark form, having very little white on the under-parts. H. E. FORREST.

UNRECORDED GREAT SKUA IN MEATH.

ON October 2nd, 1908, when walking with my wife along the beach from the mouth of the Boyne to Laytown, I saw for the first and only time a Great Skua (*Stercorarius s. skua*). It approached very near us in chase of an Arctic Tern, and the dark brown plumage and hooked bill left me no doubt as to its identity. This occurrence should go to the credit of co. Meath, which I do not find included in my friend Mr. Ussher's list of appearances of this remarkable bird.

CHARLES W. BENSON.

CUCKOO REARED BY ROCK-PIPITS.—Mr. C. Kirk, in the *Scottish Naturalist* 1912, p. 235, states that he saw a young Cuckoo (*Cuculus c. canorus*) on July 14th, 1912, on Ailsa Craig, which was only able to make short and unsteady flights, and was attended by the foster parents, which were Rock-Pipits (*Anthus spinoletta obscurus*). This appears to be the seventh recorded instance of the Rock-Pipit being used as a foster parent by the Cuckoo (*supra*, p. 156).

LITTLE OWL IN FORTH.—A Little Owl (*Athene n. noctua*) was shot on November 9th, 1910, at East Grange, near Dunfermline, Fifeshire, and is now preserved in the Dunfermline Natural History Museum. With the exception of one obtained near Aberdeen, which is believed to have escaped from confinement, this appears to be the first recorded occurrence in Scotland (R. Somerville, *Scot. Nat.* 1912, p. 225).

WHITE VARIETY OF THE HERON IN WIGTOWNSHIRE.—The Duchess of Bedford records a Heron (*Ardea cinerea*), which appeared to be almost wholly white with some very pale buff markings on the feathers, and dull chocolate-brown primaries, secondaries and tail-feathers, as seen on September 14th, 1912, on a moor in Wigtownshire (*Scot. Nat.*, 1912, p. 236).

RUFF IN HEREFORDSHIRE.—A Ruff (*Machetes pugnax*) was shot by Mr. J. D. Hatton at Holmer, near Hereford, on September 12th, and a Reeve near the same place on the 14th. Both specimens have been given to the Hereford Museum. According to Mr. J. Hutchinson, who records these occurrences in the *Field* of September 28th, 1912, the last record of this species for the county was that of one shot at Garnstone on August 29th, 1894.

▸ SABINE'S GULL IN FORTH.—Mr. W. Evans observed a young Sabine's Gull (*Xema sabini*) on September 13th, 1912, just outside Leith Harbour (*Scot. Nat.*, 1912, p. 237).

BUFFON'S SKUA IN HEREFORDSHIRE.—Mr. E. Cambridge Phillips, writing in the *Field* of September 21st, 1912, states

that a Buffon's Skua (*Stercorarius longicaudus*) was shot by Major Cox of Michaelchurch Court on August 28th, 1912, while grouse shooting on the Black Hill, the Herefordshire portion of the Black Mountains. It was a bird of the year in brown plumage, and its crop was full of whinberries.

OBITUARY.

THE LATE A. O. HUME, C.B.

It is with much regret that we chronicle the death of Allan Octavian Hume, the celebrated Indian ornithologist, who died recently at the age of eighty-three. Of late years Mr. Hume had ceased to take an active interest in ornithology, but he will always be remembered for the magnificent collection of Indian birds and eggs which he brought together and finally presented to the British Museum. Between the years 1873 and 1889 he also published a periodical entitled *Stray Feathers*, which was devoted to Indian ornithology, and the bulk of the material for the well-known work on the *Nests and Eggs of Indian Birds* was accumulated by him. He also collaborated with Captain C. H. T. Marshall in publishing a work on the *Game-Birds of India, Burmah and Ceylon* (1879-80). Mr. Hume first offered his collection to the British Museum in 1883, but it was not till 1885 that Dr. R. B. Sharpe went out to India in order to bring the collection home. By this time probably some 20,000 skins had been destroyed by the ravages of insects, but the most valuable part of the collection, which still comprised 63,000 bird-skins, 500 nests and 18,500 eggs, as well as some 400 skins of mammals, was practically intact or only slightly damaged.

On turning to Dr. R. B. Sharpe's presidential address in the *Proceedings of the Forth Intern. Ornith. Congress*, in which an account is given of the chief accessions to the Ornithological Department of the British Museum, we were much surprised to find that, by some oversight, all mention of this enormous and invaluable donation has been omitted, with the exception of a bare reference to it on p. 143. There is, however, a detailed account of the collection, and some interesting facts with regard to Mr. Hume's life, in the *History of the Collections in the British Museum (Natural History): Birds*, by Dr. R. B. Sharpe, pp. 390-3; while an interesting account of how he packed and brought home this vast collection was contributed by Dr. Sharpe to the *Ibis* for 1885, pp. 456-62.

F. C. R. JOURDAIN.



LETTERS



SPORADIC NESTING.

To the Editors of BRITISH BIRDS.

SIRS.—Mr. Bunyard, in reply to my request for information as to the grounds upon which he bases his opinion that the Hobby and Grasshopper-Warbler are sporadic in their nesting-habits, studiously avoids any attempt to substantiate his assertions by facts.

In reply to the points raised by his letter in your October issue : I did not suggest a better definition because I was discussing the term as actually applied by your correspondent to the Hobby and Grasshopper-Warbler. I did not mention Hawfinch because I agreed that this species was, like the Crossbill, a sporadic breeder in England, though in a very different degree. Mr. Witherby has ample grounds — after the latest irruption of the Crossbill as a breeding species in England, in conjunction with previous authentic records—to term this species “sporadic” ; but the cases of Hobby and Grasshopper-Warbler are totally different, and, I submit, still require to be proved.

In my opinion “sporadic,” as applied to the nesting of wild birds, implies “irregular in occurrence, as the result of nomadic tendencies or of impulse.” Thus, I should describe as sporadic the nesting of Pallas’s Sand-Grouse and Crossbill, and the appearances of the clouded-yellow butterfly in England.

The dictionary assigns such meanings to the word as “single,” “separate,” etc., but such scarcely seem to apply to the context, otherwise all birds which were not gregarious would fall under this head—excluding Crossbill and Hawfinch as semi-gregarious, or at least social, while including Hobby.

In deducing generalities from statistical records, due allowance must be made for various appearances and disappearances seemingly within the above category. Thus : First appearances are not *per se* sporadic, as some young birds will select new breeding-places. Or, a bird may be blown out of its course and accordingly remain to breed, but here the occurrence would not be primarily due to impulse or intent of the bird. On the other hand, a bird may disappear without being sporadic—it may have died or have been shot ; and as regards the survivor finding a new mate, it seems equally probable that it should have gone to join a mate, as that a mate should come and join it. Similarly, the fluctuations in the numbers of a species breeding in a

district are not necessarily sporadic, for severe seasons notoriously play havoc with some of our more delicate species, which in due course recoup their numbers.

My limited experience of the breeding of the Hobby in England is as follows :—

1. This year I visited a nest in a wood where they have bred each season for at least ten years, despite the fact that about four years ago one old bird and three young were shot at the nest, and the eggs have been occasionally taken.

2. About the same time I visited another nest in a wood in an entirely different locality, where a pair have likewise bred for many consecutive years.

3. A little later this year, in yet another locality, the Hobby reared young in the same wood where she has bred for at least three years past.

4. For at least five years the Hobby bred regularly in a wood in Shropshire, despite the fact that the first clutch of eggs was regularly taken.

5. In 1907 a friend of mine visited a nest with eggs in the same wood where young had been hatched the two previous years at least. This wood was felled the following winter.

6. In 1911 a friend of mine took eggs from a nest from which the female had just been shot. The male apparently left the locality.

Of the above instances, five demonstrate that the Hobby, though a migrant, and rarer and more local, is no less regular a breeder in England than the three other British-breeding members of the genus. The sixth record is inconclusive.

Of the several instances of nesting cited in *The Birds of Hampshire and the Isle of Wight*, the following five records similarly tend to confirm the statement that the Hobby is not sporadic :—

- (1) Doles Wood
- (2) N. Oakley (Munn)
- (3) Buckhill Wood (Wise)
- (4) Ipley (Turle)
- (5) Ringwood (Corbin),

while the remainder are isolated instances and wholly inconclusive.

With regard to the Grasshopper-Warbler, this species, though local, is so well known to nest commonly in suitable localities year after year, that it seems almost superfluous, until positive evidence is forthcoming to the contrary, to encroach further upon your valuable space.

C. S. MEARES.

[It should perhaps be pointed out that my contention on page 333 of Volume IV. (April, 1911) was that the Crossbill in England and Wales "cannot be classed as a resident, but only as a migrant, breeding sporadically." I was treating the matter broadly, having in view the status of the bird in the whole of England and Wales. By "breeding sporadically" I meant that it only bred here and there at intervals, and was not a regular English breeding bird. So far as the records went, it did not breed every year in England, and it had never bred more than two years in succession in any one locality. Mr. Bunyard has now proved that the bird has bred for three years in succession in Suffolk. He feels "convinced that the Crossbill is (and probably always has been) a firmly established English-breeding bird" (*supra* p. 89). As to what it probably was, I can only judge by the published facts which, as given in my paper in Volume IV., have not been disputed. Mr. Bunyard thinks that fewer birds nested in 1912 in Suffolk than in 1910 and 1911, and I think it yet remains to be seen whether the bird has now become really established there.

The Hobby, Hawfinch and Grasshopper-Warbler seem to me to be in a different category. They are without doubt regular English breeding birds, and the fact that they breed irregularly in certain localities does not affect their general status.

It is important that we should not confuse (1) the admission of a species to a large area like England as part of its regular breeding-range, with (2) local fluctuations of a species which is undoubtedly a regular breeder within that area.—H. F. WITHERBY.]

[I should imagine that it is a practical impossibility to say to what cause isolated instances of breeding in new districts are due; and if sporadic breeding be taken to imply nomadic tendency or impulse as opposed to natural increase of individuals or the other causes mentioned by Mr. Meares, it must remain a matter of opinion whether any bird is described as a sporadic breeder or not.

Mr. Meares brings definite proof that when suitable breeding-places are available the Hobby will return to the same spot year after year to breed. But there are many cases in which the nest of the previous year proves to be tenanted by some other species, such as the Long-eared Owl, and then the Hobby must seek a new home. There are also places where it is only known to breed at long intervals. Although some localities are always occupied by Grasshopper-Warblers in considerable numbers, there are also other districts where this bird appears only irregularly, and is absent for several years together. In one locality in Derbyshire seven or eight pairs were present within a radius

of two miles in one season, but the following year not one returned, and this was also the case for some years afterwards. This might have been due to disasters to the birds on migration, but of course this is necessarily mere supposition, and breeding is here apparently sporadic. Although both Messrs. Bunyard and Meares class the Hawfinch as a sporadic breeder, there are orchards where it has bred without intermission for ten years.

As the limit of the breeding-range of any species is approached, there must always be a tendency for nesting to become irregular and sporadic. The recorded case of breeding of the Hobby in Scotland must be classed under this head. But there can be no hard and fast line between irregular breeding due to impulse or nomadic tendency, and those cases due to accidental circumstances or natural increase.—F. C. R. JOURDAIN.]

BLAKENEY POINT TERN COLONIES.

To the Editors of BRITISH BIRDS.

SIRS,—The concluding paragraph of Mr. Rowan's note (*supra*, p. 162) might be taken to imply that the Arctic Tern has bred in past years on Blakeney Point in Norfolk. This is not the case, but of course Arctic and Sandwich Terns are often noticed there on passage.

CLIFFORD BORRER.

ORKNEY BREEDING-RECORDS OF LONG-TAILED DUCK AND GREY LAG-GOOSE.

To the Editors of BRITISH BIRDS.

SIRS,—I see, in Vol. V., p. 203, of BRITISH BIRDS, you doubt the record of the Long-tailed Duck having bred in Orkney in 1911. I have just returned from Orkney, and I am very glad that you have called attention to the unsatisfactory method of recording a species as new to any locality, because unless some competent person has seen the nest *in situ*, it is surely unwise on second-hand evidence to record it as breeding in any new locality.

I would take this opportunity of calling attention to Mr. H. W. Robinson's statement in Vol. III., p. 376, that the Grey Lag-Goose nested on Kaileylang or Keelelang, Orkney, in 1904. If Mr. Robinson saw the birds and nest himself, I will at once acknowledge its correctness; but if he did not, who did see them?

JAMES R. HALE.

A SACRED IBIS IN ESSEX.

To the Editors of BRITISH BIRDS.

SIRs,—On or about August 21st, 1912, an Ibis (apparently *I. aethiopia*, but possibly *I. melanocephala*), evidently immature, was shot at Danbury, Essex, by a game-keeper named Arthur Wheeler, employed by Mr. J. C. Spencer-Phillips, of Riffhams, Danbury. The bird was first seen squatting in a hedge, apparently in an exhausted condition. It is now stuffed and being mounted by Messrs. Leech, of Chelmsford, through whose kindness I have been able to examine it. Although it shows no signs of having been in confinement, there can be scarcely a doubt that it is really an "escape"; for there is no well-authenticated record of the occurrence in Britain, or even in Europe, of either of the white Ibises. I have ascertained that no such bird has escaped recently from the Zoological Society's Gardens; but the Duke of Bedford (who has some of these birds flying wild at Woburn Abbey) has been good enough to have me informed that one was missed at the beginning of September and might have escaped some time earlier. It seems almost certain, therefore, that this is the bird shot at Danbury. Assuming this to be the case, the fact that the bird's wanderings (extending over some fifty-five miles, the distance from Woburn to Danbury) were more or less to the south-eastward (that is, in the direction of its natal region), may be noted for what it is worth.

MILLER CHRISTY.

[It would be a considerable service to ornithology if such birds which are liable to escape or are intentionally liberated, were "ringed" by those who keep them in captivity or semi-captivity.]—EDS.]

BRITISH BIRDS

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MIGRATION NOTES FROM HOLY ISLAND,
NORTHUMBERLAND, AUTUMN, 1912.

BY

H. F. WITHERBY.

ALTHOUGH not an ideal place for observing migration, Holy Island or Lindisfarne is no doubt as good as some of the best places on the mainland. At low tide one can walk almost dryshod over the sands from Holy Island to the mainland, and the island lies inside a curve in the coast, so that it has not the advantages of isolation possessed by such noted stations as Fair Isle and the Isle of May. In shape it is roughly circular, the cultivated area of about 500 acres being broadly margined half way round with bent-covered sand-dunes which continue in the north-east corner in the shape of a long tongue pointing towards the mainland.

From September 8th to October 18th, 1912, I watched carefully for migrants on Holy Island every day, and from September 14th to 25th I had the very able assistance of Miss A. C. Jackson, whose extraordinary keenness and energy make her entitled to a far larger share in the observations made between those dates than can be claimed by me.

I wish here to express my gratitude to Mr. Morley Crossman, the owner of Holy Island, for most kindly granting me freedom to trespass where I wished, and without this kind permission very little indeed could have been done. I am also greatly indebted to Mr. George Bolam and Mr. W. J. Bolam, through whose kind offices this all-important permission was obtained.

One hundred and four species and subspecies in all were observed in or around the island during our stay, and of these I do not think that more than thirty could be claimed as residents: a considerable number, such as the geese, ducks, waders and gulls, were winter-visitors, while over forty were observed as passage-migrants through the island.

As I have supplied the British Ornithologists' Club Migration Committee with data regarding the movements of all the commoner species, I propose here to give details only of those species which have been rarely noticed or not previously recorded for the county or for the "Tweed Area"—since Holy Island is included in that area.

Before proceeding to enumerate these birds, a few general remarks may prove of interest. In the first place there was never a "rush" of birds at any time while we were in the island, but migration was proceeding on twenty-six out of the forty days on which I was observing. For the most part these movements were to be traced only by the presence of two or three birds, and continuous and careful observation was necessary to detect them as new arrivals. The direction of the wind on these twenty-six days may be noted as follows:—S.E. or S.S.E., 10 days; N.E. veering to S.E., three days; E., one day; N.E., three days; N., one day; N.W., one day; W., four days; S.W., three days.

So far as Miss Jackson and I were able to observe, there was little or no "coasting" migration to be seen at Holy Island, though the island is so near the mainland. Only ten Swallows (on four days), and three House-Martins (on two days), and no Sand-Martins were seen, nor were there any coasting flocks of Finches. We had very little westerly wind during our stay, and I suppose that such winds, if strong, might force coasting birds more over the island.

On fourteen days out of the twenty-six on which we noted movements, we found birds in the afternoon which we had not seen on the same ground in the morning. I know that it is very easy to overlook birds, but it would be unreasonable to suppose that on all these occasions we had missed these birds in the morning. Moreover, I managed to see apparently the same Lesser Whitethroat every day for fourteen days which proves that birds did not readily escape attention on the ground we were working. Further, several of these afternoon arrivals

were found on dissection to have their stomachs empty or nearly empty, which would not have been the case had they arrived in the morning. Birds noted as present in the afternoon and not in the morning were of the following species :—Linnet, Brambling, Chaffinch, Sky-Lark, Goldcrest, Willow-Warbler, Garden-Warbler, Blackcap, Redstart, Fieldfare. Redwing, Song-Thrush, Cuckoo, and Long-eared Owl.

Furthermore, on October 9th, 10th, and 13th I saw Continental Song-Thrushes, Fieldfares, Redwings, Linnets, Bramblings, and Lapwings coming in oversea from the N.N.E. These birds were noted arriving between 11.30 a.m. and 1.30 p.m. When passing over the coast-line they all appeared to be flying at about the same height, viz. apparently one hundred feet, and at about the same pace, which I judged to be not more than twenty-five miles an hour. Most of them flew to the middle of the island before alighting, and they did not seem to be tired. A Continental Song-Thrush and a Redwing which I shot as they flew in had their stomachs quite empty. Had these birds started from Scandinavia at dawn they must have flown at an average speed of forty to fifty miles an hour, and it seems much more probable that they had started before dark the night before and had been travelling all the way at the speed they were flying at on their arrival.

Among the birds which we saw during our stay on the island those noted below are, I think, worthy of special record.

CONTINENTAL GOLDEN-CRESTED WREN (*Regulus r. regulus*).—Golderests obtained on September 16th, 25th and 29th proved to be of this form. and no British Golderests were identified. Those obtained on the 16th and 25th were single birds. The only immigration of any size occurred on the 29th. On this date I found four Golderests in the hedges in the morning, but on going along the same hedges at three o'clock in the afternoon I counted twenty, and later at 4.30 they had increased still further. On the same afternoon there was a

considerable influx of Bramblings and Chaffinches which were not present in the morning. The wind was blowing strongly from the south-east, as it had been on the 28th, when no Golderests were observed. On the 30th they had decreased to about ten, on October 3rd to five, on the 4th to three, on the 7th to one, while by the 8th they had all disappeared.

Neither Mr. G. Bolam in his *Birds of Northumberland and the Eastern Borders*, nor Mr. A. H. Evans in his *Fauna of the Tweed Area* recognised this form as distinct though both alluded to the autumn-immigration of the species. Mr. Evans goes so far as to say that "flocks arrive from the Continent from August onwards," but we have so far no record of an identified specimen of the Continental Golderest in the British Isles so early as August.

FIRE-CRESTED WREN (*R. i. ignicapillus*).—On the morning of October 4th I observed a Firecrest in a garden. I saw it on two other occasions during the day and secured it in the afternoon. It was a male in perfect plumage, but on skinning it I found by examination of the skull that it was a bird of the year. It was also extremely fat. The wind on this day was westerly, the day before north-west, and the two previous days north-east; but on September 30th there was an easterly gale, and this may, I suppose, have driven this bird to the neighbourhood, but its very fat condition would seem to indicate that it was not a storm-driven bird. I may remark that the Firecrest is quite easily to be distinguished from the Golderest, not only by the black lines on the sides of the head, but by the bright dark green of its back, the bronze markings on the sides of the neck and the whitish line over the eye, all of which distinctions strike one in the field. Although I watched it for a considerable time this bird made no sound, and thus differed markedly from the Golderests which, whether on migration or not, are always uttering their squeaky notes. In its breeding-haunts, however, the Firecrest in my experience utters

its note almost as frequently as the Golderest and the silence of this example may have been merely an individual characteristic.

In his *Manual*, Howard Saunders did not admit any record of the Firecrest north of Yorkshire, nor did we in our *Hand-List*. The Cumberland record of 1845 might, however, be admitted, I think. In reviewing the reported occurrences of the species in the *Zoologist* for 1889, Mr. J. H. Gurney said (p. 174) of this record that the bird was "identified by the cut in 'Yarrell,' but the cut does not show the distinguishing features well, and Mr. Macpherson is not able to trace the bird, on which, therefore, no absolute reliance can be placed." But on turning to Macpherson's *Birds of Cumberland* (p. 8), we find it stated by J. Graham, who killed the bird with a stone, that it "possessed the three facial stripes and golden tint on the body above the wings." In the *Fauna of Lakeland*, published in 1892, and therefore subsequently to Mr. Gurney's article, Macpherson states that "no doubt can reasonably be entertained as to the correct identification" of this specimen.

RED-BACKED SHRIKE (*Lanius c. collurio*).—The only one I saw was on September 30th, when we had a gale from the east with driving rain all day. I did not notice the bird until the afternoon, but it might easily have escaped my attention owing to the weather conditions, which made observation very difficult. I think, however, that the bird arrived in the afternoon for on opening it I found very little indeed in its stomach. It was a young male. There are but very few records of the occurrence of the Red-backed Shrike in the Tweed Area.

BLYTH'S REED-WARBLER (*Acrocephalus dumetorum*).—On September 25th as we were beating out the last hedge before turning homeward just after four in the afternoon, a brownish Warbler flew across from one hedge to another, and on alighting made a double note which may be syllabled "tup, tup," sounding something like the alarm

note of a Lesser Whitethroat, but much softer and less harsh. We then beat the hedge gently, but the bird kept well in the middle, and neither Miss Jackson nor I could get more than a momentary view of it. I then shot it, and on picking it up thought on account of the want of any reddish tinge in its plumage that it might be a Marsh-Warbler. Its wing-formula was, however, wrong for this species, and subsequent examination and comparison have shown it to be a very difficult specimen to identify with certainty. On dissection it proved to be a female, and a bird of the year freshly moulted into first winter-plumage. It was exceedingly fat. In coloration it exactly matches specimens of *A. dumetorum*, the upper-parts being dark brown without any of the reddish tinge which is always present in *A. streperus*. The flanks, as in *A. dumetorum*, are scarcely marked with buff, while in *A. streperus* (especially in young birds in autumn) the flanks are strongly washed with buff. The wing-formula is, however, not quite typical of either species. The second primary is equal to the fifth, and the third and fourth primaries are emarginated on their outer webs. In *A. dumetorum* the second primary is almost invariably shorter than the fifth, and is very often shorter than the sixth. But I have examined one or two specimens in which the second is equal to the fifth, and several in which it is only a shade shorter than the fifth. In *A. streperus* the second is generally equal to or a little shorter than the fourth, and very rarely so short as the fifth. The wing measures $60\frac{1}{2}$ mm., which is right for *A. dumetorum*, but rather small for a female *A. streperus*. Taking all the characters together, I must therefore conclude that this is a specimen of Blyth's Reed-Warbler (*Acrocephalus dumetorum*), although it is unfortunate that it is not quite typical. The note of the bird, which I have described above, was unlike any note that I have heard a Reed-Warbler utter. The wind on this date was blowing fairly strongly from the S.S.E., and had been S.E. for several days previously.

Blyth's Reed-Warbler has only been once recorded before for the British Isles, viz. one obtained at Fair Isle by the Duchess of Bedford on September 30th, 1910.* But the bird is so nearly allied to the Reed- and Marsh-Warblers that it might very easily escape detection.

LESSER WHITETHROAT (*Sylvia c. curruca*).—On September 14th Miss Jackson and I saw two Lesser White-throats, but the next day they were gone and we saw no more until the 28th, when one appeared. This had left the next day, but on October 2nd I saw two. One of these stayed until the 4th, after which I did not see it, but the other was to be seen every day in the same hedge until the 14th, after which date it disappeared. On October 8th I saw a second bird which had gone the next day, and on October 10th I saw another which also disappeared the following day. One or two Lesser Whitethroats were thus seen on fifteen days and seven different individuals were observed. There are very few previous records of the occurrence of this species in this area, but the regularity of its visits in autumn in very small numbers to the Isle of May as recorded by the Misses Rintoul and Baxter would lead one to expect its regular occurrence on the coast to the south of the Forth.

CONTINENTAL SONG-THRUSH (*Turdus p. philomelus*).—On September 14th a distinct increase in Song-Thrushes was noted, and some of these were undoubtedly of the Continental form. On the next day there were very few Thrushes left, and we saw none of the pale coloured Continental birds, but on the 16th there was again an increase, and one obtained on that date is of the Continental form. On the 23rd we obtained another and on the 26th I saw three, but they were gone the next day, as were three more which I saw on October 2nd.

* The interesting announcement of the occurrence of another example (in Yorkshire) a few days before the Holy Island specimen, is made by Mr. J. K. Stanford a few pages further on.—H.F.W.

On the 4th there was a considerable increase in Thrushes in the afternoon, and of these at least five were Continentals. In the afternoon of October 8th I saw six, and at mid-day on the 9th I shot one out of four, which were flying in with a Fieldfare from over the sea from a N.N.E. direction. Its stomach was empty, and it was a very typical example of this race. An hour afterwards I saw others coming in with Redwings. On the 11th a considerable number arrived, and on the 13th, when I obtained one, there was a further increase. On this date many Redwings were seen coming in oversea. but I did not actually see the Thrushes arrive. The numbers of Song-Thrushes now gradually decreased until by the 16th there were only the few "residents" left. On the 17th and again on the afternoon of the 18th there were however further increases, and on these dates the newcomers were British and Continental in about equal numbers, so that the influx may have been due to coasting movements; but of this I have no evidence to offer. Neither Mr. Evans nor Mr. Bolam so much as mention the fact that the British Song-Thrush has been separated, and the Continental form has not up to now been definitely recorded from the area by specimens obtained and compared, though Mr. Bolam's description of the very "clean looking" Song-Thrushes seen in numbers on Holy Island on October 13th, 1903, probably applies to immigrants of this race.

GREENLAND WHEATEAR (*Enanthe æ. leucorrhœa*).—On September 23rd Miss Jackson obtained a young male of this large form. Its wing measured 101 mm. On the 25th we saw six Wheatears, all of which seemed to be of this form, and an adult male which I secured measured 105 mm. in the wing. On the 27th I counted twelve, all of which looked very large and the wing of a young male secured measured 105 mm. On the 28th there was a further slight increase and these birds stayed until October 6th, when only three were seen, and I did not note any further increase or decrease until October 18th,

when all had disappeared. Mr. A. H. Evans states (*Fauna of Tweed Area*), "We have no record of the large Greenland form." Mr. Bolam mentions large specimens of the Wheatear as occurring late in autumn and one, of which he gives the wing-measurement as $4\frac{1}{4}$ inches (say 108 mm.) must have been of the Greenland race.

BLACK REDSTART (*Phœnicurus o. gibraltariensis*).—On October 11th I had a good view with binoculars at about fifty yards of a Black Redstart sitting on a wall. At that distance it looked black on the upper-parts and a dark grey on the under-parts, and the deep red of its tail was conspicuous. I had two more views of it at about a hundred yards, but it was very wild and would not permit a near approach. In flight it showed no white on the wing and must have been a young bird or a female. The Black Redstart is rarely recorded in the north, and there seem only some five previous records for Northumberland and only one for the Tweed Area.

CONTINENTAL REDBREAST (*Dandalus r. rubecula*).—There was no considerable immigration of Redbreasts, but we saw one or two examples of the Continental form on several days. I obtained one on September 24th, but saw no more until the 28th, when one appeared; on the 30th I saw four (one of which I obtained) and these stayed until October 3rd, when I saw none. On October 10th I saw one and on the 11th and 12th two, but after this date no more were seen until the 18th, when one appeared. Mr. Bolam writes of the immigration of Robins, but does not seem to think that the visitors stay. Mr. Evans on the other hand states, "About September our native stock is said to be augmented by immigrants, which remain with us during the cold season." Neither writer distinguishes the Continental race, and it is only by doing so that we can determine as to whether these immigrants are winter-visitors to the area or merely passage-migrants.

RECOVERY OF MARKED BIRDS.

THE following have kindly sent in subscriptions towards the expenses of the Marking Scheme since the last acknowledgment was made : Messrs. James Bartholomew, A. Bankes, W. Davies, H. S. Gladstone, Miss A. C. Jackson, Col. R. H. Rattray, and Anonymous. I also wish to acknowledge the great assistance which has been received from Mr. H. W. Robinson, who has most generously undertaken the great labour of filling up index cards for the very large number of rings used by himself and Mr. Smalley.—H.F.W.

STARLING (*Sturnus v. vulgaris*).—B.B., No. 11125, marked by Mr.

W. Suggitt at Cleethorpes, Lincolnshire, on October 15th, 1910, as an adult. Recovered at Wijhe, near Zwolle, Holland, on October 4th, 1912. Reported by Dr. W. G. Geesink.

B.B., No. 7000, marked by the North London Natural Hist. Soc. at Walthamstow, Essex, on May 20th, 1912, as a nestling. Recovered at Oak Hill, Woodford, Essex, on October 22nd, 1912. Reported in *Cage Birds*.

B.B., No. 15045, marked by Mr. A. Bankes at Salisbury, Wiltshire, on July 11th, 1911, as an adult. Recovered at the same place on November 8th, 1912.

B.B., No. 15925, marked as No. 15045 on January 26th, 1912. Recovered at the same place on October 10th, 1912. Ring replaced and bird released.

LESSER REDPOLL (*Carduelis l. cabaret*).—B.B., No. K329, marked by Mr. T. F. Greenwood, at Hebden Bridge, Yorkshire, on July 6th, 1912, as a nestling. Recovered in the same district during second week of September, 1912.

LINNET (*Carduelis c. cannabina*).—B.B., No. M820, marked by Mr. J. R. B. Masefield at Cheadle, Staffordshire, on July 21st, 1912, as a nestling. Recovered at Oakengates, Wellington, Salop, on September 25th, 1912. Reported by Mr. A. Storey.

CHAFFINCH (*Fringilla c. œlebs*).—B.B., No. C533, marked by Mr. J. Bartholomew at Torrance, near Glasgow, Stirlingshire, on November 28th, 1911. Recovered at same place on November 9th, 1912. Ring replaced and bird released.

B.B., No. 4539, marked by Colonel R. H. Rattray at Tonbridge, Kent, on May 3rd, 1910, as an adult female. Recovered at same place on October 20th, 1912.

PIED WAGTAIL (*Motacilla a. lugubris*).—B.B., No. K702, marked by Mr. H. W. Ford-Lindsay at Pett, Sussex, on June 20th, 1912, as a nestling. Recovered at Blaye, Gironde, France, on October 6th, 1912. Reported by M. P. Chassagne.

- SONG-THRUSH (*Turdus p. clarkii*).—B.B., No. 14096, marked by Mr. H. S. Gladstone at Thornhill, Dumfriesshire, in May, 1912, as a nestling. Recovered at Borisokane, co. Tipperary, on November 1st, 1912. Reported by Mr. J. Hogan.
- BLACKBIRDS (*Turdus m. merula*).—B.B., No. 7198, marked by Mr. R. O. Blyth at Skelmorlie, Ayrshire, on August 10th, 1910, as an adult female. Re-captured at the same place on July 26th, 1912. Ring replaced and bird released.
- B.B., No. H573, marked by Mr. J. Bartholomew, at Torrance, near Glasgow, Stirlingshire, on February 17th, 1912. Recovered at the same place on July 24th, 1912.
- WHINCHAT (*Saxicola r. rubetra*).—B.B., No. K967, marked by Mr. J. Bartholomew at Kinnelhead, Dumfriesshire, on June 25th, 1912, as a nestling. Recovered at Périssac, near Galgon, Gironde, France, on September 15th, 1912. Reported by Mr. G. Dehaut.
- REDBREASTS (*Dendralus rubecula*).—B.B., No. F61, marked by Mr. J. D. Patterson at Goathland, Yorkshire, on November 3rd, 1911. Re-captured at the same place on September 21st, 1912. Ring replaced and the bird released.
- B.B., No. H556, marked by Mr. J. Bartholomew at Torrance, near Glasgow, Stirlingshire, on February 9th, 1912. Recovered at the same place on June 5th, 1912.
- TAWNY OWL (*Strix a. aluco*).—B.B., No. 8245, marked by Mr. J. S. Elliott at Dowles, Salop, on May 13th, 1912, as a nestling. Recovered at Wribbenhall, Bewdley, Worcestershire, on October 16th, 1912.
- KESTREL (*Falco t. tinnunculus*).—B.B., No. 25924, marked by Mr. A. T. Wallis at Rubery, Worcestershire, on June 16th, 1912, as a nestling. Recovered at Liekey Wood, Rednall, Birmingham, on August 10th, 1912. Reported by Mr. Bloekley.
- COMMON BUZZARD (*Buteo b. buteo*).—B.B., No. 50038, marked by Mr. A. Mayall at Scourie, Sutherland, on June 12th, 1912, as a nestling. Recovered at Invershin, Sutherland, on October 19th, 1912. Reported by Mr. J. Henderson.
- HERON (*Ardea cinerea*).—B.B., No. 50070, marked by Mr. J. R. B. Masefield near Cheadle, Staffordshire, on May 11th, 1912, as a nestling. Recovered at Lincoln about July 15th, 1912. Reported by Mr. S. Thompson.
- MALLARD (*Anas p. platyrhynchos*).—B.B., Nos. 32402, 32405, 32408, 32453, 32461, and 32465, marked by Mr. A. Henderson per Mr. A. Haig Brown at Shadwell Court, Thetford, Norfolk, on June 14th

and 21st, 1912. The birds were hatched from Wild Ducks' eggs taken from islands on the lake, and given their liberty as soon as they were old enough. Recovered at Wretham Park, Thetford, and East Harling, Norfolk, during third week of October, 1912. Reported by Mr. A. Cochrane and Mr. W. Whyte.

CORMORANTS (*Phalacrocorax c. carbo*).—B.B., No. 50027, marked by Mr. R. M. Barrington at Saltee Island, co. Wexford, on May 21st, 1912, as a nestling. Recovered at Pénestin (Morbihan), France, on August 7th, 1912. Reported by M. G. Lecomte.

B.B., No. 50740, marked as No. 50027 on June 17th, 1912. Recovered at Douarnenez Bay, Brittany, on August 31st, 1912. Reported by M. M. Wohlgenuth.

B.B., No. 23097, marked as No. 50027 on June 16th, 1912. Recovered at Milltown, Belturbet, co. Cavan, Ireland, on September 7th, 1912. Reported in the *Daily Mail* by Mr. J. Thompson.

B.B., 50020, marked as No. 50027 on May 21st, 1912. Recovered on Lough Neagh, about one mile from Toombridge, co. Antrim, about middle of September, 1912. Reported by Mr. W. Ellis.

SHAG (*Phalacrocorax g. graculus*).—B.B., No. 50329, marked by Mr. N. H. Joy at Menawethan, Scilly Isles, on June 20th, 1912, as a nestling. Recovered at the mouth of the river Teign, Devonshire, on September 19th, 1912. Reported by Mr. S. J. Curtis.

LAPWING (*Vanellus vanellus*).—B.B., No. 13793, marked by Captain W. F. Mackenzie at Teaninich, Ross-shire, on May 8th, 1912, as a nestling. Recovered at Ainess, Ross-shire, on October 31st, 1912.

B.B., No. 17209, marked by Lord Lucas near North Preston, Yorkshire, on June 19th, 1912, as a nestling. Recovered at Esmoriz, near Aveiro, Portugal, on November 8th, 1912. Reported by Mr. F. P. Cabral.

REDSHANK (*Tringa totanus*).—B.B., No. 14030, marked by Mr. A. G. Leigh at Bickenhall, Warwickshire, on May 15th, 1912, as a nestling. Recovered at Brancaster Staithe, King's Lynn, Norfolk, at the beginning of September, 1912. Reported by Mr. A. R. Chestney.

COMMON SNIBE (*Gallinago g. gallinago*).—B.B., No. 18244, marked by Mr. R. E. Knowles on the East Cheshire Hills on June 4th, 1912, as a nestling. Recovered at Great Smeaton, Northallerton, Yorkshire, on August 13th, 1912. Reported by Mr. P. M. Horsfall.

B.B., No. 16884, marked by Mr. N. H. Joy at Aldermanton,

Berkshire, on May 26th, 1912, as a nestling. Recovered at Stanford Dingley, Berkshire, on November 7th, 1912. Reported by Sir Cameron Gull.

COMMON TERNS (*Sterna hirundo*).—B.B., No. 1356, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on July 14th, 1910, as a nestling. Recovered in Douarnenez Bay, Brittany, France, on August 25th, 1912. Reported by M. G. Lacourtoisie. B.B., No. 696, marked by Mr. H. W. Robinson at Ravenglass, Cumberland, on July 18th, 1912, as a nestling. Recovered at Rhos-on-Sea, North Wales, on August 28th, 1912. Reported by Mr. F. W. Jones.

B.B., No. 19911, marked by Mr. H. W. Ford-Lindsay, at Lydd, Kent, on June 30th, 1912, as a fledgling. Recovered at Honfleur, Eure, France, on September 11th, 1912. Reported by M. J. Magloire.

B.B., No. 40885, marked by Mr. W. Rowan at Blakeney Point, Norfolk, on July 11th, 1912, as a nestling. Recovered in the Tees Estuary, on September 2nd, 1912. Reported by Mr. W. Greenwood.

B.B., No. 2781, marked by Mr. G. J. Van Oordt in the Hook of Holland, Province south Holland, on August 2nd, 1910. Recovered at Warmond, near Leiden, south Holland, on July 30th, 1912. Reported by Mr. W. C. Van Heurn.

LITTLE TERN (*Sterna m. minuta*).—B.B., No. M340, marked by Mr. E. F. Stanford at Sizewell Thorpe, Suffolk, on June 27th, 1912, as a young one. Recovered at Noirmoutier Isle, Vendée, France, on August 27th, 1912. Reported by M. A. Rochard.

BLACK-HEADED GULLS (*Larus ridibundus*).—B.B., No. 3758, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 10th, 1910, as a nestling. Recovered at Moor Row, Cumberland, on August 1st, 1912. Reported by Mr. R. E. Tonkin.

B.B., No. 23332, marked by Mr. W. H. Robinson at Ravenglass, Cumberland, on June 10th, 1911, as a nestling. Recovered between Annan and Lockerbie, Dumfriesshire, the latter end of September, 1912. Reported by Mr. W. Baxendale.

B.B., No. 23383, marked as No. 23332. Recovered at Sandersfoot, Pembrokeshire, on October 15th, 1912. Reported by Mr. D. Hewett.

B.B., No. 23566, marked as No. 23332 on June 11th, 1911. Recovered at Bedminster, Bristol, Gloucestershire, on July 24th, 1912. Reported by Messrs. L. Carwardine and T. A. Bickley.

B.B., No., 24106, marked as No. 23332 on June 16th, 1911. Recovered at Urswick, Ulverston, Lancashire, on November 5th, 1912. Reported by Mr. J. Dobson.

B.B., No. 26553, marked as No. 23332 on June 1st, 1912. Recovered at Skinningrove, Yorkshire, on October 22nd, 1912. Reported by Mr. G. Jackson.

B.B., No. 26674, marked as No. 23332, on June 5th, 1912. Recovered at Crosby-on-Eden, Carlisle, Cumberland, on July 27th, 1912. Reported by Mr. R. Mark.

B.B., No. 26673, marked as No. 23332 on June 5th, 1912. Recovered at Seaseale, Cumberland, on September 4th, 1912. Reported by Mr. H. Vere Champ.

B.B., Nos. 26755, 26865 and 27059, marked as No. 23332 on June 5th, 6th and 8th, 1912. Recovered at Terrington Main, eight miles from King's Lynn, Norfolk, on September 2nd and 3rd, and about October 22nd, 1912. Reported by Mr. S. H. Allen.

B.B., No. 27015, marked as No. 23332 on June 7th, 1912. Recovered on the Lincolnshire side of the Wash on October 18th, 1912. Reported by Mr. J. W. Harrison.

B.B., No. 27198, marked as No. 23332 on June 8th, 1912. Recovered at Barrow-in-Furness on August 2nd, 1912. Reported by Mr. T. Wright.

B.B., No. 27501, marked as No. 23332 on June 8th, 1912. Recovered on the River Wyre at Fleetwood, Lancashire, about September 15th, 1912. Reported by Mr. W. H. Palin.

B.B., No 27509, marked as No. 23332 on June 8th, 1912. Recovered at Thornaby-on-Tees, Yorkshire, on September 14th, 1912. Reported by Miss E. E. Higginson.

B.B., No. 27592, marked as No. 23332 on June 8th, 1912. Recovered at Lea, near Preston, Lancashire, on September 18th, 1912. Reported by Mr. L. Goodin.

B.B., No. 27123, marked as No. 23332 on June 8th, 1912. Recovered at Great Grimsby, Lincolnshire, on October 7th, 1912. Reported by Mr. G. Bemrose.

B.B., No. 27129, marked as No. 23332 on June 8th, 1912. Recovered at Boston, Lincolnshire, second week of October, 1912. Reported by Mr. J. W. Barsby.

B.B., No. 27254, marked as No. 23332 on June 11th, 1912. Recovered at North Burton, near Bridlington, Yorkshire, about the middle of October, 1912. Reported in the *Leeds Mercury*.

- B.B., No. 27202, marked as No. 23332 on June 11th, 1912. Recovered six miles north of Lockerbie, Dumfriesshire, on July 15th, 1912. Reported by Mr. R. Dunwoodie.
- B.B., No. 27631, marked as No. 23332 on June 13th, 1912. Recovered at Landemer, near Cherbourg, France, on July 21st, 1912. Reported by M. E. Maroreffe.
- B.B., No. 27740, marked as No. 23332 on June 13th, 1912. Recovered at Distington, Workington, Cumberland, on July 23rd, 1912. Reported by Mr. H. Hill.
- B.B., No. 27775, marked as No. 23332 on June 13th, 1912. Recovered at Grange-over-Sands, Lancashire, on July 30th, 1912. Reported by Miss Sherring.
- B.B., No. 27319, marked as No. 23332 on June 13th, 1912. Recovered between Eastbourne and Bexhill, Sussex, on September 5th, 1912. Reported by Mr. S. Hurd.
- B.B., No. 27665, marked as No. 23332, on June 13th, 1912. Recovered near Bolton-le-Sands, Lancashire, on October 9th, 1912. Reported by Mr. J. Baines.
- B.B., No. 27679, marked as No. 23332 on June 13th, 1912. Recovered at Moira, co. Down, on September 31st, 1912. Reported by Mr. J. A. Davison.
- B.B., No. 27314, marked as No. 23332 on June 13th, 1912. Recovered at Long Sutton, Lincolnshire, on October 19th, 1912. Reported by Mrs. Anderson.
- B.B., No. 27264, marked as No. 23332 on June 13th, 1912. Recovered between Newport and Stockton-on-Tees, Yorkshire, on November 6th, 1912. Reported by Mr. W. Broadbent.
- B.B., No. 27818, marked as No. 23332 on June 14th, 1912. Recovered at Barrow-in-Furness on August 10th, 1912. Reported by Mr. J. Pelan.
- B.B., No. 27764, marked as No. 23332 on June 14th, 1912. Recovered at Milnathort, Kinross-shire, on August 21st, 1912. Reported by Mr. H. Purvis-Russell-Montgomery.
- B.B., No. 27823, marked as No. 23332 on June 14th, 1912. Recovered near Winsford, Cheshire, on September 12th, 1912. Reported by Mr. T. Sutton.
- B.B., No. 27866, marked as No. 23332 on June 15th, 1912. Recovered at Maryport, Cumberland, on July 30th, 1912. Reported by Mr. W. R. Ellwood.
- B.B., No. 27889, marked as No. 23332 on June 15th, 1912. Recovered at Stainburn, near Workington, Cumberland, on August 2nd, 1912. Reported by Mr. J. Ellwood, junr.

NOTES

RARE MIGRANTS IN YORKSHIRE.

WHILE observing migration on the east Yorkshire coast in the district of Holderness this autumn, I obtained the following birds, which are noteworthy owing to their rare occurrence.

FIRE-CRESTED WREN (*Regulus i. ignicapillus*).—On September 28th, 1912, I shot a Firecrest. The broad white eye-stripe was very conspicuous, and it uttered a single sharp note, rather shriller than that of a Golderest. The wind had been easterly for some days, and it was blowing half a gale on the 28th. There were considerable arrivals of Goldcrests on the 24th and 25th, but a good many of these were gone by the 28th.

RED-BREASTED FLYCATCHER (*Muscicapa p. parva*).—On September 24th, 1912, I shot an immature Red-breasted Flycatcher. Only one has previously been obtained in the county, though three others are said to have been seen. This bird was in a faggot breakwater, and appeared somewhat smaller than *M. h. hypoleuca*. The wind had been easterly for some days, and on the 24th a number of small birds arrived, including Golderests, Continental Robins (*Dandalus r. rubecula*), and a Ring-Ouzel (*Turdus torquatus*).

BLYTH'S REED-WARBLER (*Acrocephalus dumetorum*).—On September 20th, 1912, I obtained an example of Blyth's Reed-Warbler. It was very tame, and I watched it for some time feeding in a patch of sea-buckthorn. The wind had been north-east for several days, and the only other birds about at the time were a few Redstarts and Common Whitethroats; a Spotted Flycatcher (*Muscicapa s. striata*) also appeared on the 20th.

I am most grateful to Dr. N. F. Ticehurst and to Dr. E. artert for the trouble they took in identifying this bird.

BARRED WARBLERS (*Sylvia n. nisoria*).—On September 10th, 1912, after a rush of Pied Flycatchers, Redstarts and Common and Lesser Whitethroats, I obtained an immature male Barred Warbler. A strong west wind was blowing at the time, with heavy squalls of rain. On the 14th near the same place I shot an immature female, which I had observed about for several days. There are four previous records for Yorkshire.

J. K. STANFORD.

EARLY NESTING OF LESSER REDPOLL IN NORFOLK.

A NEST of the Lesser Redpoll (*Carduelis l. cabaret*) with five eggs, found on April 24th, 1912, at Croxton, Norfolk, may perhaps be worth recording, as I cannot remember having seen a published note of this bird nesting in April.

From the various notes upon its nesting-habits in other counties which have appeared from time to time in BRITISH BIRDS, it would seem to be always a rather earlier nester than usual in Norfolk, other dates upon which I have found nests being: May 2nd, two eggs; May 12th, three eggs; May 13th, five eggs; May 26th, one egg, another nest ready for eggs, and a third half-built nest; June 2nd, three young nearly ready to fly.

B. B. RIVIERE.

[Lesser Redpolls seem to have bred exceptionally early in the spring of 1912. Mr. P. C. Dutton informs me that on May 12th, 1912, he met with a nest of newly hatched young near Stone, Staffordshire, which must have contained a full clutch by the end of April. On May 19th, Mr. W. T. Mynors found a nest, with four well-feathered young, near Ashburne, Derbyshire. In these cases the localities are considerably further north.—F.C.R.J.]

TAWNY PIPIT IN SUSSEX.

ON October 1st, 1912, a birdcatcher caught a Tawny Pipit (*Anthus campestris*) at Eastbourne, and this specimen has now come into my possession.

E. C. ARNOLD.

GREY WAGTAILS NESTING IN SURREY.

ON May 5th, 1912, I observed a pair of Grey Wagtails (*Motacilla b. boarula*) feeding two recently-fledged young birds in the neighbourhood of Godstone. The species has not previously nested in that locality to my knowledge, although a pair have bred annually since 1906 at a spot about three miles distant.

HOWARD BENTHAM.

WALL-CREEPER IN SUSSEX.

AN example of the Wall-Creeper (*Tichodroma muraria*) was obtained at Camber Castle, Sussex, on November 1st, 1912. I examined it in the flesh, when it proved to be a male. Unfortunately it was rather knocked about, having been killed at close range within the ruins, and with large shot.

H. W. FORD-LINDSAY.

WILLOW-TITS IN NORFOLK AND HUNTINGDON.

ON August 9th, 1912, I obtained a specimen of the Willow-Tit (*Parus a. kleinschmidti*) in an alder ear on the Norfolk side

of the Waveney near Beccles. This is, I believe, the first recorded occurrence of what is probably an overlooked bird in Norfolk.

I also wish to record that I found an example of this bird in an old collection in Yarmouth lately. It had been obtained in 1844 in the neighbourhood of Somersham. There seem to be no previous records from Huntingdonshire.

C. B. TICEHURST.

[I have in my collection a female Willow-Tit obtained at Loddon, Norfolk, in January, 1893, by my friend Capt. A. E. Hamerton, who gave it to me about two years ago, but I have omitted to record it.—H. F. WITHERBY.]

GREAT GREY SHRIKE IN RUTLAND.

As the Great Grey Shrike (*Lanius excubitor*) is very rarely seen in Rutland, I may record that I saw one between Braunston and Oakham in November, 1911. I observed the bird first on November 14th, and four times subsequently in the ensuing fortnight. Each time it perched in most conspicuous positions, and it was always very bold.

K. HUGHES-ONSLow.

RED-BACKED SHRIKE'S METHOD OF DEALING WITH ITS PREY.

WHILE staying in a district of Suffolk last summer in which Red-backed Shrikes (*Lanius c. collurio*) were very numerous, I observed a male bird carrying a half-grown Sky-Lark, which it clasped in its talons after the manner of a hawk, conveying its victim apparently with ease for fully two hundred yards before depositing it upon the ground, one of the parent Larks being in hot pursuit.

The fledgling upon examination was found to be headless, having evidently been decapitated immediately after seizure, as I could discover no trace of the head at the spot where the Shrike alighted. It seems reasonable to assume that the Lark was beheaded at the nest, in order that its struggles might cease and transportation thus be effected without difficulty.

HOWARD BENTHAM.

[The fact that the fledgling Sky-Lark was picked up headless does not prove that it was decapitated at the nest in order to facilitate transportation, for it is usual for the Shrikes to begin their meal by tearing off and swallowing the head of a young bird, so that naturally no trace would be found of it. The same habit may frequently be observed in the case of the Accipitres.—F.C.R.J.]

AQUATIC WARBLER IN NORFOLK.

A FEMALE Aquatic Warbler (*Acrocephalus aquaticus*) was obtained on Blakeney golf course on October 23rd, 1912. It was unfortunately much damaged with large shot, but Mr. Pashley, of Cley, has successfully mounted it. The last occasion when the Aquatic Warbler occurred in this neighbourhood was in 1903, when my friend, Mr. Gilmour Richards, shot a bird (now in his father's collection at Ealing) on September 21st. Previous to that a specimen was killed by Mr. Gunn, the Norwich naturalist, all three within a mile or two of the same spot.

CLIFFORD BORRER.

BARRED WARBLERS IN SUFFOLK AND NORFOLK.

ON August 28th, 1912, I had on several occasions a good view of a Barred Warbler (*Sylvia nisoria*) on the Lowestoft Denes, Suffolk. The bird was shy and on near approach invariably dived into the thick brambles. The woodcut in Saunders's *Manual* of the young bird shows a very typical position.

On the 27th there was a gentle north-east wind following the hurricane of the previous day. The morning of the 28th was calm. On the same morning there was a fairly large influx of Wrynecks, suggesting that these had perhaps come in from the north-east with the Barred Warbler, which species is found in south Sweden and is not uncommon in parts of Denmark. This is the first recorded occurrence in Suffolk.

C. B. TICEHURST.

ON September 3rd, 1912, my brother, G. F. Arnold, shot an immature female Barred Warbler at Blakeney. The wind was blowing from the north-west at the time, and in my experience this is usually the direction of the wind when Barred Warblers appear. The bird in flight looks like a large Spotted Flycatcher.

E. C. ARNOLD.

[I understand that three more Barred Warblers in similar plumage were taken in the same locality, and about the same time as the one referred to by Mr. Arnold. One was obtained on the same day, September 3rd, and the other two a few days afterwards.—H.F.W.]

DARTFORD WARBLER IN IRELAND.

ALTHOUGH birds of greater rarity have been obtained at Irish Light stations, probably no more interesting bird has occurred than the Dartford Warbler which was caught at the Tuskar Lighthouse, co. Wexford, by Mr. A. O'Leary, lightkeeper, on October 27th, 1912, and sent to me in the flesh as an unknown bird.

In the ordinary sense, this species is local and resident in southern England, and is one of the few warblers which winter in Great Britain. In the more extended sense of the word "migratory" it is not even an occasional wanderer across the sea, for though it has twice occurred in Heligoland, it has never, so far as I am aware, been obtained at any Light station in Great Britain or Ireland: it is said, in Newton's *Yarrell*, p. 401. never to fly on land more than fifty yards at a time. Seebohm states in 1883 in his *British Birds* (Vol. I., p. 415) that, "It is not known to be anywhere a migratory bird." Newton, on the other hand, in his *Dictionary of Birds*, 1896, says, "It is known to be migratory in most parts of the Continent." Howard Saunders, in his *Manual*, 1899, says that, "Allowing for a little wandering, it is a resident species in the south of England"; and in the most recent *Hand-List of British Birds*, 1912, it is given as "resident."

The specimen received was an adult, in rather bad condition; however, with care a very good skin was made. Mr. W. P. Pyecraft, of the British Museum (Nat. Hist.), kindly dissected the body; it proved to be a female.

Three races have been distinguished by Dr. Hartert (*Vög. pul. Fauna*, p. 600-1), viz. *Sylvia undata undata*, inhabiting south-western Europe, *Sylvia undata toni*, north-western Africa, and *Sylvia undata dartfordiensis*, to which the Irish specimen belongs, being resident in southern England and north-western France.

This solitary occurrence in Ireland, though very interesting and totally unexpected, is not, I think, evidence of any special movement. It may have been due to a very strong south-east gale which swept across the mouth of the Channel on October 26th and 27th, blowing direct from the south-west of England to the south-east of Ireland (see daily weather-charts).*

The following is a complete list of birds forwarded to me from Irish Light stations since 1887, which up to that date had not been recorded as occurring in Ireland.

1887, Red-breasted Flycatcher and Lapland Bunting; 1889, Greenland Redpoll; 1890, Yellow-browed Warbler, Lesser Whitethroat, and Short-toed Lark; 1892, Antarctic Sheath-bill; 1893, Woodchat Shrike; 1903, Aquatic Warbler;

* Since writing the above, Prof. Patten has, without having seen the bird and without ascertaining its age, sex, racial form or destination, written to the daily Press announcing its occurrence—on the authority of the lightkeeper, to whom I communicated the name. This explanation is necessary to prevent the inference that two specimens were obtained.—R.M.B.

1905, Melodious Warbler, and American Snow-Bird; 1907, Reed-Warbler*; 1908, Pallas's Grasshopper-Warbler, and Little Bunting; 1910, Shore-Lark; 1912, Dartford Warbler.

In addition, to the above Prof. Patten, when staying at the Tuskar Rock, lately obtained the Tree-Pipit.

RICHARD M. BARRINGTON.

GREENLAND WHEATEAR IN DERBYSHIRE.

As the Greenland Wheatear (*Eenanthe a. leucorroha*) has not hitherto been recorded for Derbyshire, and the material for the study of its migration from inland districts is very scanty, it may be of interest to record that on September 14th, 1912, Mr. G. L. Spilsbury shot a female in a field at Findern where the cabbage crop had partially failed and large open spaces existed between the plants. I examined this specimen at Messrs. Hutchinson's, where it was being set up, and found the wing-measurement just over 100 mm.

F. C. R. JOURDAIN.

BLACK REDSTARTS IN ANGLESEY.

On the morning of October 15th, 1912, there was an adult male Black Redstart (*Phœnicurus o. gibraltariensis*) in a garden-patch abutting on the harbour at Holyhead. The bird was in a state of restless activity, catching insects, now upon the ground, now among and upon the cabbages and other garden stuff, and occasionally snapping flies from the face of the boundary wall, upon which it would alight for an instant. When I visited the garden again on the 18th with Mr. T. A. Coward, the bird was still there, but we failed to find it on the 23rd. On the 22nd we watched another—either an adult female or a bird of the year—on the cliffs at Penrhyn Mawr, a mile to the south of the South Stack Lighthouse.

C. OLDHAM.

BLACK REDSTART IN CARNARVONSHIRE.

On November 2nd, 1912, I had an excellent view of a Black Redstart (*Phœnicurus o. gibraltariensis*) as it flitted about a rock-bestrewn cliff-top on the north-easterly side of the Great Orme's Head. Its black chin and breast, the deep greyish feathers of its crown and back—so different from the dull brownish-grey plumage of the female—and the

* The Reed-Warbler was first authentically recorded as Irish from a specimen obtained at Roekabill in 1908, but subsequently on examining carefully the legs and wings obtained in 1907, those of a specimen killed striking at the Codling Bank Lightship, 3.XI.07, were identified as certainly belonging to this species.

absence of white wing-patches led me to suppose that the bird was an immature male. Its ruddy tail was in constant motion.

In December, 1910, and November, 1911, other birds of this species were observed on the same headland and noted in BRITISH BIRDS, and I feel that these three occurrences in late autumn and early winter are not accidental, but enable us to see fairly clearly that the bird is not so rare in North Wales as is generally reputed.

RICHARD W. JONES.

CUCKOOS LAYING IN ROCK-PIPITS' NESTS.

WITH reference to the note on page 194, I may mention that in June, 1895, Miss Dorrien-Smith sent me a Rock-Pipit's nest containing two eggs of the owner and one of a Cuckoo. It was taken at Tresco Abbey, Isles of Scilly, where *Anthus s. obscurus* is exceedingly common.

HEATLEY NOBLE.

WITH reference to the notes on pages 156 and 194 on this subject, I should like to say that I found a Cuckoo's egg in the nest of a Rock-Pipit in the Scilly Isles, in 1904. I have also a clutch of Rock-Pipit's eggs from the Farne Islands, with one egg very considerably larger than the others, which may be a Cuckoo's.

HORACE TERRY.

GLOSSY IBISES IN ESSEX.

FIVE Glossy Ibises (*Egretta f. falcinellus*) were shot on October 14th, 1912, at Walton-on-the-Naze, Essex, out of a party of six, by Mr. Woodruffe Eagle and his brother. The sixth was, I understand, afterwards picked up dead by somebody else. The five obtained by Mr. Eagle were two adults and three birds of the year.

WALTER B. NICHOLS.

NIGHT-HERON IN CHESHIRE.

MR. J. MOORE recorded (*antea*, p. 156) a Night-Heron (*Nycticorax n. nycticorax*) at Marbury Mere, near Northwich, on July 31st, 1912. I visited the spot immediately afterwards, but failed to find trace of the bird and concluded that it had left. I can now, however, confirm the identification (if that be necessary) for the decomposed remains of a Night-Heron—presumably the one seen by Mr. Moore—were discovered in a reed-bed by the mere by Mr. John Hindley, the gamekeeper, on November 3rd. The skull and sternum are intact, but the feet are missing, possibly having been shot away by some gunner, who wounded but lost the bird. Many of the ash-grey flight-feathers are still attached to the

wing-bones, and some of the dark feathers of the back remain ; these, the skull, and the measurements of the culmen and wing, enabled me to recognize the species. The remains are now preserved in spirits in the Warrington Museum.

T. A. COWARD.

SNOW-GEESE IN NORFOLK.

ON October 31st, 1912, six Snow-Geese (*Anser hyperboreus*) were seen on the north Norfolk levels. A Mr. Glanville saw them fly in from the sea and fired at the birds ; and I subsequently heard that E. Ramm, the well-known fowler, had a capital view, but was not lucky enough to get a shot. Ramm noticed " hundreds of duck passing at sea, and ten Whoopers " on the same day.

CLIFFORD BORRER.

GOOSANDER AND SCAUP IN WARWICKSHIRE.

ON October 20th, 1912, I watched on one of the pools at Packington, Warwickshire, a bird which I identified as a female or immature Goosander (*Mergus m. merganser*). It was at first swimming with some Coot, and I at once noticed the comparative thinness of the neck, and the large size of the head. The latter was brown, the whole upper-surface being dark grey and the throat dirty-white, whilst there was a conspicuous white patch on the wing. Later I saw the bird on the wing together with a duck Mallard, and the fact that it was considerably larger than the latter, coupled with the grey back, served to distinguish it from the Red-breasted Merganser. Beyond the rather vague statement (*Viet. Hist. Warwick.*, p. 202) that, " although not of frequent occurrence it is certainly not very rare." I am aware of only two previous records of this species in the county.

Though occurring more frequently than the Goosander, I may record seeing a drake Scaup (*Nyroca m. marila*) on the same pool on November 26th, 1911.

A. GEOFFREY LEIGH.

REDSHANKS TRAPPED BY COCKLES.

THE photograph here reproduced is of a Redshank (*Tringa totanus*) with a cockle on its upper mandible. I picked the bird up on some rocks at Hoylake, Cheshire, i.e. in the Dee Estuary, on October 5th, 1912 ; it had been dead perhaps some twenty-four hours and was emaciated. It was also moulting. I think there can hardly be any doubt that the Redshank died of starvation, having accidentally been trapped by the cockle while feeding on the sand-flats. One wonders that the accident is not more common, but in

the case of the Redshank and many other small waders, the feeding action is one of "picking up" rather than "probing" as in the case of Curlews and Oyster-catchers, so that the time the bill is actually in the mud is often momentary. A somewhat similar experience befell me on October 22nd, 1910. I was watching a group of several



dozen Redshanks through a telescope (x 60). One had a cockle attached to its left foot. One toe could be seen to be free in front of the cockle. Occasionally the Redshank pecked at it in a sort of half-hearted way but made no serious effort to remove it. Perhaps the readers of BRITISH BIRDS have similar experiences to relate.

J. W. W. STEPHENS.

LONG-TAILED SKUA IN NORFOLK.

ON September 7th, 1912, my brother, G. F. Arnold, shot an immature Long-tailed Skua (*Stercorarius longicaudus*) at Blakeney. The wind was north-west at the time.

E. C. ARNOLD.

LITTLE BUSTARD IN DEVON.

ON January 11th, 1912, a Little Bustard (*Otis tetrax*) was captured by a farmer at Braunton, and taken by him to Mr. James Rowe, the taxidermist of Barnstaple. Its head had been injured, probably through coming in contact with telegraph wires. It proved to be a female, like nearly all the recorded specimens from this district, though possibly some may have been immature birds. Mr. J. Henderson

saw it while it was being set up for Mr. F. B. Hinchliff of Instow, and kindly obtained the above particulars from Mr. Rowe. F. C. R. JOURDAIN.

LITTLE AUKS IN SUSSEX AND WARWICKSHIRE.

THE Little Auks (*Alle alle*) have put in an early appearance this winter, several having been observed along the coast, and I regret to say some have already been obtained. The first capture that came to my notice was at Winchelsea, on October 31st, 1912. Another at Bopeep on November 2nd, and on the same day one was killed by a bottle being thrown at it from St. Leonards Pier, after spending a couple of days swimming among the piles. H. W. FORD-LINDSAY.

[Two more were seen from St. Leonards Pier on November 11th.—N.F.T.]

ON November 5th, 1912, a Little Auk (*Alle alle*) was brought to me. It had been picked up alive in the road in Rugby on the previous day. We had had no rough weather since the previous Thursday (October 31st) when the wind shifted from south through west to north-west. The bird appeared to be in good condition. H. COLLISON.

TREE-PIPITS IN IRELAND.—Professor C. J. Patten recounts at some length in the *Irish Naturalist* (1912, pp. 209-13) his capture of two examples of *Anthus t. trivialis*, a young female on September 10th, 1912, and a young female on September 22nd, at the Tuskar Rock, co. Wexford. These are the first authenticated records of the occurrence of this species in Ireland. Professor Patten argues that these birds were emigrating from Ireland, and suggests that they breed there and are overlooked. It is possible, we suppose, that they do, but it seems more likely that Tree-Pipits from the west coast of Scotland occasionally pass down the east coast of Ireland on passage. The fact that one of the birds obtained in the early morning had no food in its stomach hardly points to emigration from Ireland, since the Tuskar is but a very few miles from the land.

WHITE WAGTAILS IN CO. DONEGAL.—Mr. N. H. Foster writes (*Irish Nat.*, 1912, p. 218) that he observed about twenty *Motacilla a. alba* on the shore at Bundoran, co. Donegal, from August 12th to 14th, 1912.

WRYNECK IN CO. GALWAY.—Mr. R. M. Barrington records (*Irish Nat.*, 1912, p. 207) the occurrence of an example of *Iynx t. torquilla* killed striking the Aran lighthouse, co.

Galway, on September 19th, 1912. The Wryneck has only been recorded six times previously in Ireland.

LEVANTINE SHEARWATER IN YORKSHIRE.—Mr. W. J. Clarke records (*Nat.*, 1912, p. 301) the occurrence of an adult example of *Puffinus p. yelkouan* shot from a boat a few miles south-east off Scarborough on the evening of September 3rd, 1912.

SPOTTED REDSHANK IN CUMBERLAND.—A specimen of *Tringa erythropus* is recorded by Mr. H. Mackay (*Scot. Nat.*, 1912, p. 259) as having been seen by Mr. Nichol near Skinburness (Solway) "recently," presumably autumn, 1912.

AVOCET IN CO. DONEGAL.—Mr. D. C. Campbell records (*Irish Nat.*, 1912, p. 208) that about the middle of October, 1911, a specimen of *Recurvirostra avosetta* was shot at the mill-dam, Buncrana, Lough Swilly.

BLACK-TAILED GODWITS IN IRELAND.—Mr. R. Warren notes (*Zool.*, 1912, p. 396) the occurrence of *Limosa limosa* in Cork Harbour in the middle of September, 1912, and on the Shandon Estuary, co. Waterford, on September 21st (*cf.* Vol. V., p. 203).

BLACK-TAILED GODWITS IN THE OUTER HEBRIDES AND CUMBERLAND.—A specimen of *Limosa limosa* is reported by Mr. D. Mackenzie (*Scot. Nat.*, 1912, p. 237) as having been shot near Stornoway, Lewis, on August 31st, 1912. The species is very rarely noted in the Outer Hebrides. Another is recorded as seen on the English side of the Solway in the autumn of 1912 (*t.c.*, p. 259).

DARK-THROATED VARIETY OF QUAIL IN NORTHAMPTONSHIRE.—Mr. O. V. Aplin records (*Zool.*, 1912, p. 349) that a Quail with the middle of the throat nearly black shading off to rich chestnut-brown at the sides, was killed last spring at Middleton Cheney. Mr. Aplin considers the bird a hybrid between *Coturnix c. coturnix* and *C. c. capensis*, but if this is really so it is most remarkable that the offspring of a bird which lives in South Africa should come here to breed.



REVIEWS

The Home-Life of the Terns. Photographed and described by W. Bickerton, M.B.O.U. Crown 4to., 88 pp. and 32 mounted plates. (Witherby & Co., London.) 6s. net.

THE issue of a new volume of Messrs. Witherby & Co.'s Home-Life series has become an annual event, and one looked forward to with pleasurable anticipation by all lovers of bird-life. The volume which has just appeared is uniform in all respects with its predecessors, and it may be said at once, that the standard has been fully maintained both in regard to the letterpress and the reproduction of the plates. The author is well known as one of the chief exponents of the bird-photographer's art in these islands, and we expect a high standard of work from such hands as his; nor are we disappointed, for on examination of his plates, we find but few points for criticism either in their generally high technical level or their pictorial qualities. They are also well chosen as illustrations of the different points in the letterpress, and of the various habits and attitudes of the birds at their nests.

The intense enthusiasm of the author and his real sympathy with the birds in their home-life is evident in every page of his writing, which in a separate chapter devoted to each of the five British breeding species of Terns, contains a very full and readable account of their habits as observed at two of the largest English colonies. On several points, such as the average number of eggs in the clutch in certain species, the author differs from the generally accepted idea, but it must be remembered that he is only stating facts as observed by him in two restricted areas, and it may well be, if indeed it is not proved, that the fertility of this group varies in different regions.

We note that the author affirms the *under* water plunge of all five species when feeding, a fact that was at one time greatly doubted, and although definitely recorded with regard to the Arctic Tern, and probably well known to many with regard to one or more of the other species, we do not remember to have seen it established in print with regard to all. A very acceptable item is the table given on page 33, of the number of eggs of the Sandwich Tern found by the watcher at Raven-glass during the thirteen years that this colony has been

systematically protected. This shows a steady increase from 120 in 1900 to 423 in 1911, and cannot but be a source of gratification to all who are interested in the preservation of this the largest and one of the least numerous of our Terns. A very interesting point also is the description given of the coloration of the downy young in this species, and the light and dark phases into which they can be separated. This is well illustrated in the two photographs in Plate 6. The similar dimorphism in the young Arctic and Common Terns, which had been previously recorded, is also corroborated as regards the former species by Mr. Bickerton, and illustrated on Plate 32.

Most ornithological readers will naturally turn first to the chapter on the Roseate Tern and the seven very beautiful plates accompanying it, for in it most of us will gather our first intimate knowledge of the home-life of one of our rarest British breeding birds illustrated by what are probably the first photographs ever taken of it in a wild state. The author is much to be congratulated on the success that attended his researches in this direction, and it is gratifying to know that in this one locality he definitely identified eight nests of the Roseate Tern, and estimated their numbers so high as fifteen to twenty pairs.

N.F.T.

DEATH OF MR. W. B. TEGETMEIER.

WE greatly regret to have to record the death, at the great age of ninety-six, of Mr. W. B. Tegetmeier, which occurred on November 19th, 1912, at Golder's Green, N.W. Mr. Tegetmeier will perhaps best be remembered for his work in connexion with poultry and pheasants, and the help he afforded to Charles Darwin in the preparation of his work on *The Variation of Animals and Plants under Domestication*. We hope to publish a short memoir of Mr. Tegetmeier in our next number.



LETTERS

SPORADIC NESTING.

To the Editors of BRITISH BIRDS.

SIRS,—Mr. Jourdain in his editorial note has so completely replied to Mr. Meares's letter, that there is very little more for me to add. I have never disputed Mr. Witherby's grounds for describing the Crossbill as a sporadic breeder in England; on the contrary I consider at the time the statement appeared it was fully justified. But since the statement was made, i.e. soon after the great irruption in 1909-10, I have proved conclusively that it bred in 1911 and 1912. Apart from this, the evidence which I have collected from several keepers and keen observers left no doubt in my mind that it has always bred in Suffolk and possibly Norfolk. Mr. H. M. Upcher remarked that the Crossbill used to breed regularly in a small clump of fir-trees near Brandon station, Norfolk (*Bulletin B.O.C.*, Vol. XXVII., p. 61), and I now respectfully submit that Mr. Witherby has no longer any claim to maintain that the Crossbill is not a resident breeding species in England. If some foreign species has a right to be placed on the British list as the result of securing a solitary example, then surely the Crossbill has some claim to be classed as a resident English breeding species, on the strength of the evidence which has been submitted from time to time and placed before your readers.

If I do not succeed in discovering the Crossbill breeding in Suffolk in 1913, it would be mere supposition to say that it had not bred, and in my opinion this would not alter the question in the slightest.

An important fact which should not be overlooked, is that Suffolk and Norfolk are eminently suited to the habits of the Crossbill. It is a resident breeding species in Scotland and Ireland, and to my mind there is nothing remarkable in its being so in England.

As to the use (I would prefer to say the misuse) of the word "sporadic," "erratic" would I think have been more applicable to the case. However, I will not attempt to offer any opinion as to the correct definition of a word which apparently can be "drawn and quartered" at will, but if Mr. Meares is correct in his interpretation of the word, then I have not the slightest hesitation in saying that the species mentioned by me as a comparison are undoubtedly sporadic; indeed to a certain extent all migratory species must be, as the distribution of any species over a given area must depend entirely on the numbers which arrive in this country.

The reason I included the Hawfinch in my comparison is that they have almost deserted parts of Kent within the last five or six years where they had previously bred annually, and are now breeding in considerable numbers in Lancashire in parts where they had not previously bred.

Mr. Meares accuses me of studiously avoiding to substantiate my assertions by facts. May I be allowed to point out that I have not made any definite assertions: I simply made *comparisons*, and had he studied my original note and my reply to his first letter more carefully, he could not have failed to see this. I hope Mr. Jourdain has satisfied Mr. Meares in regard to facts, if not I shall be most happy to supply authenticated records of sporadic nesting (according to his own definition) both in regard to the Hobby and Grasshopper-Warbler, but I do not consider it is fundamental to the question. In regard to the former species, Mr. Meares will find several sporadic cases of nesting in the *Birds of Hampshire and the Isle of Wight*, which he studiously avoided quoting, classing them as "wholly inconclusive," or "isolated," which is surely the same as "irregular in occurrence as the result of nomadic tendencies" (i.e. sporadic). Further the number of these cases exceeds the number of those forming the so-called "conclusive" evidence, quoted from the same work. Mr. Meares has mentioned the clouded-yellow butterfly: I may say, that it is a well-known fact to most entomologists that in some parts of Kent this insect may be taken every year. It is an exact parallel to the matter under discussion: *C. edusa* can be found in some spots every year, but in a good or favourable season much more plentifully and consequently with wider distribution; the same point holds good, to a certain extent, with all our migrant species of birds.

My original comparison was, "I do not consider it (the Crossbill) is more sporadic in its nesting than many other British birds such as Hobby, Hawfinch, Grasshopper-Warbler, etc.," and on the evidence concerning Crossbills that was at my disposal at the time, and which is given above, this is fully borne out.

P. F. BUNYARD.

[Mr. Bunyard does not give any details of the evidence he has collected to show that the Crossbill "has always bred in Suffolk and possibly in Norfolk," and the statements of keepers mentioned by Mr. Bunyard on p. 364 of Vol. IV. are not to my mind sufficiently convincing. With regard to the remark quoted by Mr. Bunyard, as made by Mr. Upcher, this was not founded on any observations made by Mr. Upcher himself, and on my appealing to him for further

information he was unable to substantiate the statement. The Crossbill resident in Scotland is, of course, a distinct form, *Loxia c. scotica*, and apparently is not a wanderer. The Crossbill which breeds in Ireland is, however, the typical form, but if Mr. Bunyard had studied the history of the bird in Ireland he would have found that it was not indigenous but had "settled down" (with fluctuations) after irruptions (see *Brit. B.*, IV., p. 334), and the bird may now be acting in the same way in Suffolk; but I suggest that we should wait a little longer before we make sure of this, especially as the breeding birds are diminishing in numbers.—H.F.W.]

SUPPOSED OCCURRENCE OF THE SACRED IBIS.

To the Editors of BRITISH BIRDS.

SIRS,—Although the Sacred Ibis recently shot in Essex (*British Birds*, p. 200) was probably an escaped one, there is more to be said for one which was taken alive on the coast at Bulverhythe in Sussex in 1871. I saw this bird alive in a garden near to where it had been caught, and some particulars of it were sent to Prof. Newton.

J. H. GURNEY.



TWO YOUNG AND AN ADDLED EGG OF A WHOOPER
IN THE NEST.

(Photographed by C. H. Wells.)

BRITISH BIRDS

EDITED BY H. F. WITHERBY, F.Z.S., M.B.O.U

ASSISTED BY

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NOTES ON THE BIRD-LIFE OF SOUTH-WEST
ICELAND.

BY THE
REV. F. C. R. JOURDAIN.

[PLATE 6.]

THE following notes must be taken as referring only to the birds of the Gullbringu, Kjosar, and 'Arnes Sýslur, as observed on a visit to this part of Iceland in June, 1912, in company with Mr. J. Wilkinson. Although naturally it was not to be expected that any sensational discoveries would be made within a hundred kilometres of Reykjavik, the bird-life proved full of interest and would well have repaid a longer visit. In one respect our experience was quite at variance with that of the Rev. H. H. Slater, who states in his *Manual of the Birds of Iceland* (p. 34), that "many species seem to reduce the number of eggs the farther north they range." He proceeds to give instances of small (and apparently incomplete) clutches of various species, which we found with decidedly larger clutches than are usually met with at home. In the case of some groups, such as the Limicolæ, there is of course no difference, and the same is true also of Alcidaë, and possibly some other families, but where there is any range of variation, as in the Passeres, the tendency in most cases seems to be decidedly in favour of larger families in the high north than in more southern regions.

A pleasing characteristic of the country is the extreme tameness of most species of birds. On a wet day we have ridden within a yard or so of a telegraph post on which a Raven was perched, without disturbing it; the Redshanks while anxiously conveying their recently hatched young, would run along just out of reach of our ponies' feet: Phalaropes are proverbially confiding, but it is surprising at first to see Golden Plover on the little crofts in front of the farms within a few feet of the front door, and Whimbrel feeding unconcernedly within half a dozen yards. For the bird-photographer Iceland

should have many attractions, and if the visitor fails to get a satisfactory print of a bird like the Raven, which will sweep by within a foot of his head when the young are threatened, it is certainly not the fault of the bird! The extremely good knowledge of birds which is possessed by practically every countryman and country-woman is also surprising, when one recalls the astonishing blunders which are made by otherwise well-informed people at home, who have lived all their lives in the country and yet know nothing of its animal-life.

The local race of the Raven (*Corvus corax islandicus* Hantzsch) is a finer bird than our British and Continental forms. It is quite common still, especially in the 'Arnes Sysla, where it levies a heavy toll on the eggs of the Red-shanks, Dunlin, Golden Plover, and other birds which breed in great numbers in the flat marshy country between the Ölfusa and Thjorsa Rivers.* At the time of our visit (early June) all nests contained well-fledged young, and both parents showed the utmost boldness when the nest was approached, the male often tearing up the turf with his beak in his rage, exactly as I have seen Ravens do at home under similar circumstances.

The Mealy Redpoll (*Carduelis linaria linaria* (L.)), though common where there is birch-scrub in the north, is decidedly scarce in the south, and a single bird which appeared among the currant-bushes of a garden on the south coast on June 5th was the only specimen we met with.† Snow-Buntings (*Plectrophenax nivalis* (L.)) were by no means uncommon, haunting not only the screes and boulder-strewn hills, but also even low marshy ground near the sea, where blocks of lava provided them with suitable nesting-places. The beautiful black-and-white breeding-plumage makes them

* In writing Icelandic place-names (in the absence of Icelandic type), the letter "Thorn," which in appearance closely resembles a P, has been represented by *Th*. It should be noted that the *d* in *Videy* is also a letter not included in our alphabet and is pronounced "dth."

† The statement that the eggs are white in the *Manual* (p. 16) must be due to a slip of the pen: they are of course a rather deep blue.

rather conspicuous in this barren country, and their sweet song was an agreeable surprise, for the Buntings are not remarkable for musical talent. Slater seems to understate the number of eggs laid, for the average clutch is apparently six, while seven occur not infrequently, and eight have been recorded.

The only Pipit which is known at present to breed in Iceland is the Meadow-Pipit (*Anthus pratensis* (L.)). It is quite one of the commonest birds, breeding in holes in the sides of the big hummocks covered with turf or ling, into which the ground is broken by the action of rain and melting snow, so that the nest is quite sheltered from above. It lays not four to five eggs, as stated by Slater, but five or six and occasionally seven, which vary extraordinarily in colour and markings. Where there was much birch-scrub these birds were frequently to be seen perched in the bushes, looking more like Warblers than Pipits. I have often noticed that the Meadow-Pipits, which pass through Derbyshire on migration in the spring, are much more arboreal in their habits than our resident or partly-resident birds, and it seems possible that they may be Icelandic birds on their way north. White Wagtails (*Motacilla alba alba* L.) replace our Pied Wagtail, breeding in the loose walls of the sheep-folds and under boulders, and laying five to seven (not four or five) eggs, but do not appear to be plentiful. The characteristic Thrush of the island is the Redwing (*Turdus musicus* L.), which is found wherever there is any growth of scrub, though in most places it has been recklessly cut down and destroyed. It is quite common in the birch-woods by the Sog River, and four or five males were singing from all the most prominent points on the vast wall of rock which borders the road up from Thingvellir through the Almanns Rift towards Reykjavik. While scrambling among the broken rocks beyond the Rift, we put a Redwing out from a crevasse partly blocked by fallen lava blocks, and were surprised to find a nest in a

kind of hollow chamber down among the rocks some five or six feet below the level of the ground outside, and completely covered in above. It seemed a curious place for a Redwing to nest in, but there was very little in the way of scrub to attract it here. The Wheatear



THE ALMANN'S RIFT: NESTING-SITE OF REDWING.

(Photographed by Johnson Wilkinson.)

is very generally distributed, and in some of the lava-strewn districts is the only common small bird. The single specimen I was able to handle had a wing of over 100 mm., and certainly belonged to the Greenland race

(*Enanthe a. leucorrhœa* (Gm.)), but breeding birds collected by Hantzsch had wings varying in length from 95.5 to 98 mm., though in other respects typical *leucorrhœa*. So far from laying five eggs more commonly than six, and sometimes four only (*Manual*, p. 4), three nests which I saw contained nine, seven and eight eggs respectively, and Mr. G. H. Lings also obtained a clutch of nine eggs. We saw nothing of the rare Iceland Wren (*Troglodytes t. islandicus* Hart.), but the Museum at Reykjavik contained two recently-obtained specimens, one dated "Reykjavik, XII. 02," and the other 24.II.12., and quite a number are said to have been shot lately by a native collector. A fine Iceland Falcon (*Falco rusticolus islandus* Brünn.), showing a good deal of white in its plumage, was soaring round the tops of a mountain-range in Grimsnes, but there is no breeding-place near at hand. The Merlin (*Falco r. regulus* Pall.) is thinly distributed, and we obtained a couple of nests in which incubation was already somewhat advanced at the beginning of June.*

As a breeding species the Whooper (*Cygnus cygnus* (L.)) was new to us both, and we were glad to find that it is still by no means uncommon. On some large, flat grassy islands in the middle of a river we found two or three pairs nesting, together with a large colony of Great Black-backed Gulls. Many remains of old swans' nests could be distinguished in the rank grass. Subsequently we met with two other pairs breeding on islands, one of which had practically fresh eggs on June 8th, while the other had hatched off her brood by June 9th. A fifth pair, which had probably already been robbed, was apparently settling down to nest in a marsh about the same time. In addition to the rather goose-like

* Only one pair of Sea-Eagles (*Haliaëtus albicollis*) was met with, which had an eyrie in a range of crags at the foot of a big lake. Unfortunately they received the attentions of an enthusiastic "bird watcher," with the result, as we are informed by letter from Iceland, that the unfortunate bird deserted her nest and highly-incubated eggs, so that no young were reared this year.

alarm-note, which is uttered by both sexes, in rather different tones, the male has a little song of about seven notes, which he utters in rather a low tone, and is by no means unpleasing. So far I have failed to find any reference to it in the literature on the subject.

As there is much difference of opinion with regard to the species of Geese which breed in Iceland, we watched every bird which we came across with great care, and came to the conclusion that they were all Grey Lags (*Anser anser* L.) One bird had a nest on a rocky islet in a river, and at least two other pairs had nests with eggs on another island not far away, while we flushed other birds from marshy moorland where they were no doubt breeding, but failed to find any other nests. Two of the nests above referred to contained three eggs and one egg respectively, but as they were on the point of hatching there is little doubt that the farmer had removed the eggs as laid, for the purpose of food, earlier in the season.

Of the ducks the ordinary Mallard (*Anas p. platyrhyncha* L.) was common. Teal (*A. c. crecca* L.) were seen several times, while Scaup (*Nyroca m. marila* (L.)) were generally to be seen on the larger pieces of water, and a party of Barrow's Goldeneye drakes (*N. islandica*) was seen. We also found Long-tailed Duck (*Clangula hyemalis* (L.)) breeding on islets together with the Scaup. We captured one duck on her nest well in among some boulders on an islet in a river, and found her to be a female Red-breasted Merganser (*Mergus serrator* L.). The nine eggs on which she was sitting were typical Merganser eggs, but the down, of which there was a plentiful supply, was the well-known white down of the Goldeneye! Close examination showed that the down was that of the previous year from which a brood had been hatched off, but the Merganser had not added a particle of her own down, but was quite contented with that provided for her. As the fact is not generally known, and the bird is not mentioned in Slater's *Manual*,

it may be advisable to mention that for some time past the Tufted Duck has bred in north Iceland, and that it was first noticed there in 1895, and probably bred the following year, while more recently a duck was shot from a nest with eggs in the Myvatn district (G. H. Lings), and eggs have also been taken regularly there since 1907. The Goosander (*Mergus m. merganser* L.) was not common, and only one old drake was seen. The south-west of Iceland is not a particularly good district for ducks, with perhaps the exception of the Harlequin (*Histrionicus histrionicus* (L.)), which is extremely common in the rapid-flowing parts of the larger rivers which do not take their rise in glaciers, and in consequence are rich in fish and insect-life. The islets on which they build are, however, exceedingly difficult of access. On one small bushy island in particular some twenty pairs must have been breeding, but a big fall above and another below made the use of a boat almost impossible, and wading or swimming in such a torrent was out of the question.

The Eider Duck (*Somateria m. mollissima* (L.)) is stringently protected by law, and in consequence is plentiful and tame. Most of the colonies are on islets in the fjords, but one which we visited was on two islets in a large river, about ten or eleven kilometres from the sea. Most of the birds here were very tame, and one old duck allowed herself to be stroked by the whole party in succession without stirring from her nest. It was very interesting to notice the extraordinary amount of variation in the plumage of the ducks, some being exceedingly dark and others just as light in colour. One duck was a semi-albino; she had a white head and a good deal of white about her plumage generally, so that on the wing she might have passed for an abnormally-coloured drake. Some of the nests were placed very close together. In one case we saw a clump of six or seven nests under the shelter of a dwarfed but spreading *Salix lanata*, less than a foot apart from one another. The eggs also showed

some variation, as did also the down, but the most remarkable clutch we saw was a set of four eggs in the Reykjavik Museum, which were deep blue in colour, like those of the Glossy Ibis.

Many Gannets (*Sula bassana* (L.)) were seen at sea off Reykjanes, and a colony is said to exist on Eldey. Iron stanchions have now been fixed in the rock, so that the eggs can be collected by fishermen from the Vestmannaeyjar, where there is also a colony. On the latter islands there is also a breeding-station of Fork-tailed Petrels (*Oceanodroma leucorhoa* (Vieill.)), the existence of which was unknown at the time Slater's *Manual* was published, but time prevented us from reaching it. We did however visit the cliffs where the Fulmars (*Fulmarus g. glacialis* (L.)) breed in thousands. One grassy bluff standing back some distance from the water was not difficult of access, and here we managed to obtain several eggs. Practically the whole of the way from the Orkneys to Reykjavik we were accompanied by, or in sight of, these birds, whose tireless gliding flight just over the crests of the waves was the main feature of the voyage.

The only Grebe which breeds in Iceland is the Slavonian (*Colymbus auritus* (L.)), which is plentiful on the marshlands near the south coast, a pair being met with on every pond of any size.* Great Northern Divers (*Gavia immer* (Brünn.)) cannot be called common, but there is pretty certain to be a pair on each lake, and on the large ones, such as Thingvallavatn, there are at least two pairs. The nest is a typical Loon's nest—the turf flattened out by the weight of the bird, and with a very decided track where she shovels her way on to the nest on her breast and slides back again by it into the water. Red-throated Divers (*G. stellata* (Pont.)) were extremely plentiful in one locality, the nests being sometimes not more than twenty yards apart. There could not have been fewer than about sixteen pairs breeding in this group of islands,

* Here again Slater gives the number of eggs as two to four, whereas the typical clutch is four or five, sometimes six.

but as the nests are found without the slightest difficulty and are regularly taken, it is probable that few succeed in rearing young till the second or third attempt. It is a fine sight to see a little fleet of half a dozen of these handsome birds sailing about together, while others fly overhead in pairs, uttering their weird notes.

Oyster-catchers were found breeding by the sides of the main streams in fair numbers, and Ringed Plovers were also not uncommon on sandy and barren spots at considerable distances inland. Golden Plover (*Charadrius aprivarius* (L.)) were extraordinarily plentiful and their warning whistle was continually in our ears. Most of the nests we found were in cup-shaped hollows, which enabled us to approach the bird without being seen. In such cases the sitting bird, not having been warned by its mate, flew direct from the eggs after a few steps. Dunlin (*Erolia a. alpina* (L.)) were not uncommon, but the nests are not easy to find, and in some cases the young were already hatched. The Purple Sandpiper (*E. m. maritima* (Brünn.)) was only met with once, on the barren heath between Reykjavik and Thingvellir, and was extraordinarily tame even for an Iceland bird, allowing us to dismount and examine it from two yards distance. Red-hank (*Tringa totanus* (L.)) were quite common, but chiefly confined to the lower ground. The Grey Phalarope (*Phalaropus fulicarius* (L.)) still manages to survive as a breeding species in the south, but is of course much more numerous in the north of the island. We met with one breeding pair within a few hundred yards of the shore, to which they resorted to feed. Red-necked Phalaropes (*P. lobatus* (L.)) were plentiful and widely distributed wherever there were pools and marshes. It is pretty to see them floating lightly in the eddies of some great river which thunders along as though it would sweep everything to destruction, while these delicate little birds feed in the most unconcerned manner, picking up flies even while they are whirled about by the current. The first eggs were found on June 6th.

Black-tailed Godwits (*Limosa limosa* (L.)) are decidedly local birds in Iceland, and though by no means uncommon in the district which we worked, are not known to breed in any other part. By a slip of the pen, Slater describes this district as lying in the south-east of the country, although it is more correctly described as the south-west. Whimbrel (*Numenius p. phaeopus* (L.)) are to be met with almost everywhere. In fact they are so plentiful that the difficulty of finding the nests is materially increased, for one cannot sit down to watch a pair without disturbing others. The eggs are not nearly so conspicuous as might be supposed for their size. Snipe (*Gallinago g. gallinago* (L.)) are also common in the wet moorlands. Most of them had already young, and the anxious "chik, chik" of the parent birds was continually heard.

Only one species of Tern, the Arctic (*Sterna paradisæa* Brünn.) is known to breed in Iceland. Some of the colonies are of considerable size, and in Videy they may be found breeding among the Eider Ducks. The Reykjavik Museum contains a fine example of the true "red" type of the egg of this species—the only one I have seen. On the night of June 8th, I noticed that up to 1 a.m. the Arctic Terns were hawking away as eagerly as by day.

Only three species of the true gulls were met with: the Kittiwake (*Rissa t. tridactyla* (L.)), which was breeding in enormous numbers on the Vestmanneyjar; the Glaucous (*L. glaucus* Brünn.), which was also seen on the Vestmams as well as at several points on the east coast, and the Great Black-backed (*L. marinus* (L.)). The last named nests in colonies on the islands in the rivers and lakes. From one colony in a river nearly 200 eggs had been taken by the owner, and we obtained a pretty pair of light-blue eggs with one or two grey-violet markings. There is however a much larger colony on an island in a lake from which over 1,200 eggs had been taken for eating purposes! Great Skuas (*Stercorarius s. skua* (Brünn.)) still breed in large numbers on the flat lava plains and islands near the mouths of the great rivers east of Eyrarbakki,

but the colonies are difficult of access. From the steamer one can see them coming off by dozens even before reaching the Vestmann Isles, each bird hunting singly as a rule, and attaching itself to the Arctic Terns and Kittiwakes. Sometimes two would join together in the

chase, and once we saw a Richardson's and a Great Skua in joint pursuit of a Kittiwake, but the Great Skua monopolized the plunder when the chase was over. The steady flapping flight, generally low down, was not at first impressive, but it was wonderful to see the quickness with which every turn and twist of the gull or tern was followed when once the Skua started in pursuit. Unlike the Fulmars and



NEST OF GREAT SKUA.

(*Photographed by Johnson Wilkinson.*)

Shearwaters, the Skua rarely glides, and then only for short periods: it keeps up a steady and tolerably quick wing-beat nearly all the time. Formerly there was a flourishing colony of these birds on the river Ölfusa, but it is now reduced to a couple of pairs. While watching a pair of these birds make their

“charge” in turn, we noticed that every attack was delivered from the same direction, whether we faced them or turned our backs, and it soon became evident that the regulating factor was really the direction of the wind, the birds preferring to charge against it. The Arctic or Richardson’s Skua (*S. parasiticus* (L.)) shows no tendency to breed in colonies, but isolated pairs are to be met with in many boggy places among the hills. Both light and dark breasted birds were met with.

Guillemots, Razor-bills and Puffins were breeding in vast numbers on the Vestmann Islands. Hantzsch ascribed the Iceland-breeding Puffins to the northern form (*Fratercula arctica glacialis* Steph.), but his view is not accepted by Le Roi and other writers. It is however noticeable that a couple of eggs which we found on the cliffs in the Vestmann Islands can be picked out at a glance from a series of British-taken eggs, by their superior size. Of the Icelandic Ptarmigan (*Lagopus rupestris islandorum* (Faber)) we saw next to nothing, but the birds are undoubtedly common on the hills, and large numbers are killed in the winter months.

In the Museum at Reykjavik we saw a Bittern shot at Fljutshlid in 1904, and received through Herra Nielsén. It was labelled *B. stellaris*, but looked much more like *B. lentiginosus*. Neither species has been recorded from the island previously. Herra Nielsén, to whom our thanks are due for much kindness and hospitality, informed us that he was preparing a revised list of the Birds of Iceland for publication in the *Dansk Ornith. Foren. Tidsskrift*, in which this and other rarities will be duly recorded.

For permission to reproduce the photographs with which this paper is illustrated, I have to thank my friends Mr. C. H. Wells and Mr. J. Wilkinson, who kindly placed them at my disposal.

WILLIAM BERNHARD TEGETMEIER.

BY

F. W. SMALLEY.

AT Golder's Green, on November 19th, 1912, there passed away, at the great age of ninety-six, that well-known naturalist, breeder, exhibitor, judge, author and journalist, William Bernhard Tegetmeier. Born at the small village of Colnbrook in Buckinghamshire, on November 4th, 1816, a son of a surgeon in the Navy, Tegetmeier originally intended following his father's profession; and with this object in view passed the necessary examinations in medicine and surgery at University College, London; indeed, for a time, he became a practising surgeon, but the call of Nature became too strong for him, with the result that he threw himself whole-heartedly into the work of a naturalist and journalist. By so doing he proved, during the rest of his long life, of the greatest service to all breeders of poultry and pigeons and exhibition-stock generally, and to such his name will go down to future generations as one of the few men to whom the huge industry of breeding poultry and pigeons for exhibition and utility purposes owes its origin.

Pigeons always held chief place in Tegetmeier's heart, his two favourite groups being dragoons and racing homers, varieties which, in no small measure, owe the high position they hold to-day to his early efforts on their behalf, and in connexion with the last-named, he made the acquaintance of the best fanciers in the home of the *Pigeon Voyageur*—Belgium—and was the first to inaugurate "pigeon races" from Brussels to London.

Turning to Tegetmeier's literary work, foremost comes his book, published in 1868, entitled *Pigeons: their Structure, Varieties, Habits, and Management*, a masterly work on the different breeds as they existed then, and illustrated in colours by the late Harrison Weir, himself a well-known fancier. About the same time he brought



WILLIAM BERNHARD TEGETMEIER.

(Photographed by Messrs. Parker.)

out another book dealing with pigeons, entitled *Homing Pigeons*, which is still held in great esteem: there are also two other well thought-out works—namely, *Breeding for Colour*, and *Physiology of Breeding*, long since out of print and now very scarce and valuable.

In 1873, Tegetmeier published his book on *Poultry*, which was again illustrated by the same artist-fancier as was his “Pigeon” book: a work widely read. In connexion with the breeding of poultry he was always strongly advocating the necessity of combining “exhibition” and “utility” properties in each individual bird, for he was no believer in “fancy” points alone, and this led up to *Poultry for the Table and Market*, published in 1893, a book which did infinite good. In co-operation with Sir Walter Gilbey, he was instrumental in forming the “Table Poultry” section at the Dairy Show, London, and it must always be remembered that it is to Tegetmeier and his great friends—F. Esquilant, Parkin, H. Jones and Charles Howard, so well known in the past in the pigeon-world—that we owe the institution of what has now, for a generation past, become acknowledged as the greatest exhibition of poultry and pigeons in the world, namely the “Grand International Show” held at the Crystal Palace.

Perhaps the best known of all Tegetmeier’s works is that entitled *Pheasants: their Natural History and Practical Management*, a book widely read and much appreciated and to which must be attributed the present-day industry—I can call it by no other name—of rearing game-birds for shooting purposes.

When the Willughby Society was formed by some members of the British Ornithologists’ Union, he undertook the duties of general editor; he also edited the fourth edition of Morris’s *Nests and Eggs of British Birds* and a new (fifth) edition of Beverley Morris’s *Game Birds and Wildfowl*. On the invasion of these Islands by Pallas’s Sand-Grouse, in 1888, he published a pamphlet giving some account of this bird and of its “history,

habits, food, and migrations, with hints as to its utility and a plea for its preservation," which however appeared too late to prevent the extermination of the flocks which visited us.

In 1895, in collaboration with the late Charles Sutherland, he published *Horses, Asses, Zebras, Mules, and Mule Breeding*, with a special view to the uses of mules for Army Transport. In 1890, he contributed an article to the *Ibis* on the principal breeds of domestic poultry, and in 1889 he published a little book on the *House Sparrow*, with special reference to the food of this bird, from observations made by Miss Eleanor Ormerod.

Special mention should be made of the fact that for over fifty years Tegetmeier was editor of the "Poultry and Pigeon" department of the *Field*, and of his wonderful journalistic record of having contributed a leader for nearly twelve hundred consecutive weeks to the *Queen* newspaper.

The above record of Tegetmeier's literary work must in no way be taken as a comprehensive list of the many articles and books which emanated from his pen, but merely as a guide to show how varied was the field of his activities.

I have purposely refrained, until the close, from alluding to what must, I think, ever remain the most lasting memento to his name—I refer to his connexion with Darwin and the latter's work. It is interesting to note that he was first introduced to Darwin by that great ornithologist Yarrell, an introduction which led to his rendering Darwin invaluable aid in the preparation of his *Variation of Animals and Plants under Domestication* such aid including, besides numerous breeding-experiments, the tabulation of the births of race-horses, covering a period of twenty-one years and taken from the *Racing Calendar*, and a similar tabulation of the births of greyhounds for a period of twelve years from the records in the *Field*. Tegetmeier had over one hundred and sixty letters from Darwin in connexion with the subject in

which both were so deeply interested, and to the end of his life he closely followed the development of the theory of evolution. That Darwin fully appreciated the help rendered is amply proved in the pages of the *Life and Letters of Charles Darwin*, and Tegetmeier was not unnaturally proud of the fact that the help he had been the means of giving should have been appreciated in such a way.

Tegetmeier was at the time of his death the oldest living member of the Savage Club, of which he was one of the founders.

Although of a reserved temperament—almost frigid at times—which rather tended to keep him aloof from the general run of fanciers, Tegetmeier will be remembered as a man possessed not only of extensive knowledge and acute judgment, but of a transparent honesty and sincerity of purpose in all he did; and it will only be now, after he has passed away, that his great loss will be appreciated to the full. He has left a name behind him as spotless as it was great—a name that will ever be revered and held in the highest esteem by one and all.

RECOVERY OF MARKED BIRDS.

THE following have kindly sent in subscriptions towards the expenses of the Marking Scheme since the last acknowledgment was made: Messrs. R. M. Barrington, A. R. Haig Brown, C. T. Cobbold, T. A. Coward, C. Collier, Miss M. Garnett, Messrs. J. R. B. Masefield, M. Portal, and the Hon. N. C. Rothschild. H.F.W.

- BLACK-HEADED GULLS (*Larus ridibundus*).—B.B., No. 26802, marked by Mr. H. W. Robinson at Ravenglass, Cumberland, on June 6th, 1912, as a nestling. Recovered near Wisbech, Cambridgeshire, on November 29th, 1912. Reported by Mr. S. Bingham.
- B.B., No. 27096, marked as No. 26802 on June 8th, 1912. Recovered at Bulk, Lancaster, on November 7th, 1912. Reported by Mr. R. Whiteside.
- B.B., No. 27884, marked as No. 26802 on June 15th, 1912. Recovered at Les Sables d'Olonne, Vendée, France, on November 14th, 1912. Reported by M. C. Madras.
- B.B., No. 27953, marked as No. 26802 on June 17th, 1912. Recovered four miles west of Newcastle-on-Tyne, Northumberland, on September 26th, 1912. Reported by Mr. J. Brown.
- B.B., No. 28915, marked as No. 26802 on June 18th, 1912. Recovered at Monkseaton, Northumberland, on November 30th, 1912. Reported by Mr. J. W. Dawson.
- B.B., No. 28971, marked as No. 26802 on June 19th, 1912. Recovered at Eccles, Norfolk, on August 30th, 1912. Reported by Mr. H. Welch.
- B.B., No. 29075, marked as No. 26802 on June 19th, 1912. Recovered at Walney Island, Lancashire, on August 20th, 1912. Reported by Mr. H. G. Sanders.
- B.B., No. 28959, marked as No. 26802, on June 19th, 1912. Recovered at Ulverston, Lancashire, on August 10th, 1912. Reported by Mr. D. H. Lord.
- B.B., No. 29104, marked as No. 26802 on June 19th, 1912. Recovered at Ferryside, north Carmarthen, on August 29th, 1912. Reported by Mr. F. Sharp.
- B.B., No. 27462, marked by Mr. F. W. Smalley at Ravenglass, Cumberland, on June 8th, 1912, as a nestling. Recovered at Urswick, near Ulverston, Lancashire, on August 16th, 1912. Reported by the Rev. T. N. Postlethwaite.
- B.B., No. 27401, marked as No. 27462. Recovered at Freckleton Marsh, Lancashire, on August 19th, 1912. Reported by Mr. F. Radcliffe.

B.B., No. 27483, marked as No. 27462. Recovered at Boardmills, near Lisburn, co. Down, on September 28th, 1912. Reported by Mr. J. Dunn.

B.B., No. 23987, marked as No. 27462 on June 12th, 1911. Recovered at Millom, Cumberland, on November 19th, 1912. Reported by Mr. J. Crolling.

B.B., No. 28853, marked as No. 27462 on June 17th, 1912. Recovered at Wisbech, Cambridgeshire, on November 12th, 1912. Reported by Mr. J. Halifax.

B.B., No. 28861, marked as No. 27462, on June 17th, 1912. Recovered on Upton Moors, near Poole, Dorsetshire, on September 26th, 1912. Reported by Mr. R. Padley.

B.B., No. 28988, marked as No. 27642 on June 17th, 1912. Recovered at Skinningrove, Yorkshire, on October 3rd, 1912. Reported by Mr. F. Appleby.

B.B., No. 28825, marked as No. 27642 on June 17th, 1912. Recovered at Morecambe, Lancashire, on September 14th, 1912. Reported in *Cage Birds*.

B.B., No. 22992, marked by Mr. J. S. T. Walton at Denton Fell, Cumberland, on June 11th, 1911, as a nestling. Recovered at Point de Brévauds, Grandcamp les Bains, Calvados, France, on October 2nd, 1912. Reported by M. J. Lavocat.

B.B., No. 26239, marked by Mr. T. C. Hobbs at Hallington Reservoirs, Northumberland, on June 17th, 1912, as a fledgling. Recovered at Middlesbrough, Yorkshire, on August 17th, 1912. Reported by Mr. W. Davies.

B.B., No. 26227, marked as No. 26239. Recovered on Claydon Race Course, co. Durham, on September 14th, 1912. Reported by Mr. R. Cameron.

B.B., No. 26245, marked as No. 26239. Recovered at North Shields, Northumberland, on October 1st, 1912. Reported by Mr. J. W. Moore.

B.B., No. 26276, marked as No. 26239. Recovered on the River Tees on September 4th, 1912. Reported by the *Shooting Times*.

B.B., No. 29246, marked by Mr. A. W. Boyd at Delamere Forest, Cheshire, on June 13th, 1912. Recovered at Brindle, near Chorley, Lancashire, on August 20th, 1912. Reported by Mr. R. Grime.

COMMON GULL (*Larus c. canus*).—B.B., No. 22008, marked by the late W. I. Beaumont at Dunstaffnage Isle, Loch Etive, Argyllshire, on June 26th, 1911, as a nestling. Recovered at Castlebellingham, co. Louth, on November 29th, 1912. Reported by Mr. P. Callan.

HERRING-GULLS (*Larus a. argentatus*).—B.B., No. 31705, marked by Miss A. C. Jackson, near Wick, Caitliness, on July 4th, 1912, as a nestling. Recovered at Sangatte, near Calais, France, on September 17th, 1912. Reported by M. E. Mareq.

B.B., No. 9119, marked by Miss A. C. Jackson at North Sutor, Cromarty, Ross-shire, on June 24th, 1912, as a nestling. Recovered at Hartwood, Lanarkshire, about October 1st, 1912. Reported by Mr. W. P. Turnbull.

LESSER BLACK-BACKED GULLS (*Larus f. britannicus*).—B.B., No. 31368, marked by Mr. H. W. Robinson at Foulshaw, Westmorland, on July 4th, 1912, as a nestling. Recovered at Arneliffe, near Skipton, Yorkshire, on August 15th, 1912. Reported by Mr. A. Pullan.

B.B., No. 31481, marked as No. 31368. Recovered at Blackpool, Lancashire, on August 28th, 1912. Reported by Mr. A. J. Brown.

B.B., No. 31492, marked as No. 31368. Recovered on Walney Island, Lancashire, on August 29th, 1912. Reported by Mr. A. S. Howarth.

B.B., No. 31379, marked as No. 31368. Recovered at Chateillon, Charente Inferieure, at the end of August or beginning of September, 1912. Reported by M. E. M. Corbineau.

MALLARD (*Anas p. platyrhyncha*).—B.B., No. 32322, marked by Miss A. C. Jackson at Swordale, Evanton, Rosshire, on June 8th, 1912, as a nestling. Recovered at Loch Glass, Ross-shire, on November 11th, 1912. Reported by Mr. A. McDonald.

B.B., No. 50115, marked by Mr. F. W. Smalley at Silverdale, near Carnforth, Lancashire, on July 4th, 1912, as a nestling. Recovered in Morecambe Bay, Lancashire, on November 30th, 1912. Reported by Mr. E. Sharpe.

WOODCOCK (*Scopolax rusticola*).—B.B., No. 17541, marked by Mr. Davison per Mr. Portal, near Carlisle, Cumberland, on May 1st, 1912, as a nestling. Recovered at Carane, near Clarendon, co. Mayo, on November 29th, 1912. Reported by Mr. E. Prendergast.

B.B., No. 15602, marked by Mr. C. Boiston per Mr. Portal at Dilston, Northumberland, on June 11th, 1912, as a nestling. Recovered at Dipton Wood, five miles south-east of Hexham, Northumberland, on November 23rd, 1912. Reported by Mr. F. T. Maling.

NOTES

EARLY NESTING OF LESSER REDPOLL AND GOLDFINCH.

AMPLIFYING Mr. Riviere's note (*supra*, p. 218) on the early breeding of the Lesser Redpoll in East Anglia, I might say that my own experience endorses Mr. Jourdain's opinion as expressed in his footnote.

I was anxious to obtain a few clutches of eggs for my collection in 1912, and accordingly kept a sharp look out for Redpolls' nests when collecting in the west of Suffolk during the early part of May. On referring to my notes I find that on May 7th I saw two nests containing young birds, and one with five fresh eggs.

I am not aware that it has been noticed that the interior of the mouth in the Lesser Redpoll nestling, is bright red in colour, and contains little "palatal flesh-teeth" like those of the Bearded Tit (*cf.* Vol. II., p. 58).

An unusually early nesting-date for the Goldfinch (*Carduelis c. britannica*) also came under my notice in the same locality. Mr. Montagu and I saw a nest containing three eggs on April 13th, 1912.

CLIFFORD BORRER.

EASTERN SKY-LARK IN IRELAND.

DR. E. HARTERT has most kindly examined for me some Sky-Larks obtained from Irish Light stations, and has detected amongst them a specimen of *Alauda arvensis cinerca*. This bird was killed striking at the Old Head of Kinsale Lighthouse, co. Cork, on October 7th, 1910. The only other British record of the Eastern Sky-Lark is the specimen obtained at the Flannan Islands Lighthouse on February 24th, 1906 (W. Eagle Clarke, *Ann. Scot. Nat. Hist.*, 1906, p. 139), which, by the way, is not indexed in that volume.

RICHARD M. BARRINGTON.

NUMBERS OF YOUNG IN BROODS OF SWALLOWS AND HOUSE-MARTINS IN 1912.

ALTHOUGH I have not been marking many Swallows (*Chelidon r. rustica*) during the past summer, perhaps it may be of interest to state the number in each brood as I have done in previous years (*cf.* Vol. IV., p. 249, and Vol. V., p. 135).

In June seven nests were visited of which four contained five young, one four, one three and the seventh two only.

In July, of six nests three contained five young, two four, and one only a single nestling. In August, of five nests one contained five young, three four, and one three, whilst two nests visited in September contained three apiece. Comparing 1912 with the three previous years shows the following for north Lancashire:—

	<i>Nests.</i>	<i>Broods of Six.</i>		<i>Broods of Five.</i>		<i>Average Broods.</i>	
1912	20	...	none	...	8	40%	3.95
1911	60	...	3	...	24	45%	4.4
1910	45	...	none	...	15	33%	3.89
1909	11	...	none	...	0	0%	3.27

Although there seemed to be a slight increase in the number of nests of House-Martins (*Hirundo u. urbica*) as compared with 1911, the average brood was 2.5 as compared with 3.22 in 1911, 3.25 in 1910, and 2.25 in 1909.

H. W. ROBINSON.

LATE SWIFTS.

A SWIFT (*Apus a. apus*) was seen flying about at Shrewsbury on November 2nd, 7th and 9th, 1912, and two on the 5th. The single bird was seen by a number of people, several of whom are capable ornithologists, so that there is no possibility of error as to the species. The occurrence is the more remarkable since the bulk of the local Swifts left about the last week of August, and I have no records at all throughout September and October, 1912.

H. E. FORREST.

[A Swift in November anywhere in the British Isles is a rare occurrence, and although the birds above recorded were doubtless passage-migrants from further north, it must be remarked that Swifts stayed rather later than usual in many localities this year. Mr. H. W. Robinson writes us that he saw a good many in Lancashire on September 11th; Mr. W. Evans noticed them in Edinburgh up to the same date (*Scot. Nat.*, 1912, p. 260); Mr. Nevin H. Foster records (*Irish Nat.*, 1912, p. 246) that one was still present at Hillsborough, co. Down, Ireland, up to September 12th, and he was told of a small party having been seen at Belfast up to September 11th. One was seen on September 29th and 30th at Cullen, Banffshire, by Miss J. Gowan (*Scot. Nat.*, 1912, p. 278). One was reported in the *Field* (9.XI.12, p. 958) by Mr. L. J. Winter-Joyner as having been seen flying over Ealing on October 31st, and there have been other notes on the subject. In the Dove Valley, Derbyshire, two were seen by Mr. J. Henderson on September 5th, and the Rev. F. Jourdain saw one at Scarborough on September 3rd.—EDS.]

GLOSSY IBISES IN NORFOLK.

THE unfortunate Glossy Ibises seem to have had a bad time of it in Essex (*cf. supra*, p. 223), and I am sorry to say they fared no better in Norfolk, two having been shot, one at Fleggburgh on November 1st, and one at Burgh Castle on December 2nd, 1912. They were forwarded for preservation to Mr. E. C. Saunders, from whom I learn that one of them, a male, is a very large bird. There seems to be a great difference in size, which I noticed in the sexes of those collected by Mr. Gerard Gurney in East Africa. J. H. GURNEY.

[A Glossy Ibis was recorded by "B" in *Country Life* of October 26th as having been shot "last week in the neighbourhood of Balsham, Cambridgeshire." Although no exact particulars are forthcoming and anonymous records are of little value, this may be mentioned for what it may be worth. Mr. Miller Christy has kindly pointed out this record, and informs us that Balsham is on the northern border of Essex and only some forty miles west-north-west from Walton where the other Glossy Ibises were shot.—EDS.]

SALE OF A GREAT AUK'S EGG.

At the dispersal by auction of the first portion of Major F. W. Proctor's collection of eggs of western Palearctic birds, which took place at J. C. Stevens's Rooms, King Street, Covent Garden, on Thursday, November 21st, 1912, the sale-catalogue (No. 12-248) contained a slip of pink paper, and on it an announcement of the sale of an egg of the Great Auk (*Alca impennis*) in the following words: "This beautifully marked egg, the very finest of its type, formed part of a Natural History Collection which was the property of Mr. W. Sheppard of Bristol, in 1807, and was purchased by Mr. Shirley of Ettington, about 1820." The egg did not come on for sale till about 4 p.m., when the bidding started at 150 guineas, advancing gradually to 220 guineas, at which sum it was knocked down to the firm of Rowland Ward, Ltd., of Piccadilly, London. *The Field*, of November 23rd, records the price given as 230 guineas. I was present at the sale, and felt sure that the lower sum which I marked off in my sale-catalogue was correct, and on writing to Messrs. J. C. Stevens, I was informed that 220 guineas was the amount paid for the egg. Thinking that a full history, so far as is known, of this finely marked egg may be interesting to the readers of BRITISH BIRDS, I give an extract from pp. 28 and 29 of my pamphlet on *The Great Auk, a Record of Sales of Birds and Eggs by Public Auction in Great Britain, 1806-1910*.

EGG XXIV. (Sale number twenty-six.)

An egg of the Great Auk, on June 7th, 1910.

Described in the sale catalogue No. 11,820 as a "beautifully marked egg."

Egg XXIV. - "Lot A. The property of Mr. Evelyn Shirley. EGG OF THE GREAT AUK. This beautifully marked egg, the very finest of its type, formed part of a Natural History collection, which was the property of Mr. W. Sheppard, of Bristol, in 1807, and was purchased by Mr. Shirley, of Ettington, about 1820."

Bought by Mr. E. L. Armbricht, of Duke Street,
Grosvenor Square, London, for £262 10 0

Mr. Symington Grieve, in his Supplementary Note (Trans. Edin. Field Nat. and Micro. Soc., Vol. III., 1896-7) wrote on page 263:—*Stratford-on-Avon: Ettington Park, Mr. S. E. Shirley.*—This egg is said to have been formerly in a large collection of natural history specimens belonging to Mr. Shepherd, of Bristol, and, having been labelled as the egg of a penguin, remained unnoticed for some eighty years. Writing to me on 18th December, 1896, Mr. S. E. Shirley says: "My egg has been here many years, and is believed to have formed part of a large collection of birds, eggs, heads, feet, etc., bought by my grandfather early this century, but the catalogue of the collection marked "Catalogue of the Collection 6 of W. Shepherd, Bristol, 1807," does not include the Great Auk egg: but it is badly done and other eggs are also omitted. The egg is a very fine one, boldly and richly marked, and of good size, quite perfect, with the exception that it is blown with a rather large hole. I fear this is all I can tell you about it. It was originally in a small cardboard case with a glass lid, and was stuck to the back of the case in quite the primitive style of egg-collectors."

A photograph of this egg was taken by Mr. Bidwell, in July, 1891, when at Ettington, and he also exhibited the egg at a meeting of the British Ornithologists' Club, on 25th May, 1910, when it was described in the Bulletin of the Society (No. CLXI., p. 115) as "one of the finest zoned specimens richly streaked with black" and "the property of Mr. Evelyn Shirley."

The frontispiece of my pamphlet consists of a picture of the great auction-room at 38, King Street, Covent Garden, London, while Mr. Henry Stevens was selling this egg on June 7th, 1910.

THOMAS PARKIN.

COURTSHIP OF THE REDSHANK.—In the *Proceedings of the Zoological Society* (1912, pp. 647-55) Mr. Julian S. Huxley has an interesting and well arranged paper on this subject. He first gives a very clear account of the course of courtship and pairing, as observed by him, from which it is perfectly clear that there is a very marked display by the male and an equally marked power of choice by the female Redshank. The love-flight, the combats of the males, and the habit

of calling from a conspicuous perch, are then briefly referred to and the paper closes with an interesting discussion on the courtship proper, and its bearing on evolution. The author mentions that further watching is required to elucidate the following points :—

1. How often does each bird go through the act of pairing ?
2. Is pairing promiscuous, or do birds pair for the season, or for life ?
3. What is the relation between pairing and nest-building, and between pairing and each act of oviposition ?
4. When does pairing begin in the spring, and for how long is it continued ?
5. What is the relation of the love-flight, the combats, and the calling from a perch, to the courtship proper ?
6. Does the female, which possesses all the structures used by the male in his display, ever use them herself for "showing off," or for any other purpose (recognition signals, etc.) ?

BAILLON'S CRAKE IN YORKSHIRE.—Mr. J. M. Charlton records (*Field*, 9.XI.12, p. 958) that he shot an immature female *Porzana p. intermedia* "early in October" 1912, in the east riding of Yorkshire. This appears to be the fourth record for the county.



REVIEWS

Snowden Sights, Wildfowler. By Sydney H. Smith. Crown Svo., 117 pp. and nearly 50 Plates from Photographs by the author. (York: T. A. J. Waddington.) 3s. 6d.

IN his preface, the author states that his principal object in writing this book has been to give a brief sketch of the life and work of that fine old character, Snowden Sights, of East Cottingwith, well known as the "Last of the Yorkshire Wildfowlers." As the author for two-thirds of his life has known his subject intimately, he is naturally in a position to describe his qualities, character and craft, and to relate his varied experiences in a sympathetic manner. In this the author has been undoubtedly successful, and has thus produced an eminently readable little book which all naturalists—sportsmen and wildfowlers in particular—cannot fail to find interesting.

This is hardly the place to say more on the main part of the book, except that we are grateful to Mr. Smith for putting on record before it is too late the simple life of the last and perhaps the most famous of a disappearing race. It remains however to say a few words on Chapter VI., which is devoted to a list of the birds of that portion of the lower Derwent Valley in which Sights followed his calling. This district, situated to the south-east of York, is but a small one covering no more than sixteen square miles, and is some sixty-five miles distant from the sea. Although a light railway is in course of construction through it, the district is still a remote one and this, coupled with the fact that large areas are flooded every winter, accounts for the length of the list (127 species) that the author has been able to compile; while there can be little doubt that a contributory factor not referred to by him, is that the district is traversed by one of the numerous subsidiary migration-routes which radiate north and westwards from the Humber. The chief feature of this list, as perhaps is to be expected, lies in the wealth of wildfowl and wading birds it contains, while it serves as a good illustration of what can be accomplished in a favourable area, albeit an inland and limited one, by an observer who is always on the look-out. With the exception of these families,

the species are little more than enumerated and therefore hardly call for notice; mention, however, may be made of the reported breeding of the Twite at Skipwith, of which perhaps further evidence would be acceptable, and we note with pleasure the recent increase of the Great Spotted Woodpecker. Recent attempts at the introduction of the Black and Red Grouse are stated to be more or less failures, but are to be persevered with. Turning to the wildfowl, Swans, both Whoopers and Bewick's, have been obtained, the former frequently; the most numerous of the Geese are the White-fronted and Pink-footed, the Bean is rarer, while the Brent and Barnacle are both obtained occasionally. Nearly all the Ducks on the British List are included and one or two call for special mention. Several Gadwall are said to have been shot, but notes on two only can be traced that are additional to those mentioned in the *Birds of Yorkshire*, viz. one shot at East Cottingwith on December 18th, 1867, and the other at the same place on January 27th, 1869. Mr. Nelson was only able to give two records of the breeding of the Shoveler in this district, an old one and one on Skipwith Common in 1900, but in the present book it is stated that it now breeds at this place regularly, five or six pairs doing so in 1911. The inclusion of the Garganey as a *winter*-visitor is evidently a slip. No less than five individuals of the Harlequin-Duck are included, of which three are said to have been shot by the old fowler in April, 1860; a good deal of their history is narrated, but all seem now to have disappeared. This is unfortunate, as there is no evidence given that they were identified by anyone but the shooter, and although he was no doubt competent to judge the identity of a good number of species, still with one like the Harlequin, where mistakes have so often been made, we feel that it would hardly be wise to accept these records without further corroboration. It is also recorded that he shot a Courser at East Cottingwith about 1860, which if correctly identified is an additional Yorkshire record, as are also five Black-winged Stilts shot at the same place on April 2nd, September 30th, and October 2nd, 1860. In the latter case the records may without much doubt be accepted. The record of a Dotterel shot at the end of February is unusual, and we should question the correct identification where it is stated that small flocks of Kittiwake are frequently mistaken and shot for duck in the twilight. The record of a Slavonian Grebe obtained at East Cottingwith on February 10th, 1912, may also be mentioned.

N.F.T.

THE FOOD OF BIRDS.

An Investigation Concerning the Food of Certain Birds. By John Hammond, M.A. (*Journal of Agricultural Science*, Vol. IV., pt. 4, June, 1912, pp. 380-409).

The Food of the Bullfinch. By Walter E. Collinge, M.Sc., F.L.S., F.E.S. (*Journal of Economic Biology*, Vol. VII., June, 1912, pp. 50-57).

The Food of Birds. By Laura Florence, M.A., B.Sc. (*Transactions of the Highland and Agric. Soc. of Scotland*, Vol. XXIV., pp. 180-219).

Methods of Estimating the Contents of Bird Stomachs. By W. L. McAtee (*Auk*, Vol. XXIX., pp. 449-464).

WE are glad to observe that investigations concerning the food of birds are gradually becoming more frequent in this country, but we are still far behind other countries such as America and Hungary, and this must necessarily be so so long as such costly investigations are left to private enterprise.

Of the papers enumerated above, the first two are the most important. Mr. Hammond deals with the food of the Starling and the Sky-Lark, while Mr. Collinge treats of that of the Bullfinch. Both investigations seem to have been carried out on thorough, but by no means exhaustive, lines. Both authors have examined a large number of specimens killed at all seasons of the year, but in each case the area over which the specimens were collected is comparatively small.

Mr. Hammond comes to the conclusion that the Starling is very beneficial during the late spring, summer and early autumn, but that during the autumn and to a less extent in spring, it does much harm by the consumption of seed-corn, although even at these times it also destroys many harmful insects. Mr. Hammond is on dangerous ground when he asserts that "it is the autumn migrants from abroad which do the damage to seed corn," and suggests that these autumn migrants might be killed off in large numbers. He apparently assumes that all our breeding Starlings leave us during the winter, but of course this is not so, and we have definite proof by means of "ringing" that many individuals stay with us all the year round. How then are the immigrant Starlings to be poisoned without also killing our breeding birds, which are so useful to agriculture in the summer. It is a great pity that the author made this recommendation without proper regard to the bird's habits; and this shows that however carefully the food of a bird may be analysed, an exact

knowledge of the bird's habits is also necessary, otherwise a recommendation may be made having an exactly contrary effect to that intended. We much prefer his alternative of dressing the seed-corn with something which renders it distasteful to birds.

In the case of the Sky-Lark, Mr. Hammond shows that the bulk of its food consists of weed-seeds, though it also eats some harmful insects, more especially in summer, and a small proportion of crop-leaves and "small seeds." He sees no reason why it should be specially protected, although its wholesale slaughter is to be deprecated.

Concerning the Bullfinch, Mr. Collinge has little good to say, and his analyses show that "for quite half the year it is most destructive in fruit orchards, causing considerable losses to growers, which far outweigh any little good it may do in keeping down the spread of weeds."

In her paper Miss L. Florence details the stomach-contents of a number of specimens of many species, but no one species is treated in a sufficiently thorough manner to enable any conclusion of value to be drawn concerning its economic status, and the summaries merely indicate the frequency of the items of food, a system which does not recommend itself to us. The paper, however, contains many facts that will interest ornithologists.

We have included Mr. McAtee's paper in this notice in order to draw attention to the difficulty of ascertaining what bird is really harmful or beneficial to agriculture even after most careful analyses of the stomach-contents of a large number of specimens have been made. Mr. McAtee's paper is by way of answer to Mr. C. W. Mason, who in his report on "The Food of Birds in India" states that, "comparative bulks of foods, if expressed merely as percentages, are of absolutely no value whatever," and that "what we want to know is the exact number of grains of corn," etc., taken. We will not follow Mr. McAtee in his somewhat lengthy arguments, but he advances a number of good reasons to show that the percentage-by-bulk system used in conjunction with the numerical system is most valuable. Certainly there are weak points in both systems, for how can we estimate the value in grains of wheat of say ten weevils, or the equivalent in fruit-buds of an ounce of injurious insects!

It should be remarked, however, that British investigators appear to have adopted the numerical system, and we advise them to study Mr. McAtee's arguments in defence of a method which has been in continuous use by the Biological Survey, U.S. Dept. of Agriculture, since 1895.

H.F.W.



LETTERS

ORKNEY BREEDING-RECORDS OF GREY LAG-GOOSE AND LONG-TAILED DUCK.

To the Editors of BRITISH BIRDS.

SIRS,—I am glad that Mr. Hale has questioned these two records (*supra*, p. 199), for since recording the nesting of the Grey Lag-Goose in Orkney in Vol. III., p. 376, I have had doubts as to whether the pair were genuine wild birds, for on the spring-migration I know of more than one case where Grey Lags have left the migrating skeins and joined tame geese in Orcadian farm-yards, sometimes remaining for considerable periods. The pair in question were probably, I now consider, semi-domesticated, and if so my record will not stand. The case of the Long-tailed Duck nesting in Orkney is still more doubtful, and I protested against the record from the moment it was published, for as I pointed out in *The Annals of Scottish Natural History* some years ago, hardly, if ever, a year passes without one or more pairs remaining on Loch Stenness throughout the summer, which of course is no proof that they nest there, such being in all probability wounded birds unable to make the passage.

H. W. ROBINSON.

SPORADIC NESTING AND THE CROSSBILL.

To the Editors of BRITISH BIRDS.

SIRS,—I have been much interested in the sporadic nesting controversy, especially where reference is made to the Crossbill, and think that Mr. Witherby is too hard on Mr. Bunyard.

Surely Mr. Bunyard's evidence is as worthy of credit as Mr. Witherby's assertion that the Crossbill in Ireland "was not indigenous"; can Mr. Witherby prove that the Crossbill has not bred in Ireland for the last hundred years, or five hundred years if you like? It is pretty easy to make an assertion of that kind but very difficult of proof; we must remember that whereas one hundred years ago there were few observers of the movements of birds in the British Islands, there are now thousands, and that the fauna of Ireland was perhaps less known than any other part. As regards England, I have positive proof of the bird nesting in Norfolk in 1887, 1889, 1890, and in 1889 in Suffolk, and I have evidence that it bred in 1888; but we will let that pass.

Will Mr. Witherby kindly say how long in his opinion we must wait before he gives this bird a "residential qualification for England"?

HERBERT MASSEY.

[Mr. Massey's letter seems to suggest that we should regard a species as breeding in any area in which it may occur until it is proved not to breed there! Such an argument is really too obviously unscientific to require refutation. Suffice it to state briefly that, although the Crossbill had long been known as an occasional visitant to Ireland, it was not until the year 1839 that it had ever been known to breed there. The next instance of breeding was in 1867, and from 1868 onwards it became a regular breeding species in Fermanagh, but it was not until 1889 that it became widely distributed in Ireland as a breeding bird. It is a significant fact that all the years mentioned were years following well marked irruptions.]

With regard to Mr. Massey's Norfolk and Suffolk breeding-records, the year 1889 for both counties is included in our *Hand-List* (p. 17), but 1890 would appear to have been previously unrecorded, while 1887 confirms the probable record mentioned in the same work. Supposing we admit that it bred also in 1888, we have here a sequence of four years in which it nested in Norfolk, but the next breeding-record for the county is not until twenty years afterwards, viz. 1910. There was an irruption in 1887, a very large one in 1888, and an equally great, or perhaps greater, one in 1909.

As to Mr. Massey's last paragraph, if we consider the past record just mentioned, would it not be better to leave the future to look after itself?—H.F.W.]



STONE-CURLEW. FEMALE. MAY, 1909.

(Reproduced direct from a Lumière Autochrome plate taken
by F. G. Penrose.)

BRITISH BIRDS

EDITED BY H. F. WITHERBY, F.Z.S., M.B.O.U

ASSISTED BY

REV. F. C. R. JOURDAIN, M.A., M.B.O.U., AND NORMAN F.

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FIELD-NOTES ON A PAIR OF STONE-CURLEWS.

HAVE THEY AN APPRECIABLE SENSE OF SMELL ?

BY

F. G. PENROSE, M.D., F.Z.S., M.B.O.U.

[PLATE 7.]

SCATTERED over the southern Wiltshire Downs are several pairs of Stone-Curlews (*Burhinus a. adicnemus*) during the breeding-season. The following observations, which were made from a photographic tent, refer to a pair which haunted part of the open down about six miles due south of Salisbury, close to the boundary between Wiltshire and Hampshire. I have known of eggs or young birds every spring in this locality for the last five years. The birds generally laid their eggs on a bare patch of chalk on the open down, as is shown in the accompanying reproduction (Plate 7) of a photograph taken on a Lumière Autochrome plate, but last season (1912) the eggs were deposited on fallow ground. I am venturing to transcribe some of the notes I jotted down at the time, as they bear directly on the question as to whether or not these birds have a sense of smell.

March 30th. First day on which a pair were seen on the down.

April 29th. Birds suspected of having eggs.

April 30th. The eggs were found about forty yards from the edge of a fallow field, which was separated from the open down by a wire-netting rabbit-fence. The tent was pitched about twenty-five yards south of the eggs, and about fifteen yards from the fence.

May 1st. I went into the tent about 4.30 p.m. and stayed until about 6.30 p.m. Up to 6.15 p.m. nothing happened, and then I gave the signal to my man to come and release me from the tent. During the next ten minutes one of the old birds had come up and settled on the eggs without my having seen its approach. Before leaving I moved the tent nearer to the eggs.

May 2nd. The old bird again came up and reached the eggs without my being able to detect its approach, in spite of keeping a careful look-out.

May 3rd. I learnt how this was done. The old bird came up from behind, passed close by the tent and slipped on to the eggs. This occurred about 5 o'clock. Between 6 and 7 o'clock the mate came up whilst I was watching, and took its turn at sitting. I thought this was the male, but could not be sure, as the light was very poor. What happened was as follows: the sitting-bird looked up and gave a low note which brought the mate striding up. As soon as he got within a few yards he stopped and stood staring at the tent. Apparently, however, he was soon satisfied that everything was all right, perhaps because he saw that the other bird was sitting quite contentedly. As soon as he had come up quite close to her, she began to pick up a few small pebbles and to drop them just round her. Meanwhile he was making her a series of bows. She then got up, ran off and he slowly took her place. When she had gone about twelve yards from the eggs she became, in the poor light, absolutely invisible against the fallow ground. The afternoon was very dull, with a slight breeze blowing directly from the tent towards the sitting bird. Before leaving I put the tent about eight feet from the eggs.

May 4th. I was again in the tent, and the female came on to the eggs and sat all right for a time, but suddenly she ran off. I am afraid that I must have made some slight noise or perhaps she heard my retriever, which was asleep and breathing deeply, though not at all loudly, in the tent. She joined her mate about fifty yards away, and when she got up to him he almost stood on his head in front of her. After a minute or so he came towards the eggs, but hesitated when about thirty yards off. She then ran up to him, sat down just in front of him, and apparently made a pretence of being on the eggs, for she began to pick at things round her in the same way that she had done on the previous afternoon when

her mate came to relieve her. After about three minutes she got up, walked away, and squatted again just on the sky-line some fifty or sixty yards away, putting her tail straight up in the air. Meanwhile he came close to the tent, i.e. within three yards, and stood as if listening. He then walked away again and went and stood near her, where he remained stationary for so long a time that at last I gave the signal to be released. Almost immediately I had done so he walked towards the eggs, but before he got near he saw the keeper coming, and ran away. After leaving the tent and disappearing over the top of the hill I waited a quarter of an hour, and then crept back and had a spy with a powerful pair of field-glasses. The last thing I saw was one of the birds standing quite close to the tent, apparently listening for any sound which might come from it. It was then 7 p.m. and I had to leave.

May 6th. Wind blowing briskly from the south-east. I was at the tent by about 3.50 p.m. One of the birds, which I took to be the male, soon appeared (i.e. within five or six minutes) and came running up, but on getting directly to leeward of the tent about ten yards away he evidently became suspicious and kept wandering round and round. He went occasionally out of sight over the sky-line some sixty yards away, but soon re-appeared. Then one of them, I think the female, hid herself between two clods of earth forty to fifty yards away to leeward of the tent. After some time she came right round the tent and finally settled on her eggs. From this moment she showed no more anxiety and occasionally went to sleep. Could this suspicion, so much more marked than on May 4th, have been due to the birds having smelt me? The first that came—I think the male—was very suspicious, as mentioned above. He peered so hard at the tent. This was much more marked than his attitude on the former occasion, when the conditions, except the difference in the force of the wind, were very similar.

On May 6th the tent shook and rattled a good deal, but the bird which finally came on to the eggs made no fuss at all about this. Referring to the note of the observations on May 4th, I was not aware of having made any noise or any suspicious movement, when the bird unexpectedly left the eggs. It seems to me that a possible explanation of this suspicious behaviour on both days may be that these birds have some sense of smell, which, however, is not very keen.

I believe that it is generally accepted that most birds are practically devoid of a sense of smell, but that undoubtedly ducks have it fairly developed, as is shown by the experiences of the duck-decoy men, also that there is some probability of some of the Waders, such as the Snipe, being also endowed with it.

Certainly my previous experience as a bird-photographer has been that as long as a bird—excluding the ducks—did not see or hear me, it appeared to be quite unconscious of the close proximity either of myself or of my retriever, which is very often with me in the tent. It would be interesting to have the experiences of other observers on this subject of the olfactory powers of birds.

THE BRITISH BLACK GROUSE.

Lyrurus tetrix britannicus, subsp. nov.

BY

H. F. WITHERBY AND EINAR LÖNNBERG.

THAT the British Greyhen differs from the typical Scandinavian bird (*Lyrurus t. tetrix*) has for some years been suspected by Witherby, who has been waiting to obtain sufficient material before coming to a definite conclusion. Recently Lönnberg, on comparing a Scottish killed Greyhen with Swedish birds, also noticed the differences between them. Having now carefully examined a good series of skins we are able to describe the British Black Grouse as distinct as follows, under the name of

LYRURUS TETRIX BRITANNICUS, subsp. nov.

Female.—Like that of *Lyrurus t. tetrix* but in general coloration more suffused with rufous-brown and differing in the following points: (1) The white and greyish-white tips to the greater and median wing-coverts and longer scapulars in *L. t. tetrix* are either entirely wanting or scarcely noticeable in the British form. (2) The rump and upper tail-coverts in the British form are suffused with rufous-brown, whereas in Scandinavian birds the tips of the feathers of these parts are usually vermiculated with grey. Scandinavian Greyhens are also frequently glossed with blue on the upper-parts and specially on the rump, but the British bird very rarely has the slightest tinge of blue gloss. (3) The British form is very little marked with grey on the breast, whereas in the typical form the breast is very distinctly marked with grey or greyish-white. (4) The belly in the British bird is barred with rufous-brown and black, whereas in the Scandinavian form it is almost invariably much blacker, often barred with greyish-white and seldom with brown, and often almost entirely dull black without bars. (5) The under tail-coverts of the British form are very much more suffused with rufous

above the white tips than those of the Scandinavian bird, in which the rufous-brown is often restricted to a fine line above the black bars. (6) The black bars on the under tail-coverts of the British form are narrower than those on the same feathers of Scandinavian birds: in twelve specimens of each form they measure in width—*British*, 3 to 6 millimetres, average 4.5; *Scandinavian*, 6 to 8 millimetres, average 7. (7) The white at the base of the secondaries of the British form is usually less extensive than in the Scandinavian. The wing of the British form also averages very slightly shorter than in the Scandinavian: in twelve specimens of each they measure—*British*, 214 to 230 mm., average 221.5 mm.; *Scandinavian*, 230 to 238 mm., average 229 mm.

In the *male* we can detect no constant character to differentiate it from the Scandinavian form, though the wing appears to be generally rather smaller.

Type, ♀: 8.xii.1910: Thornhill, Dumfriesshire: H. S. Gladstone. No. 483/10 in Witherby coll.

It is interesting to note that in this form, as is the case in other British races, the colours are more diffused—less sharply contrasted—than in the Continental bird which gives the British form a duller appearance.

Witherby has compared sixteen British Greyhens and thirteen Scandinavian. He is greatly indebted to Lord William Percy and Mr. H. S. Gladstone for generously providing him with a number of specimens from Alnwick, Northumberland, and Capenoch, Dumfriesshire, respectively. Both of these gentlemen assure him that Scandinavian Blackgame have not been introduced on their shootings. This is a most important point to make sure of in comparing British killed birds, as unfortunately Scandinavian Blackgame have been introduced in many parts of Great Britain. Witherby is also much indebted to Professor R. Collett for loaning him skins and for helping to procure specimens from Norway. Varieties are plentiful in collections, but very few normal examples seem to have been preserved!

BARROW'S GOLDENEYE AND THE COMMON GOLDENEYE.

BY

H. F. WITHERBY.

At the meeting of the British Ornithologists' Club held on November 13th, 1912, Mr. W. R. Ogilvie-Grant re-exhibited a young male Goldeneye* which had been shown to the members in March, 1909, by Mr. F. Menteith Ogilvie, who with Mr. Grant then considered it to be an example of *Nyroca islandica* (*Bull. B.O.C.*, XXIII., pp. 63-65).† Mr. Grant was now able to show by the shape of the scapular-feathers that this bird was really nothing more than a specimen of *Nyroca c. clangula*. The difference in the shape of the scapulars of the Common Goldeneye and Barrow's Goldeneye is a very interesting one, and although Mr. Grant was wrong, as he points out in the next number of the *Bulletin* (p. 29), in supposing that he was the first to detect this difference, he was nevertheless the first to bring it before British ornithologists, for Dr. J. A. Jeffries's paper on the subject appeared in the *Bulletin of the Nuttall Ornithological Club*, V., p. 189 (1880), and was quoted by Mr. William Brewster in the *Auk*, 1909, p. 161.

Mr. Grant found that the black and white inner scapular-feathers of the males, "though much alike in general appearance, were structurally quite different in the two species. In Barrow's Goldeneye the black lateral portion was produced into a long process extending much beyond the white portion, while in the Common Goldeneye the white feather was of the usual shape, margined on the side with black."

As I find that the shape of these feathers in Barrow's Goldeneye varies, and that they also differ in size from those of the Common Goldeneye, I have had photographed

* *Bull. B.O.C.*, XXXI., pp. 18-20.

† We did not accept this identification and did not admit the bird to the British list in our *Hand-List*—see note on page 142 of that work.



SCAPULAR-FEATHERS FROM BARROW'S GOLDENEYE AND THE COMMON GOLDENEYE.

Top row: Adult male Barrow's Goldeneye, Jan. 17, North Iceland.

Middle row: Adult male Common Goldeneye, March, Yorks.

Bottom row: Young male (? first winter) Common Goldeneye, Jan. 17th, Wales.

The feathers are taken from corresponding positions in each bird; those on the left being from nearest the neck, and those on the right from nearest the rump.

and reproduced a representative selection of the scapular-feathers of an adult male Barrow's Goldeneye, an adult male Common Goldeneye, and a young male Common Goldeneye. I can only regret that feathers from a young male Barrow's Goldeneye are not available.

The elongated portion of the feathers is formed by the rami, and in none of the feathers that I have examined is the rhachis elongated. It will be noted that the elongations are sometimes on one side of the feather and sometimes on the other, and sometimes on both. In the specimen from which these feathers were taken the longest scapulars (i.e. those nearest the rump) on each side had two "horns," but I find that in some specimens the longest feathers have but one "horn."

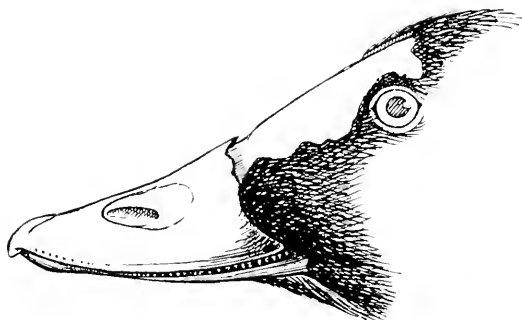
It is obvious by the even rounded shape of the white portion and by the fact that the rhachis is not projecting, that the peculiar shape of these feathers is not due to wear, as was suggested by Dr. Jeffries; moreover, Mr. Grant notes that new feathers still with a sheath are so shaped.

In comparing these feathers with those taken from similar positions in the scapulars of the adult male Common Goldeneye (see middle row in figure) it will be noted that the latter differ in being much longer and narrower as well as in their lack of "horns."

In the young male Common Goldeneye (presumably in its first year) when it is moulting from a female-like plumage into one much resembling that of the adult male, the black and white scapulars differ from those of the adult in being somewhat broader in shape, in having less white (especially note the tips), and in having the black of a less intense jet-colour.

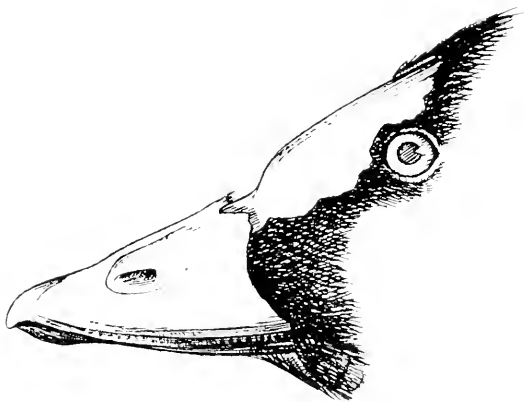
Another distinction between the two species was pointed out by Mr. Menteith Ogilvie (*Bull. B.O.C.*, XXXI., p. 19). This is a "boss," which is present in Barrow's Goldeneye on the anterior portion of the frontal bone. In the Common Goldeneye, on the other hand,

this part, when viewed from the side, has an even upward slope, and when seen from the front is inclined to be grooved longitudinally rather than elevated. By passing the finger up the forehead from the base of the upper



FRONTAL BONE OF COMMON GOLDENEYE.

Female. March. Yorkshire.



FRONTAL BONE OF BARROW'S GOLDENEYE,

Female. Jan. 17. North Iceland.

mandible, this "boss" in Barrow's Goldeneye could easily be detected in most of the specimens to which I have had access, either as a well-defined "lump" or as a smooth swelling. Unfortunately, however, in some specimens it appears to be an uncertain character, otherwise

had it been entirely constant it would have provided an excellent means of identifying females and young males of the two species.

In the course of his interesting article in the *Auk* already quoted, Mr. Brewster has shown other differences between Barrow's Goldeneye and the American form of the Common Goldeneye (*Nyroca c. americana*), none of which, however, seems entirely satisfactory.

It may here be mentioned that Mr. P. F. Bunyard has recently pointed out (*Bull. B.O.C.*, XXXI., p. 28) that the eggs of the Common Goldeneye are smaller and greener, and the down much paler and the flank-feathers smaller, than in Barrow's Goldeneye.



NOTES

A SWALLOW RINGED IN STAFFORDSHIRE AND RECOVERED IN NATAL.

THE following letter has just reached me :—

Grand Hotel,

Utrecht, Natal,

27th December, 1912.

“Witherby,”

High Holborn, London.

DEAR SIR,

On December 23rd a Swallow was caught in the farmhouse of the farm “Roodeyand,” 18 miles from this town, with a metal label round its leg, with the words: Witherby, High Holborn, London, and on the other side B.830.

The farmer, Mr. J. Mayer, took the label off and has it in his possession. As I am interested in birds of any sort and the migration of same, I shall be glad to know if you receive this letter safely.

Yours truly,

C. H. RUDDOCK, *Proprietor.*

The ring B.830 was put on an adult Swallow (*Chelidon r. rustica*) by Mr. J. R. B. Masefield, at Rosehill, Cheadle, Staffordshire, on May 6th, 1911. This bird was one of a pair (Mr. Masefield thought the female) which nested in a porch. Its mate was also caught and ringed. At the same time Mr. Masefield ringed another pair nesting in the same porch. In the summer of 1912 he again caught the Swallows which had come to nest in his porch and found that only one of them had a ring, viz. B.827, which was one of the birds nesting there the year before (see *supra*, p. 13). Neither its mate nor the other pair of which the present B.830 is one had returned to this particular spot.

That this Swallow breeding in the far west of Europe should have reached so far to the south-east of Africa as Natal, seems to me extraordinary. Unfortunately the few records we have as yet of ringed Swallows recovered during migration do not afford a clue to the routes taken and it seems to me unreasonable to suppose that our birds proceed southwards down the east side of Africa as *might* be inferred from this Natal record.

It is, indeed, quite impossible to theorize on a single recovery of this kind and we must be content at present

with the bare fact—perhaps the most startling fact that the ringing of birds has as yet produced.

We are most thankful to Mr. Ruddock for reporting this extremely interesting recovery and we hope that the details of it will become widely known in South Africa and thus produce further results.

H. F. WITHERBY.

SLENDER-BILLED NUTCRACKERS IN SUSSEX.

Two examples of the Slender-billed Nutcracker (*Nucifraga c. macrorhynchus*) have recently been obtained at Wartling, Sussex, the first a male, on December 26th, 1912, and the second a female, on December 28th. I saw both birds in the flesh. A third has been seen in Brickwall Park, Northiam, Sussex, which so far has escaped capture.

H. W. FORD-LINDSAY.

[Concerning the last bird mentioned above, Mr. T. Parkin writes to us under date January 8th as follows:—

“A few days ago I received a letter from Colonel Edward Frewen, C.B., of Brickwall, Northiam, informing me that when shooting in Alder Wood on his property at Brede, on November 16th, 1912, a Nutcracker was seen. I am pleased to be able to state that Colonel Frewen writes that none of the ‘guns’ shot it.

“It is curious that there are records of two other birds of this species having been obtained in the last few years in the same neighbourhood, viz. one (west European or Thick-billed form) at Broad Oak, Brede, on February 12th, 1907 (*British Birds*, I., p. 105), the other (also of the west European form) at Three Oaks, Guestling, on March 4th, 1907 (*t.c.*, IV., p. 23). Both these birds are, I believe, now in the fine collection of Mr. J. B. Nichols.

“All good ornithologists will thank Colonel Frewen for kindly preserving this bird from destruction when it appeared in the deep woodlands on his property at Brede and Northiam.”]

SKY-LARK AS FOSTER-PARENT OF CUCKOO.

THERE appear to be very few authenticated instances of the Cuckoo (*Cuculus c. canorus*) selecting the Sky-Lark (*Alauda a. arvensis*) as a foster-parent, and I therefore record that in June, 1912, I was shown a Sky-Lark's nest at Aldringham, Suffolk, containing a Cuckoo's egg of a purplish-brown type. The nest contained only one Lark's egg, so that possibly at least two had been ejected by the Cuckoo when depositing her own egg. The young Lark emerged from the shell fully

two days before the Cuckoo, but despite the disparity of size, the interloper when about forty-eight hours of age ejected its companion, which remained near the nest and was fed by its parents, the Cuckoo also receiving a share of the food.

Unfortunately observations were brought to a sudden termination by the mysterious disappearance of the Cuckoo when less than a week old. HOWARD BENTHAM.

[Sky-Larks have been recorded as fosterers of the Cuckoo by F. Bond, J. E. Harting, J. Palmer, M. A. Mathew, and E. V. Seebohm (*Cat. Eggs Brit. Mus.*, III., p. 112) but in most cases the evidence of first-hand observation is not very satisfactory, so that Mr. Bentham's detailed record of the hatching of a young Cuckoo in a nest of this species is a welcome addition to our notes on the subject.—F.C.R.J.]

BLACKCAP AND SWALLOW IN ENGLAND IN WINTER.

THE occurrence of the Blackcap (*Sylvia atricapilla*) during winter in the British Isles is sufficiently unusual to deserve notice. On December 29th, 1912, I saw a male bird near Bourne End, in Buckinghamshire. It was very much exhausted and I succeeded in catching it, and examined it closely. Before releasing the bird I photographed it several times, in order to establish its identity beyond a doubt. It is possible that the bird was swept up by the southerly gales at Christmas-time and was exhausted by flying, or else it had been wintering with us owing to the mildness of the weather, and was weak from starvation.

G. K. BAYNES.

[Lt.-Col. F. G. L. Mainwaring reports (*Field*, II.i.1912, p. 94) having seen a Swallow twice on January 3rd, 1913, at Upwey, Dorsetshire.—EDS.]

“LATE” SWIFTS.

IN connexion with the dates quoted in the editorial note under this heading in the January number (*supra*, p. 255), I give from my notebooks the “last” dates for the Swift for the last ten years for the district of Duddingston, which is within the bounds of the city of Edinburgh:—

10th September, 1903.	7th September, 1907.
13th September, 1904.	17th September, 1908.
15th September, 1905.	29th August, 1910.
2nd September, 1906.	14th September, 1911.

From an experience of over thirty years, the last ten of which I have stayed in Duddingston, I am of opinion that

Swifts linger longer round the tower of the old church here than elsewhere around. For some of these years I might have secured later dates, but I am sometimes from home. I left for Germany on September 2nd, 1912, and saw Swifts in the air as I went to the railway station.

WILLIAM SERLE.

GLOSSY IBIS IN ESSEX.

REFERRING to the Glossy Ibis recorded in *Country Life* (Oct. 26th,) as having been killed at Balsham, reference to which is made in the last number of BRITISH BIRDS (*supra*, p. 256), this bird came into my hands for preservation on October 15th, 1912. It was, I believe, shot in the village of Balsham. One version given me was to the effect that the man who *shot* it saw it coming, fetched his gun out of the house, or called to his wife to bring it, and fired at the bird as it was flying over the house. Another version was that it was *shot* whilst feeding with some fowls. I am inclined to place more credit on the former version, as I had it—if not first hand—at least second hand.

W. FARREN.

THE SONG OF THE SWANS.

I AM glad that the Rev. F. C. R. Jourdain, in his article in the last number on "Bird-Life in Iceland," mentioned the beautiful little song of the male Whooper Swan, for I heard a similar song for the first time twelve years ago, and wrote to more than one publication concerning it, the *Field* among them: but all treated my remarks with contempt, as apparently a revival of the myth of the dying swan; so much so, that I decided to keep it to myself until some other observer noticed the same thing.

The song I heard was performed by Bewick's Swan (*Cygnus b. bewickii*) which was by far the more plentiful species on the particular island in the Inner Hebrides where I made the observation, although a few Whoopers were there also. Many a whole night have I spent on the shores of the "haunted loch" listening to this weird but beautiful song. The song is hard to describe, but most nearly resembles the voices of many women humming a somewhat mournful tune softly to themselves. Situated as I was, right in the midst of the herd of swans, the song sounded most weird, and was interspersed with sobs and sighs of such a heartrending nature, that one no longer wondered why the loch was shunned as haunted by the islanders after dark. The song of Bewick's Swan consists of the full octave, and both ascends and descends

the scale. Then there is the sharp barking alarm-note which can be heard at some considerable distance, and this is especially so when an otter appears on the scene and causes the whole herd to give tongue. I only once heard the song in the daytime, and that was on the afternoon before the terrific storm which swept over the whole of the Western Isles in February, 1901.

H. W. ROBINSON.

CURLEW-SANDPIPER IN SCOTLAND IN WINTER.

ON December 13th, 1912, my brother shot a Curlew-Sandpiper (*Erolia ferruginea*) at Cairness, Aberdeenshire. I saw the bird half an hour after it was dead, and was able to identify it. My brother thought it was a Dunlin, but I directly noticed the white rump and tail-coverts, and the slightly longer and more curved bill, being well acquainted with Curlew-Sandpipers, having kept them as pets in my smoking-room. Unfortunately the bird's breast and head were damaged by the shot, so that I did not consider it a good enough specimen to preserve (I did not at the time know how rare this species is in the British Isles during the winter).

The bird was on the edge of a small sheet of water surrounded by rushes, about two hundred yards inland among the sand-hills, and was in good condition. H. WORMALD.

[So far as we know there is only one previous record of the occurrence of this species in December in the British Isles, viz. at Lough Kiltorris, co. Donegal, Ireland, on December 26th, 1892.—EDS.]

PURPLE SANDPIPER IN SUSSEX.

ON December 27th, 1912, whilst shooting at Pett, Sussex, I noticed an example of the Purple Sandpiper (*Erolia maritima*) wading in the shallow water at the edge of the canal. It was quite tame, and allowed me to approach within a few feet, when it flew across to the other side and was walking in the mud when, I regret to say, one of the party shot it. Not having seen the bird since, I am unable to state its sex.

H. W. FORD-LINDSAY.

POMATORHINE SKUA IN STAFFORDSHIRE.

It is seldom that the Pomatorhine Skua (*Stercorarius pomarinus*) comes so far inland as Staffordshire, and the only records we had were a rather doubtful reference to this species in Sir Oswald Mosley's *Natural History of Tutbury* (p. 58), and one recorded by Mr. R. W. Chase as shot at

Oldbury in October, 1879 (McAldowie's *Birds of Staffordshire*, p. 138). On October 30th, 1912, however, Lord Lichfield kindly wrote to me from Shugborough to say that "a Pomatorhine Skua (a male) flew over at a considerable height, saw some wild duck on a pool near Cannock Chase, and was killed while hovering over them, regardless of the presence of several people who approached the pool. He had, however, spent about an hour from the time of his first arrival in eating the remains of a dead duck already well decomposed—extreme expanse of wings 45 inches."

JOHN R. B. MASEFIELD.

[There is also a reference to a Skua "with twisted tail feathers," but which has since been destroyed, in the *Rep. North Staffs. Field Club*, 1909-10, p. 108.—F.C.R.J.]

RAZORBILL IN STAFFORDSHIRE.

ON November 11th, 1912, during the course of a gale from the north-west, a Razorbill (*Alca torda*) was picked up alive but injured on the Sandwell Golf Course at West Bromwich, Staffordshire, and sent to Messrs. Spicer & Sons, Birmingham, for preservation. Mr. Spicer, Junr., informs me that he dissected it and found it to be a male.

GEOFFREY LEIGH.

POST-MORTEM EXAMINATIONS OF BIRDS.

AT the suggestion of several subscribers, the Editors have now made an arrangement with an eminent veterinary pathologist to carry out post-mortem examinations of any birds (other than cage-birds) which may be sent for that purpose, at a fee of five shillings per examination. Should any subscriber desire to avail himself at any time of this arrangement it would be necessary to despatch the bird immediately to the Editors of "BRITISH BIRDS," 326, High Holborn, and by the same post to send the fee of five shillings for the pathologist's report. The pathologist's report would then be despatched as soon as possible *direct by post to the subscriber*, but in no case can an examination be undertaken or reported upon unless the fee is sent in advance. The Editors reserve the right to publish in "BRITISH BIRDS" any information concerning such birds should they think it of interest to their readers.

RED-BREADED FLYCATCHER AT THE PENTLAND SKERRIES.—The occurrence of an adult male *Muscicapa p. parva* at the Pentland Skerries (Orkney) on September 30th, 1912, is recorded by Mr. J. Bain (*Scot. Nat.*, 1912, p. 278).

SUPPOSED SCARLET GROSBEAK IN OXFORDSHIRE.—Mr. O. V. Aplin puts on record (*Zool.*, 1912, p. 460) that Miss J. H. Blunt, of Adderbury Manor, has made a coloured sketch of a bird which she and others of her household saw from a window on January 31st, 1912, whilst it was feeding in a courtyard. The bird, unknown at the time, was afterwards identified as a specimen of *Carpodacus erythrinus*, and Mr. Aplin thinks that anyone who saw the sketch would have no doubt as to the correctness of the identification, and considers that the bird was an adult male. It is not stated, however, whether the observer was acquainted with the Crossbill, nor whether the shape of the bill was specially observed.

REED-WARBLER IN ORKNEY. — On September 28th, 1912, Mr. H. Laidlaw obtained a specimen of *Acrocephalus streperus* on Aukerry (*Scot. Nat.*, 1912, p. 278). The only other records of the Reed-Warbler in Scotland are three at Fair Isle.

SUPPOSED FEMALE GREENLAND WHEATEARS IN MALE-PLUMAGE.—In the *Scottish Naturalist* the Duchess of Bedford records (1912, p. 210) that a specimen of *Oenanthe æ. leucorrhœa* obtained on Barra (Outer Hebrides) on May 13th, 1912, has been sexed as a female by Mr. C. Kirk, taxidermist, of Glasgow, although the bird is in the plumage of an adult male, as is evident by the description given. The wing measured 106 mm., which is larger than any female measured by Dr. C. B. Ticehurst (*cf. antea*, Vol. II., p. 273) or any which we have ever seen. In the same journal (p. 259) the Misses Baxter and Rintoul give details of a specimen, also sexed as a female, which appears to be in the plumage of a year-old male. The wing measures 101 mm., and this bird was killed at the Isle of May Lighthouse on May 27th, 1911. Unfortunately in neither instance are details of the sexual organs given, and after all it is essential that such details should be available in these cases. The large size of the first-mentioned specimen points to a mistake having been made.

COMMON EIDER IN IRELAND.—Mr. A. R. Nichols announces (*Irish Nat.*, 1912, p. 20) that an immature female *Somateria m. mollissima* has been sent to the Dublin Museum by Colonel J. J. Perceval from Wexford Harbour, where it was shot on November 12th, 1912. The Eider is a rare straggler to Ireland, and it will be remembered that it was recorded in our September issue (p. 106) as having bred in that country for the first time in 1912.

LITTLE BITTERN IN NORTHAMPTONSHIRE.—Mr. J. Crisp records the occurrence of an adult male *Ixobrychus minutus*, which was shot at Naseby, Northamptonshire, on October 2nd, 1912 (*Field*, 4.i.13, p. 45).

INCREASE OF THE FULMAR PETREL IN ORKNEY AND SHETLAND.—Mr. G. D. Ferguson writes to the *Scottish Naturalist*, (1912, p. 260) that he found this year Fulmars (*Fulmarus g. glacialis*) nesting on the Calf of Eday (Orkney) and a great increase at Noup Head (Orkney). Fulmars also appeared to be nesting on Uyea (Shetland) and on the cliff to the north of Uyea Sound.

CURLEW-SANDPIPERS IN EAST RENFREW.—In Vol. V. (p. 230) we drew attention to Mr. J. Robertson's observations at Balgray Dam, where he saw a number of waders in the autumn of 1911. In the autumn of 1912 he reports (*Glasgow Nat.*, IV., p. 137) that the water did not recede until too late in the season to have a marked effect. He notes, however, the occurrence of small parties of *Erolia ferruginea* on September 29th and October 6th, and one bird on the 13th.

BLACK-TAILED GODWIT IN Ayrshire.—Mr. H. W. Wilson records (*Glasgow Nat.*, IV., p. 137) the occurrence of three *Limosa limosa* in Troon Harbour on September 12th, 1912. Two were noted in the same place in September, 1911 (*cf.* Vol. V., p. 231).

ACCESSORY DIGIT AND PRIMARIES IN A RED GROUSE.—A description and two figures are given in the *Field* (4.i.13, p. 44) of an interesting malformation in the right wing of a Red Grouse, sent to the Editor by Messrs. Lancaster & Co. The dissection of the wing showed growing out from the carpal joint, at right angles to the radius, "an accessory digit consisting of a metacarpal bone, to which are attached three accessory primary flight feathers, broken off two inches from their base, and beyond this metacarpal bone is a rudimentary phalanx." These extra primaries would thus point downwards over the back of the bird, and would naturally get broken, we suppose, when the wing was moved in flight. Such a malformation in a wild bird must be a very rare occurrence.

THE LATE A. W. JOHNSON.

WE regret to announce the unexpected death of Mr. A. W. Johnson, who died after a very brief illness at Bucklebury, Berkshire, on December 18th, 1912. He was born in 1850 at Newcastle-upon-Tyne, and inherited his love of Ornithology from his father, who was a keen student of birds and a skilful taxidermist. Mr. Johnson's earlier years were spent in the North of England, on the borders of Northumberland and Durham, and here he studied birds and collected eggs up to the year 1892. In 1869 he visited the Orkney and Shetland Isles and a few years later explored Denmark and the North Frisian Islands, besides paying several visits to Ireland. Although he rarely published any of his notes, he frequently communicated interesting information to his friends, and corresponded regularly with the late Professor Newton, Mr. R. J. Ussher, the late Henry Seebohm, and Mr. H. E. Dresser, who incorporated many of his observations in their well-known works. In 1892 Mr. Johnson retired from business and went to Upper Lake, California. Here he remained for twelve years, and continued to collect. In 1904 he returned to England for the purpose of educating his children. It was always a pleasure to him to show his large collection of over 16,000 eggs to an appreciative visitor, and his kindly disposition and generous hospitality will long be remembered by his many friends. F. C. R. JOURDAIN.



LETTERS

THE GEESE AND THE WIGEON OF ICELAND.

To the Editors of BRITISH BIRDS.

SIRS,—I have read with much interest the Rev. F. C. R. Jourdain's article entitled "Notes on the Bird-Life of South-west Iceland" (*supra*, pp. 234-45). Mr. Jourdain again raises the much vexed question as to what species of Grey Goose breeds in Iceland, and I see he and his companions came to the conclusion that all the Grey Geese they saw were *Anser anser*. The matter has puzzled me for some time, and last year, when in communication with Mr. G. B. Dinesen the collector, of Husavik, North Iceland, I asked him what species of Grey Goose he found breeding in Iceland. I quote his reply: "In regard to Grey Geese, I will name *Anser segetum* and *Anser albifrons*," and I have heard from him recently that he has two skins of *Anser albifrons* for me to see (one a small one), and which I expect to receive shortly; I shall then be in a position to report definitely. The fact that Mr. Dinesen only names *Anser segetum* (= *A. f. fabalis*) and *Anser albifrons* does not make Mr. Jourdain's record any less likely to be correct; indeed, I think that it is generally accepted that *Anser anser* does breed in Iceland. Moreover, I have in my own collection, a clutch of five eggs with down of *Anser anser*, and also a clutch of five with down of *Anser brachyrhynchus*, both taken in North Iceland; but while I am quite satisfied as to the identity of the *Anser anser* eggs, I do not at present know of any differentiating character by which the eggs of *Anser brachyrhynchus* can be distinguished from those of *Anser f. fabalis*, although I am inclined to think that the down of *Anser brachyrhynchus* is darker than that of *Anser f. fabalis*, which is light, like that of *Anser anser*. Personally, I see no valid reason why all four species of Grey Geese (*A. anser*, *A. brachyrhynchus*, *A. f. fabalis*, and *A. albifrons*) should not breed in Iceland, although I believe I am right in saying that *A. f. fabalis* is unrecorded as an Icelandic bird.

On another occasion I asked Mr. Dinesen (in view of the reported breeding of the American Wigeon (*Anas americana*) in Iceland by Mr. Coburn (*Bull. B.O.C.*, XII., p. 14) what species of Wigeon he came across, and I quote his reply: "Of the Wigeon breeding there I only find *Anas penelope*." That Mr. Dinesen must have a very extensive and accurate knowledge of Icelandic birds goes without saying, I think.

F. W. SMALLEY.

[My own experience is of course confined to the south-west of Iceland, and I have seen nothing at present of the north, but it is clear to me from what has been recorded by Messrs. Pearson and the Rev. H. H. Slater, that the Grey Lag is the "Grey" Goose of South Iceland. When we remember that Faber, Gröndal, and Nielsen mention "*Anser segetum*" (i.e. *A. fabalis*) as the ordinary Grey Goose, and omit all mention of the Grey Lag (*Anser anser*), it is impossible to avoid the inference that the two species have been confused and that the Grey Lag has been mistaken for the Bean-Goose, of which no Icelandic specimen is known to exist. Many supposed clutches of eggs of *A. fabalis*, from Iceland, are to be found in English collections, sent in good faith by Icelandic collectors, and which are really attributable to *Anser anser*. The feathers are really more useful in distinguishing the various species of geese than the downs, and I have found no difficulty in distinguishing authentic clutches of *A. brachyrhynchus* by the size of the eggs and the appearance of the flank-feathers from those of *Anser anser* or *A. fabalis*. There is little doubt that a large proportion of the eggs in private collections are wrongly identified, and no inferences as to the colour of down, etc., can be drawn from such dubious material.—F. C. R. JOURDAIN.]

LARGE CLUTCHES OF EGGS LAID BY BIRDS IN ICELAND.

To the Editors of BRITISH BIRDS.

SIRS,—The Rev. F. C. R. Jourdain, in his interesting article on the bird-life of Iceland (*supra*, pp. 234-45), calls attention to the large clutches of eggs produced by many of the Passerine birds breeding in that far-northern locality. This coincides with my own somewhat limited experience during a brief visit to the Dovre Fjeld in Norway in the summer of 1911: I examined nests of the Fieldfare, Bluethroat, Brambling, Reed-Bunting, White Wagtail, and Meadow-Pipit, all of which contained six eggs. Except in the case of the Fieldfare, I did not see a nest of any of the species enumerated containing less than six eggs, and one clutch of seven Meadow-Pipit's eggs came under my notice.

HOWARD BENTHAM.

REVIEW.

Clare Island Survey, Part 20, Aves. By R. J. Ussher (*Proc. R. Irish Acad.*, Vol. XXXI). 54 pp. and 5 plates. (Dublin: Hodges Figgis, July, 1912). 2s. 6d.

A SURVEY of the Fauna, Flora, Geology, Meteorology, etc., of Clare Island, Achill and other islands and the adjoining mainland of the west of Ireland was carried out by over one hundred specialists during the years 1909, 1910 and 1911, under the auspices of the Royal Irish Academy. The ornithologists who made special visits to the locality were Major G. E. H. Barrett-Hamilton, Messrs. R. M. Barrington N. H. Foster, Pastor C. Lindner, Professor C. J. Patten, and Mr. R. J. Ussher, while schedules have been filled in by other ornithologists. Mr. Ussher now gives us the results of these observations in a very careful and concise paper consisting of a few general remarks, an account of each species, and a comparative table, as well as a summary and bibliography.

Mr. Ussher notes that the special features of the avifauna of these islands are : the large winter immigration of Passeres such as Thrushes, Finches, Starlings, Rooks and Sky-Larks ; the winter visitation of species from northern countries and the late stay in spring of these and other birds, the rarity of those Continental birds which are occasional visitors to Ireland, and the increase of the Blackbird and several woodland species on the mainland, and of the Great Black-backed Gull on the islands. We might also mention the marked extensions of the breeding-ranges of the Tufted Duck and Shoveler in recent years, and the great diminution (amounting almost to extinction) of the Quail in western Ireland.

There is one serious omission in this work to which attention must be drawn, and that is the lack of information as to subspecific forms. We are told that specimens collected were carefully compared and that none of the Clare Island birds differed from those from other parts of Ireland. In one case—the Dipper—the characters of the Irish bird are discussed, but no mention is made of the fact that this race was separated by Dr. Hartert in 1910 ! We may therefore conclude that the purely resident birds are of the British or Irish forms, but it would have been far simpler and more scientific to have said so. When however we consider the migrant Song-Thrushes, Golderests and Red-breasts, we are left in ignorance as to whether the Continental forms visit this area or not, nor are we told if the Greenland Wheatear occurs. Most of the British races have now been separated for some years, and surely it is time that Irish ornithologists learnt something about them. H.F.W.



Thomson, *Phot.*]

B.B., Vol., VI., Pl. 8.

Edward A. Wilson.

Born 1872.

Died 1912.

BRITISH BIRDS

EDITED BY H. F. WITHERBY, F.Z.S., M.B.O.U

ASSISTED BY

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EDWARD ADRIAN WILSON, B.A., M.B.CANTAB.
SURGEON, NATURALIST, EXPLORER.

AN APPRECIATION

BY

WILLIAM S. BRUCE, LL.D., F.R.S.E.

[PLATE 8.]

I FIRST met Dr. Edward A. Wilson on board the "Discovery" on his return from the Antarctic Regions in 1904, and the second time at the International Ornithological Congress in London in 1905, when he and I were both communicating ornithological results respectively of the "Discovery" and of the "Scotia." Since that time I was in close touch with him, and on several occasions he visited the "Scotia" collections in the Scottish Oceanographical Laboratory and in the Royal Scottish Museum. Although our meetings were not very numerous, yet as fellow workers in the Polar Regions we were drawn together more closely perhaps than many others who had known each other longer and seen each other more frequently. We could both appreciate better than anybody else what it means to be cut off from civilization for long periods, to be huddled together in close quarters in a ship, or in a house ashore for months—even years—or in a tent, without seeing anything of the outside world, and we had both learned to give and take in a way that would astonish many at home. We could thus appreciate difficulties that the other had in attaining scientific results which he had secured, knowing full well that if certain results were not attained that it was due to some insuperable difficulty which no layman could fully understand.

It was this tie of Polar brotherhood that drew Wilson and myself together. He was born in 1872, the son of Dr. E. T. Wilson, consulting physician to Cheltenham General Hospital.

One who knew him best was Dr. A. E. Shipley, Master of Christ's College, Cambridge, and I think I cannot do

better than quote some notes he has been good enough to furnish me with.

“Edward A. Wilson,” he says, “came up to Cambridge in 1891, and rowed ‘No. 3’ in Gonville and Caius College First Boat in 1894. He was placed in the First Class in the Natural Science Tripos of the same year and took his degree at once. He resided until 1895, in which year he went down to St. George’s Hospital. In 1898 he had threatenings of phthisis, and spent some time abroad in a Sanatorium. He took his M.B. in 1900.

“The last four or five years that he spent in Britain he devoted himself in a most indefatigable way to carrying out the work of the Departmental Committee of Enquiry appointed by the Board of Agriculture and Fisheries to investigate the subject of Grouse Disease. It was pioneer work, as little was at that time known of either the Grouse in health or the Grouse in disease, but Wilson’s medical knowledge, his marvellous Natural History attainments, and his great skill as a draughtsman, were invaluable to the research. He travelled extensively in Scotland, getting in touch with practically all the moors. He assisted in the experiments on the control material at the Grouse Committee’s experimental station at Frimley, where Grouse were reared in captivity. He dissected with his own hands nearly two thousand birds, and minutely recorded their condition. With the help of other members of the committee he gradually established the fact that the bacillus to which Klein had attributed the trouble was a *post-mortem* phenomenon, and that the disease of the adult bird was caused, in the main, by a round worm inhabiting the caeca. Later it became apparent that the mortality amongst the chicks was largely due to *Coccidium* parasites, whose life-history had been worked out by Dr. Fantham.

“Wilson wrote quite one-third of the two quarto volumes which deal with the ‘Grouse in health and in disease,’ but he had to leave for the Antarctic Regions

about the time the book began to go to press. In one of the last letters he wrote before starting south he expressed his keen desire to see the Report, and regretted that it must be at least another year before it could be in his hands. He never saw it.

“Dr. Wilson was a particularly keen observer, especially in the open. Nothing escaped his notice. He worked with untiring patience, was very modest, and never thought of himself or his own reputation. He died as he had lived—a very perfect English gentleman.”

Mention should also be made of the excellent illustrations, especially those in black-and-white, that he did for Major G. E. H. Barrett-Hamilton's work on “British Mammals,” published by Messrs. Oliver & Boyd. The recent expedition was the second one that Wilson had accompanied to the Antarctic Regions, for in 1901 he was selected as assistant surgeon and naturalist to the “Discovery” Expedition, when he first revealed himself in Polar circles as an artist of great merit. One may refer to several of the illustrations in the publications of that expedition, and to the many fascinating water-colour paintings and exquisite black-and-white sketches that were exhibited after his return from the Antarctic Regions in 1904. By his good work the collections of the “Discovery” were greatly enhanced, especially by his find of the Emperor Penguins' breeding-place, and by securing possibly the first eggs and certainly the first young of this bird. His observations regarding the time of laying and the development of the chick are especially noteworthy. For about three years he worked in the British Museum at the “Discovery” vertebrate collections, and his work on the ornithology of the expedition marked him out as a fitting naturalist to another Antarctic expedition. No doubt these were the qualifications which made Scott choose him as chief of the scientific staff for his second expedition. But there was something more: a friendship had sprung up between Wilson and his chief, which settled from the

beginning that he would accompany Captain Scott on his great journey to the South Pole itself. It meant that Scott considered him not only as physically fit for the work, but also that he would be invaluable in aiding him in skilled scientific investigation—an estimate fully justified by his important geological researches along with Bowers in the vicinity of the Beardmore Glacier—and most particularly, that he would be a trusty companion.

Wilson had the happy faculty of getting on with almost everybody in many different walks of life. There was no sense of rivalry in his scientific work: his aim was to do the best he could, and, at the same time, he appreciated the best in others working in similar or in different directions. Carlyle rightly says: "It is a most serious thing to be alive in this world; to die is not sport for a man. Man's life never was a sport for him; it was a stern reality altogether, a serious matter to be alive." Yet Wilson and his brave comrades have given up their lives for an ideal, and they have done so without a murmur. Our heartfelt sympathy goes out towards those nearest and dearest to him, and above all to his widow.

[We greatly regret to have to announce that Mr. Henry J. Pearson, well known for his ornithological journeys in the north of Europe, died suddenly in Egypt on February 8th. In our next number we hope to publish a memoir of Mr. Pearson from the pen of Colonel H. W. Feilden.—Eds.]

THE LATE PROFESSOR ROBERT COLLETT.

By the death of Professor Robert Collett at Christiania on January 27th, 1913, Norway loses its best-known naturalist, and one whose reputation is practically cosmopolitan.

The following tribute to his memory must, it is feared, be of a rather egotistical nature, because the writer, who has known him for over thirty years, seeing him on nearly every occasion of his passage through Christiania, and corresponding with him somewhat largely, is surprised to realize how very little he knows of the personal history of his friend. His acquaintance with him dates from 1881. When in Christiania that year the writer went as usual to the Zoological Museum of the University and asked for Professor Esmark (Collett's predecessor), but instead of the old gentleman, a slim young man appeared, who expressed his interest in two papers on Beavers in Norway, published in the *Zoologist* in 1880, which the writer had sent to Esmark. This proved to be Herr Collett, who had already contributed five papers to the *Proceedings* of the Zoological Society of London, besides having published several in Norway, the most important of which was perhaps his Report on *Den Norske Nordhavs Expedition, 1876-1878, Zoologi. I. Fiske*, published in Christiania, 1880, in Norwegian and English. He had also begun his "Bemærkninger til Norges Pattedyrfauna" in *Nyt Magazin for Naturvidenskaberne*, which appeared in 1876-77-81-82.

On Esmark retiring shortly afterwards, Collett was appointed his successor as Professor of Zoology of the University of Christiania and Director of the Zoological Museum there.

Within a marvellously short time he formed an almost entirely new collection of the vertebrates of Norway for the Museum, going off with a taxidermist to whatever parts of the country might be expected best to provide him with the specimens desired. The show-cases soon contained a fresh and nearly absolutely complete series of each species of bird of his own collecting, and full series of specimens of the other classes of vertebrates.

In 1876 Herr Collett had been elected a Corresponding Member of the Zoological Society of London; and in 1893 the Professor was elected a Foreign Member of the Society, and was at the time of his death the sixth in order of seniority out of the twenty-five members on that list. Between 1865 and 1894 he contributed many valuable papers to the *Ibis* and in 1900 was elected to the distinguished band of Honorary Members of the British Ornithologists' Union.

Professor Collett could speak English excellently, but was occasionally at fault in writing it, and at his request the present writer made some slight amendments in a paper "On the External Characters of Rudolphi's Rorqual," which he read for the author at a meeting of the Zoological Society on February 2nd, 1886 (published *P.Z.S.*, 1886). In 1893 he translated for him "Fugleliv i det aretiske Norge," which was published by Porter early in 1894. Subsequently at Collett's request, he translated his "Norges Vigtigste Hvirveldyr" (= "The Principal Vertebrates of Norway,") from *Norge i det Nittende Aarhundrede*, but this failed to find a publisher, because, in the opinion of the late R. B. Sharpe (to whom the English edition was to be, by permission, dedicated), the various species were not treated of in due order in separate sections, but were referred to in the order they might be supposed to be met with in wandering over the different varieties of locality described.

Collett's latest published work "Norges Pattedyr" (1911 to May, 1912) he was anxious to see reproduced in England (and some portion is already translated), but this also has so far failed to secure a publisher. It is no secret (now at any rate) that Collett intended to publish further volumes on the other classes of the vertebrate fauna of his native country, but that unfortunately now falls to the ground, unless his MSS. or any of them are sufficiently forward for some one else to edit. (The Birds were, we believe, to be the last volume of the set.) He had become of late years a good photographer; a few of his works are illustrated by small photographs taken by him, and at Christmas, 1911, he sent the writer a portfolio containing really beautiful nature-studies of his own taking.

There can be no question that Collett did far more than anyone else for the zoology of Norway, besides contributing excellent papers on various vertebrates of other parts of the globe. He was of a particularly friendly, kind disposition, and one of the most unassuming of men. His mother was in her day a well-known personality in Christiania on account of her advanced views. The professor was not married. He was ill only a few days, and died of inflammation of the lungs at the age of seventy, having been born on December 2nd, 1842. He will be greatly missed by his numerous friends, not only in Norway but in many other countries, especially perhaps in England, and not least by

ALFRED HENEAGE COCKS.

INCREASE AND DECREASE IN SUMMER
RESIDENTS.

EDITORIAL NOTE.

FOR a considerable time past there has been a general impression that some of our summer migrants have been decreasing in numbers, and that in some districts certain species which were common a few years ago are becoming less common every year. It will be remembered that in our issue for August, 1912 (*supra*, p. 87) it was proposed to hold an inquiry into this question with a view to gaining some exact knowledge from a wide area regarding these reported fluctuations—knowledge which is absolutely necessary before causes for such fluctuations can be ascertained.

A schedule was sent out containing the names of twelve selected species and observers were asked to state the result of their observations on three points :

1. Was there an increase in 1912 over 1911 ?
2. Was there a decrease in 1912 from 1911 ?
3. Were numbers in 1912 above or below the average ?

They were further asked to state whether the conclusion at which they arrived was based on the actual number of birds counted in a definite area, or whether it was the result of a general impression.

One hundred and sixteen observers in England and Wales responded to the invitation, but it should be noted that of these only twelve based their replies on the number of birds actually counted, thirty-two on their general impression, while in the rest of the replies received this query was ignored, from which it is clear that the answers received differ in value.

It is manifest that most of our readers were unprepared for such questions, and were consequently unable to fill in the schedules, but the comparatively few schedules sent in have provided some valuable material which has been worked out most carefully by Mr. M. Vaughan,

to whom we are greatly indebted for the following account of the results achieved. In reading this account it must be clearly borne in mind that the material upon which it is based is not sufficient in our opinion to warrant any very definite conclusions. The report must be read as an interim one which may be liable to correction should the inquiry be continued as we hope.

Mr. Vaughan had kindly prepared a map for each species, but we think it better to reproduce only a selection of these, in order to give an idea of what might be done by a more thorough inquiry.

We think it will be agreed after Mr. Vaughan's paper has been read, that the subject is an interesting one from many points of view, and may lead to issues of considerable importance. We therefore propose to ask our readers to continue the inquiry, and we sincerely hope that this year the majority will be able to fill in the schedules, and that we may have many hundreds of replies to work upon. We also hope that with the initial experience of last year more of the exact information which is so valuable will be forthcoming.

In order that our readers may see exactly what is required of them we are sending out the schedules with this number, but they are not required to be filled in and returned until after the breeding-season.

THE EDITORS.

REPORT ON THE 1912 INQUIRY.

BY

M. VAUGHAN, M.A., M.B.O.U.

INTRODUCTORY.

IT will be as well to explain briefly the principles on which this report has been drawn up. The results of each schedule have been carefully tabulated ; a separate report of each species has been made out ; and a series of maps has been prepared, a selection of which is published. In many cases no answer to the third question (" Were numbers in 1912 above or below the average ? ") has been received, so it is only possible to decide approximately whether a majority of observers considered the numbers in 1912 above or below the average, and no exact standard of comparison is possible.

That certain species do vary in number considerably from year to year there can be no doubt, whether we confine ourselves to the facts recorded in the schedules or look on the question from a wider point of view. To quote two examples :—

" Whitethroat. 22 pairs, 1912, 34 pairs 1911. Tunbridge Wells." (H. G. Alexander.)

" Spotted Flycatcher. Very common 1912. Quite scarce 1911. Beaulieu." (P. Gosse.)

Where no return regarding a particular species has been entered attention is drawn to the fact, as this negative evidence seems to be of some value in determining the position of a species.

In each report the inference which may fairly be drawn from the figures has been pointed out ; interesting facts have been noted ; and an attempt has been made to decide whether the decrease of any species is general or only local and made up by a corresponding increase in an adjacent area, though the reports do not often contain enough information for this point to be decided with any degree of certainty. The reports received from Scotland and Ireland were so few that it has been

thought best to disregard these countries for the present, while only two were received from Wales, but those from England cover a good deal of ground and may fairly be taken as representing a tendency one way or the other.

Some counties, e.g. Kent, Surrey, Essex, Yorkshire, Wiltshire, Hampshire, Cheshire and Northumberland, have been worked with comparative thoroughness, though there are others, e.g. Lincolnshire, Dorsetshire, Nottinghamshire, Buckinghamshire, Northamptonshire, Bedfordshire and Derbyshire, which have either been omitted or scarcely touched on at all, and this must of course detract from the value of the report as a whole. Perhaps it is not too much to say that the inquiry is a step in the right direction, and that we are now in a better position to decide whether certain species are decreasing or not, and certainly if the inquiry is carried on, more and more valuable results will be achieved.

No attempt has been made to suggest the why or the wherefore. To arrive at the facts is all that has been aimed at, though this has been in some cases not an easy task, as more than once observers from the same district have come to different conclusions. Of course it does not follow that two or more observers reporting different results from the same district have based their conclusions on observations made in identical areas; more probably such is not the case, and the observations have been made in more or less adjacent areas in the same district. Assuming that the observations are of equal value, of which we have very little evidence one way or the other, this would tend to show the existence of what may be termed neutralizing fluctuations, i.e. given a large enough area, the numbers vary but little from year to year within that area, though the distribution within it varies from year to year.

That some migrants are decreasing, and that the decrease is not confined to one locality, cannot reasonably be doubted. How far this is the case with the species

which have been under observation, readers will be able to decide for themselves by referring to the report, but it may be more convenient first to give brief summaries of the results arrived at:—

RED-BACKED SHRIKE.—Positive evidence seems to prove that this species is decreasing, while negative evidence must also be taken into consideration.

SPOTTED FLYCATCHER.—On the whole holding its own and well represented almost everywhere.

CHIFFCHAFF.—Common but not so well distributed as the Willow-Warbler.

WILLOW-WARBLER.—Common almost everywhere and in many districts increasing. In some cases, where a decrease is reported, it seems to be local.

WHITETHROAT.—Holding its own well in most counties, but not very common in the eastern counties.

LESSER WHITETHROAT.—Always scarce in the north, apparently so in the east, and plentiful in but few localities. The numbers seem to vary a good deal from year to year.

WHINCHAT.—Very local and a marked decrease almost everywhere.

REDSTART.—Seems to be decreasing in many places, and the decrease has been going on for some time.

NIGHTINGALE.—Maintaining its ground and no more. In some favourite localities its numbers are reported as steadily on the decrease.

HOUSE-MARTIN.—Marked and general decrease.

SWALLOW.—Marked and general decrease.

WRYNECK.—Very local. Nearly extinct in some districts.

DETAILED REPORTS ON EACH SPECIES.

RED-BACKED SHRIKE (*Lanius c. collurio*).

Increase 20. Decrease 22. Normal numbers 28. No returns 52.

So far as can be gathered from answers received to query 3, this species appears to have been scarcely up to its average numbers in 1912.

It would seem to be generally on the decrease, and its distribution is patchy, e.g. there are no returns from Norfolk or Lines., while three observers from Suffolk report an average, though a small one. It seems numerous nowhere. Increases are reported from Epping (Essex) with the remark "goes in years, one good to four bad;" and Sunningdale (Berks.) "four pairs 1911, six pairs 1912" (G. F. Clarke), but from the same place "scarce here as always" (J. G. Cornish). In some cases the increase does not amount to much, e.g. from the three following places: Kingham (Oxon.), Windermere (Westmorland), Walton (near Stone, Staffs.), "one pair compared with none in 1911"; Yateley (Hants.), "a slight increase, but the species has been decreasing for years" (Miss Stilwell). Sometimes an increase in one part of a county can be set against a decrease in another, e.g. increase at Beaulieu (Hants.)—four pairs bred in 1912, in 1911 one (P. Gosse)—and at Hayling Island (Hants.) a "great decrease" (J. E. H. Kelso); at Midhurst (Sussex) an increase (J. G. Dalglish), and at Horsham "a steady decrease—scarcely a pair since 1900" (J. G. Millais).

The decrease is not confined to one part of England, as the following show: Tenterden (Kent) "fifty per cent. decrease" (N. F. Ticehurst); Downton (Wilts.) seven pairs 1911, two pairs 1912 (F. G. Penrose); Kingham (Oxon.) "an increase, but 1912 far below the average" (W. Warde Fowler); Abergavenny (Monmouth) "t'ree pairs 1911, one bird 1912" (S. W. White); Shrewsbury (Salop) "decided decrease" (H. E. Forrest); Shere (Surrey) "marked decrease" (C. Russell).

SPOTTED FLYCATCHER (*Muscicapa s. striata*).

Increase 15. Decrease 40. Normal numbers 46. No returns 9.

Judging by the answers received to query 3, the species seems to have been present in average numbers in 1912.

Decided increases are reported from Hever (Kent), "greatly above average" (E. G. B. Meade-Waldo); Tenterden (Kent), "one pair 1910, two pairs 1911, four pairs 1912" (N. F. Ticehurst); Beaulieu (Hants.), "much above the average" (P. Gosse); Lydiard Millicent (Wilts.), "none 1911, ten pairs 1912" (D. P. Harrison); and four other observers report that the bird is common in Wiltshire. An increase is also announced from Hoddesdon (Herts.) and Cheltenham (Gloucester).

In some cases a decrease is only local, and there is often an increase in an adjacent locality to set against it, e.g. in

1911 and 1912 this bird was scarce in the immediate vicinity of Exeter, but more plentiful at some distance from the city; but marked decreases are announced from Banstead (Surrey), "a great decrease" (Miss Acland); Pensford (Somerset), "none seen, usually a few" (H. L. Popham); Ashburne (Derby.), "much below the average" (F. C. R. Jourdain); Woodford (Essex), "very marked, none seen till August" (C. L. Collenette); but it should be remembered that at Epping, which is not very far off, the numbers are said to have been normal.

It should be noted that a decrease is often qualified by the epithet "slight," and "normal numbers" often means considerable numbers.

This species appears to be rather rare in Suffolk and Norfolk, but well distributed in Yorkshire, Lancashire, and Northumberland.

CHIFFCHAFF (*Phylloscopus c. collybita*).

Increase 26. Decrease 23. Normal numbers 38. No returns 28.

So far as can be judged from the returns the Chiffchaff was present in average numbers in 1912, and though it is more local and not so well distributed as the Willow-Warbler, this species seems to be holding its own well.

Decided increases have been reported from Tunbridge Wells (Kent), "thirteen pairs over average" (H. G. Alexander); Rickmansworth (Herts.); Maidenhead (Berks.); Cambridge, "twelve more pairs than usual" (H. G. Alexander); Oswestry (Salop), "six times as many" (J. H. Owen); Walton (near Stone, Staffs.), "decided increase" (P. C. Dutton); Sutton Coldfield (Warwick.), "decided increase" (Miss Carter); Lydiard Millicent (Wilts.), "large increase" (D. P. Harrison); Scarborough (Yorks.), "an increase," one of the few localities in the north where the bird seems at all common (E. A. Wallis).

In some cases the decrease seems only local, and an increase in an adjacent locality can be set against it, e.g. a decrease at Shrewsbury is made up by a large increase at Oswestry, and the same remark may be applied to other localities. No reports have been received from Norfolk and the species seems scarce in Suffolk, where "normal" implies scarce.

Decided decreases are reported from Felsted (Essex), New Forest (Hants.), "has been decreasing for years" (R. E. Coles), and also from Copdock, Ipswich (Suffolk), while the species naturally grows scarcer the further north one goes.

WILLOW-WARBLER (*Phylloscopus t. trochilus*).

Increase 33. Decrease 14. Normal numbers 57. No returns 7.

The Willow-Warbler seems to have been above the average in numbers in 1912.

A decided increase is reported from many localities, e.g. Tenterden (Kent); Felsted (Essex), "many more, well above the average" (J. H. Owen). Four observers in Herts. report this species as very plentiful. A marked increase is reported from Oswestry (Salop), Lydiard Millicent (Wilts.), Ackworth (Yorks.), Hebden Bridge (Yorks.), Cheadle (Staffs.). In some cases where a decrease is reported, it seems only local, and is made up by an increase in an adjacent area, e.g. Bloxham (Oxon.), "slight decrease" (O. V. Aplin), Kingham (Oxon.), "above the average" (W. Warde Fowler); Tonbridge (Kent), "decided decrease" (R. H. Rattray), Tenterden (Kent), "thirty per cent. increase" (N. F. Ticehurst).

Where "normal numbers" are returned it is often described as "plentiful as usual," e.g. Aldringham (Suffolk), Chelmsford (Essex); or the decrease is but slight, e.g. Cambridge, "fifty pairs 1911, forty-six pairs 1912" (H. G. Alexander). In Norfolk, at Brunstead and at Keswick, this species is reported as below the average.

A decided decrease is only noticed in a few localities, e.g. Midhurst (Sussex), Stockfield (Northumberland), though another observer reports an average, Harrogate (Yorks.) and Chapwell (Durham).

WHITETHROAT (*Sylvia c. communis*).

Increase 13. Decrease 33. Normal numbers 50. No returns 14.

This species seems on the whole to be holding its own, though its distribution is rather "patchy." As far as can be judged from the answers received its numbers seem to have been about up to the average in 1912. In only two districts was a decided increase reported, though in both cases the report was qualified by a different one from the same district, i.e. Sunningdale (Berks.), "fifty per cent. increase" (G. F. Clarke), Sunningdale (Berks.), "rather scarce" (J. C. Cornish), Horsham (Sussex), "much above the average" (P. H. Wyatt), Horsham (Sussex), no return (J. G. Millais).

In some cases an increase in one district must be set against a decrease in another not far off: such are Send (Surrey), "decreasing" (B. Norman), Banstead (Surrey), "an

increase" (Miss Acland), Farnham (Surrey), "an increase" (A. R. Gillman); Stone (Staffs.), "decreasing" (P. C. Dutton), Cheadle (Staffs.), "increasing" (J. R. B. Masefield); Bloxham (Oxon.), "below the average" (O. V. Aplin), Kingham (Oxon.), "rather above the average" (W. Warde Fowler).

A decided decrease is reported from Tenterden (Kent) (N. F. Ticehurst), Tonbridge (Kent) (R. H. Rattray), and Felsted (Essex) (J. H. Owen). Perhaps it may be said that this species is holding its own better in the north than in the east of England.

LESSER WHITETHROAT (*Sylvia c. curruca*).

Increase 20. Decrease 17. Normal numbers 27. No returns 50.

From the answers received to query 3, the Lesser White-throat seems to have been present in average numbers in 1912. Some observers remark that they find this species "hard to observe," so perhaps the absence of returns is in some cases due to the fact that the bird has not been recognised. Except in a few localities the Lesser Whitethroat cannot be considered a common bird, and it is very local in its distribution. It is always scarce in northern counties and in the south-west, though it was common in the spring of 1912 in the neighbourhood of Porlock (Somerset); and it seems to have been scarce in Norfolk and Suffolk.

Decided increases are reported from Hever (Kent), "an increase and always increasing" (E. G. B. Meade-Waldo); Oswestry (Salop), "well above the average" (J. H. Owen); Felsted (Essex), "well above the average" (J. H. Owen); Cheadle (Staffs.), "an increase, above the average" (J. R. B. Masefield). Slight increases are reported from Shrewsbury (Salop), Pensford (Somerset), Culmstock (Devon.), and Holderness, one of the few districts in Yorkshire where this bird is found.

A slight decrease is reported from Cambridge, "twenty-one pairs 1911, eighteen pairs 1912" (H. G. Alexander); and a more marked one from Sunningdale (Berks.), "only seen one, far below the average" (F. G. Clarke); and Downton (Wilts.), "four pairs 1911, one pair 1912" (F. G. Penrose).

In some cases we can set an increase in one locality against a decrease in another, e.g.: Send (Surrey), "decrease"; Shere (Surrey), "increase"; New Forest (Hants.), "increase," but the bird has not been seen this year at Beaulieu. Mr. Mark Pybus writes that this bird nested this summer near Warkworth in Northumberland.

WHINCHAT (*Saxicola r. rubetra*).

Increase 8. Decrease 20. Normal numbers 21. No returns 64.

A majority of observers considered that the Whinchat was below its average numbers in 1912. Negative as well as positive evidence would seem to prove that this species is decreasing. A decrease is the rule, and an increase the exception, while, as far as can be seen, there is only one instance of a decrease in one district being made good by an increase in an adjacent area, viz.: Shere (Surrey), "none seen for eight or ten years (C. Russell), Farnham (Surrey), "more numerous than I have ever seen them" (A. R. Gillman). A few increases are reported, viz.: Coventry (Warwick), "an increase" (R. and B. Starley); Cheltenham (Glos.), "an increase" (R. and V. Wilde); Abergavenny (Mon.), "an increase, 1911 and 1912 both good years" (S. White); Windermere (Westmorland), "an increase and above the average" (D. G. Garnett). In Stafford it seems to be maintaining its ground.

From many counties there is no return at all, while from many quarters there comes ample evidence of the scarcity of this species, e.g. Holderness (Yorks.), "once common, now gone" (E. W. Wade); Lincoln, "none seen, very scarce" (F. L. Blathwayt); Copdock, Ipswich (Suffolk), "not seen one for twelve years" (F. L. Bland); Beaulieu (Hants.), "not one for three years" (P. Gosse); Wark-on-Tyne (Northumberland), "great decrease" (A. Chapman); Scarborough (Yorks.), "not one this year in well-known haunts" (E. A. Wallis); Shere (Surrey), "none seen for eight or ten years" (C. Russell); Wharfedale (Yorks.), "a decreasing species" (H. B. Booth); Bloxham (Oxon.), "below the average" (O. V. Aplin).

It is possible that a more thorough working of a county or district might bring to light localities where this species is holding its own.

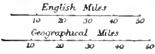
REDSTART (*Phoenicurus ph. phoenicurus*).

Increase 11. Decrease 28. Normal numbers 22. No returns 53.

A majority of observers considered that the Redstart was below the average in numbers in 1912, but making every allowance for this the species seems to be decreasing in many localities. In very few districts, if any, can it be described as numerous, and, as can be seen from the map, in many counties observers have failed to detect its presence.

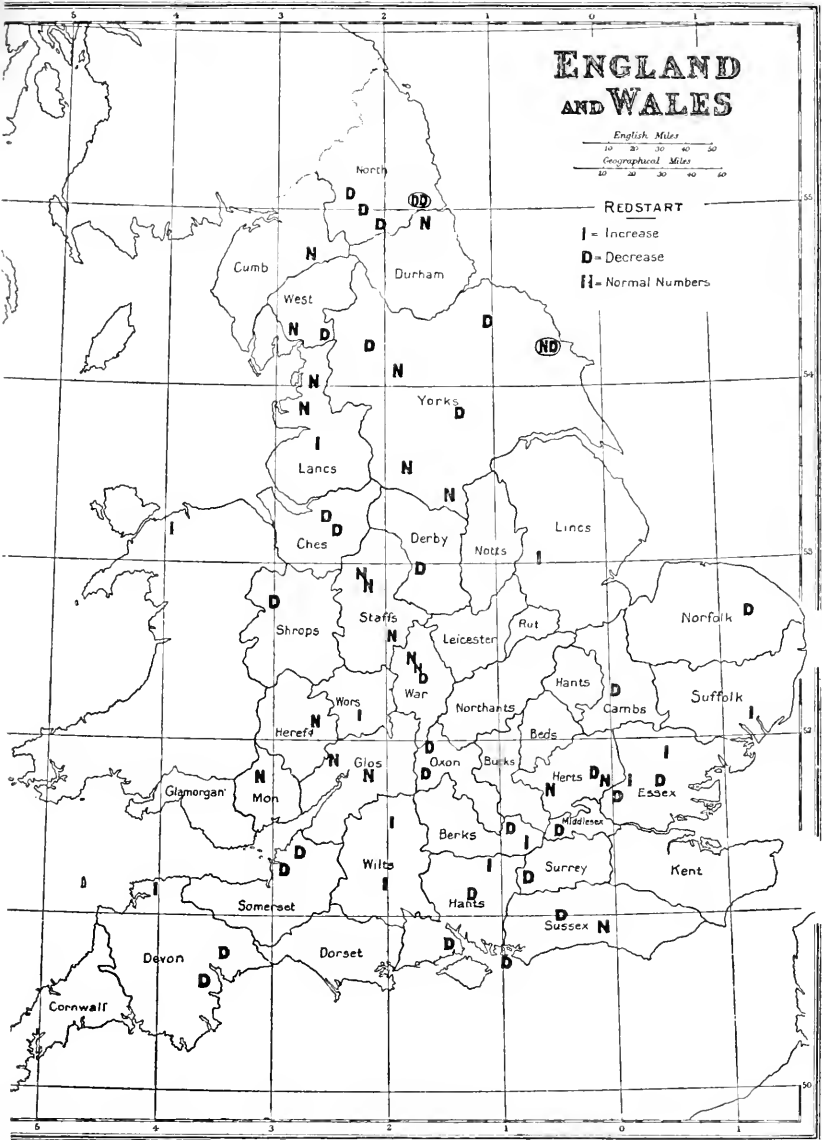
In one district there is a distinct increase—Sunningdale (Berks.), "eight pairs, where the average is two"

ENGLAND AND WALES



REDSTART

- I = Increase
- D = Decrease
- {} = Normal Numbers



(G. F. Clarke), but the Rev. J. G. Cornish from the same district does not send any return. An increase is also reported from Salisbury (Wilts.), but another observer in the same town has not seen the birds at all. In two districts, Lydiard Millicent (Wilts.) and Withnell (Lancs.), the increase does not amount to much, "none in 1911, one pair in 1912." Normal numbers are reported from three districts in Staffordshire.

Decreases are not confined to any particular district, e.g. Haileybury (Herts.), "only one seen this year" (F. W. Headley); Exeter (Devon.), "only one seen in two years" (M. Vaughan); Kingham (Oxon.), "far below the average" (W. Warde Fowler); Pensford (Somerset), "scarce 1911, none 1912" (H. L. Popham); Chelmsford (Essex), "once common, none seen now" (L. Gray); Otterburn (Northumberland), "five pairs 1911, two 1912" (Miss A. Pease); Wharfedale and Goathland (Yorks.). "a decreasing species" (H. B. Booth and J. D. Patterson); Cambridge, "ten pairs 1911, six pairs 1912" (H. G. Alexander).

NIGHTINGALE (*Luscinia m. megarhynchos*).

Increase 12. Decrease 22. Normal numbers 27. No returns 52.

The Nightingale seems to have been present in average, or perhaps in more than average, numbers in 1912.

In a few cases slight increases have been reported, viz: Lydiard Millicent (Wilts.), "three pairs 1911, eleven pairs 1912" (D. P. Harrison) (this is all the more striking as there are no returns from the rest of Wiltshire); Abergavenny (Monmouth), "three pairs 1911, six pairs 1912" (S. W. White). An increase is also reported from Coventry (Warwick), Maidenhead (Berks.), Norwich (Norfolk), Midhurst (Sussex), and Wye Valley, though not a very marked one. In a well-known haunt like Epping Forest this species seems to be holding its own. At Beaulieu (Hants.), though 1912 was only an average year, the bird was common. It is perhaps worthy of mention that in a favourite county like Hertfordshire a decided decrease is announced by all four observers, with the additional remark from Rickmansworth that it is decreasing every year (W. Bickerton). Sometimes, no doubt, the decrease is local only and is due perhaps to some change in local conditions, e.g. a decrease is reported at Limpsfield (Surrey), but an increase at Banstead not so very far off, while from some localities a steady decrease is announced, e.g. Horsham (Sussex), "rarer every year, only one pair within three miles of Horsham" (J. G. Millais), Uckfield

(Sussex), "has been decreasing for the last ten years" (R. Morris). In one locality in Yorkshire, Ackworth, the numbers are said to be much the same as usual.

On the whole the Nightingale seems to be holding its own, but with difficulty, though we must not forget to take into account that 1911 was an exceptionally good year and therefore 1912 may have suffered by comparison.

SWALLOW (*Chelidon r. rustica*).

Increase 9. Decrease 71. Normal numbers 30. No returns 3.

A majority of observers considered Swallows well under the average in numbers in 1912. The returns seem to indicate that this species is decreasing, especially as some (eleven) observers consider that this decrease has been going on for some years.

A decided increase is reported from Farnham (Surrey), and the numbers at Brunstead (Norfolk) and at Chelmsford (Essex) are said to be above the average. In fact, Essex and Hants. are among the few counties where the Swallow appears to be maintaining its ground.

The decrease is not confined to any one county or district, and as far as can be seen is not nullified by a corresponding increase in any adjacent area. The following instances will serve to illustrate this: Tenterden (Kent), "fifty per cent. decrease" (N. F. Ticehurst); Midhurst (Sussex), "far below the average" (J. G. Dalgleish); Banstead (Surrey), "in one farm seven nests 1911, two in 1912" (Miss Acland); Hayling Island (Hants.), "marked decrease" (J. E. H. Kelso); Sunningdale (Berks.), "fifty per cent. decrease" (G. J. Clarke); Hexham (Northumberland), "much below" (M. Portal); Harrogate (Yorks.), "much below" (E. Steward); Abergavenny (Monmouth), "not much difference between 1911 and 1912, but big decrease compared to average of five years ago" (S. W. White).

HOUSE-MARTIN (*Hirundo u. urbana*).

Increase 11. Decrease 78. Normal numbers 14. No returns 5.

A majority of observers considered the House-Martin to be far below the average in numbers in 1912. This species seems to be decreasing in numbers, and as far as can be seen the decrease is general and is not confined to any part of the country.

Distinct increases have been reported from Farnham (Surrey), Culmstock (Devon), Coventry (Warwick), Kingham (Oxon.), and from Lydiard Millicent (Wilts.), where no birds were seen until May 12th. From Sunningdale (Berks.)

G. F. Clarke reports this species to be twice as numerous as usual, while the Rev. J. G. Cornish considers it to have been decreasing at the same place for the last three years.

Many illustrations of the decrease of this species might be given, but the following will suffice: On a bridge at York, Captain Seppings reports that there were fifty-two nests in 1910, forty-two in 1911, and thirty-four in 1912. At Woodford (Essex) Mr. C. L. Collenette says, of five colonies under eaves in 1911, only two were occupied in 1912 in diminished numbers, and no fresh colonies could be found. At Barcomb (Sussex) the Rev. C. Toogood found twenty nests round some farm buildings in 1911, in 1912 there were none. Some observers consider that the Martin has been ousted by the Sparrow; but that it is decreasing there can be no reasonable doubt.

WRYNECK (*Jynx t. torquilla*).

Increase 3. Decrease 16. Normal numbers 17. No returns 78.

The Wryneck seems to have been below the average in numbers in 1912. From the negative information* as well as from the actual returns it seems beyond question that the species is decreasing, while the distribution is extremely restricted. Mr. J. G. Dalgleish reports an increase from Midhurst (Sussex); but as a rule the increase does not amount to much—e.g. Uckfield (Sussex), “a slight increase” (R. Morris); Maidenhead (Berks.), “two pairs” (F. W. Proctor).

Normal numbers are reported from several localities in Kent, but the average is often quite a small one, e.g. Boughton Monchelsea and Langton Green “two pairs only,” and from Haileybury (Herts.), “normal numbers, but never a common bird here” (F. W. Headley), while attention is constantly being drawn to the fact that the numbers of this species have been and are decreasing, e.g. Bosham (Sussex), “almost extinct” (F. H. Adkin); Cambridge, “none either year” (H. G. Alexander); Hayling Island (Hants.), “marked decrease” (J. E. H. Kelso); New Forest (Hants.), “decreasing” (R. E. Coles); Abergavenny (Monmouth), “none seen for years” (S. W. White); Lowestoft (Suffolk), “very scarce” (C. B. Ticehurst); Tunbridge Wells (Kent), “no increase or decrease but unusually few both years” (H. G. Alexander).

* Of course the bird's restricted range and its patchy distribution must be taken into consideration in this connexion, but apart from these returns there is good evidence to show that the Wryneck has been decreasing, especially on the outskirts of its range in England, for some years.—Eds.

NOTES

THE "PEEWIT" NOTE OF THE GREENFINCH.

ON June 10th, 1912, my brother called my attention to the note of a bird in our garden at Lynmouth, Devon, like that of a Peewit, which he had heard for some days but could not identify. On the next day I again heard it from the middle of a holly-bush. My brother, however, found in the Rev. C. A. John's *British Birds in their Haunts* (edition of 1862) the following passage in reference to the Greenfinch (*Chloris chloris*): "Another of the notes is a double one and closely resembles that of the Peewit, hence it is called in some places 'Peesweep.'" I had seen a Greenfinch, which is not a common bird here, on May 16th, and I am sure that a pair nested in the neighbourhood, for I heard the cries of the young birds, and on June 16th saw the male uttering this note from the bough of a tree. I do not know whether the note is an unusual one or confined to the breeding-season only, but I had never heard it before, and as it is a very singular and striking note I was surprised not to find it more generally mentioned in the description of this bird in other books.

T. H. BRIGGS.

RICHARD'S PIPIT IN LINCOLNSHIRE.

ALTHOUGH the late Mr. J. Cordeaux recorded having seen an example of Richard's Pipit (*Anthus r. richardi*) when driving along the road between Tetney and the coast, the species does not appear to have been actually obtained in Lincolnshire until November 16th, 1912, when I shot a specimen on the sea-bank in the parish of Marshchapel. Its long legs and the rapidity with which it ran rendered it very conspicuous at a considerable distance. It was in good condition, and very wild. Migration was practically over, but I saw a Golden Plover on the same day, and a few Lapwings were coming in from the sea with a light east wind.

G. H. CATON HAIGH.

WILLOW-TIT IN DUMFRIESSHIRE.

A TIT, kindly identified for me by Mr. H. F. Witherby as a Willow-Tit (*Parus a. kleinschmidti*), was shot at Grennan (Dumfriesshire) on January 25th, 1913.

HUGH S. GLADSTONE.

YELLOW-BROWED WARBLER IN LINCOLNSHIRE.

ON September 25th, 1912, I shot a Yellow-browed Warbler (*Phylloscopus s. superciliosus*) in a thorn-hedge near the sea bank at North Cotes. There was a fresh east wind blowing, and the weather was fair, but very few birds were moving, a single Redstart, two Ring-Ouzels, and half a dozen Goldcrests being the only migrants seen during the day. This is the first example which has appeared here in September, the previous occurrences having taken place during the following month.

G. H. CATON HAIGH.

BLACKCAPS, CHIFFCHAFFS, AND SWALLOW
WINTERING IN THE BRITISH ISLES.

ON February 1st, 1913, I watched a male and female Blackcap (*Sylvia a. atricapilla*) in the "Rock Garden" at Torquay, Devon. The female, which for a time was only a few feet away from me, was feeding upon the berries of ivy. It is interesting to note that the male and female were together in winter-quarters, for it is often stated that the immigrant males arrive in England before the females, which suggests that the sexes do not winter in company.

T. A. COWARD.

ON January 25th, 1913, I had a good view, at close range, of a female Blackcap (*Sylvia a. atricapilla*) in the parish of Weare, Somerset; the sun was shining and the light good at the time. I re-visited the spot a little later and saw the bird again, when it was engaged in capturing an occasional gnat and feeding on the berries of the privet, of which there was a large crop in the hedge.

HARVEY W. MAPLETON.

ON February 8th, 1913, I saw a Chiffchaff (*Phylloscopus collybita*) in a sheltered orchard at Blackpool near Dartmouth, Devon. It is unlikely that this was an exceptionally early immigrant.

T. A. COWARD.

I HAVE to-day (February 10th, 1913) seen a Chiffchaff (*Phylloscopus collybita*) near Tring, Hertfordshire. The bird was on some willows, within a few feet of me and occasionally alighted on a fence where I could identify it with absolute certainty. The legs were dark and the general colour of the upper-parts brownish-green.

M. BEDFORD.

MR. ARMSTEEN, of Cork, has sent me a Chiffchaff (*Phylloscopus collybita*) in the flesh for identification. It was caught alive on January 25th, 1913.

ALLEN SILVER.

[In the *Field* (l.ii.13, p. 237) Capt. L. Creaghe Creaghe-Haward records that one of his men observed two or more Swallows hawking round the house at Glenellen, Milltown, co. Kerry, for the greater part of the day on January 23rd, 1913.—Éds.]

BRENT GOOSE IN DERBYSHIRE.

MR. T. E. AUDEN informs me that on January 10th a Brent Goose (*Branta b. bernicla*) was brought to him in the flesh, and only recently dead, at Danesgate near Repton. It had been caught alive, but completely exhausted, on the previous night in the yard of a cottage at Winshill, in the part of Burton-on-Trent which lies in Derbyshire, and died the following morning.

Though always rare inland, Brent Geese have been recorded on several occasions from Derbyshire. Pilkington and J. J. Briggs both state that it has occurred, and Whitlock saw one on the Trent in October, 1888 (*Birds of Derbyshire*, p. 163). Sir R. Payne Gallwey also mentions an instance of one of two being shot on the River Derwent near Derby about 1890, and one was killed on the River Dove near Rocester in January, 1903 (*Jourdain, Vict. Hist. of Derbyshire*, I., p. 139, and *Addenda*, p. xxix. ; *Zool.*, 1904, p. 103).

In a note on this subject in the *Field* (February 1st, 1913, p. 237), Mr. Auden's name is incorrectly given.

F. C. R. JOURDAIN.

PINTAIL IN ESSEX.

ON January 26th, 1913, I identified a male Pintail (*Dafila acuta*) on Connaught Water, Chingford, Essex. On clapping my hands the bird took flight and, joining some Mallards, soared round over the lake, and finally alighted on the water in company with the other Ducks. I visited the lake on February 2nd, and again had the pleasure of seeing the Pintail.

As Connaught Water is only about eleven miles from St. Paul's, and as the Pintail is a scarce visitor to Essex, this occurrence seems worth recording.

WILLIAM E. GLEGG.

LITTLE DUSKY SHEARWATER IN KENT.

IN *Country Life* for January 18th last, Mr. R. Lydekker published the record of a Little Dusky Shearwater that had been picked up in an exhausted condition at Welling in Kent on August 20th, 1912. He stated that it was the property of a member of the staff at Rowland Ward Ltd.

The accompanying photograph of the specimen gave a false impression of the bird in several particulars, probably owing to the position in which it was photographed with respect to the light. I therefore applied to Mr. Ogilvie-Grant who had seen the bird, and he kindly corroborated its identification as an adult male of the Madeiran form of the species (*Puffinus obscurus godmani*) to which form all the British specimens at present obtained belong, the present one being the seventh (not the fifth, as stated in *Country Life*) and the second for Kent.

N. F. TICEHURST.

GREEN SANDPIPER AND BAR-TAILED GODWITS IN ORKNEY.

I BELIEVE there are not many records of the occurrence of the Green Sandpiper (*Tringa ocropus*) in Orkney, so it is worth while to note that one, a female, was shot at Kirbister, Pomona on August 19th, 1912, and another was seen on the same day. Also two Bar-tailed Godwits (*Limosa l. lapponica*), both males, were shot on October 1st, 1912, on the island of Shapinsay.

JAMES R. HALE.

[The Bar-tailed Godwit is a rare visitor to Orkney, but we think the only previous record of the Green Sandpiper is one from the Pentland Skerries on July 30th, 1911, though the bird occurs regularly at Fair Isle.—Eds.]

MOVEMENTS OF LITTLE AUKS ON THE NORTHUMBERLAND COAST.

THE following notes on the movements of Little Auks (*Alle alle*) during this winter may be of interest:—

1912, November 3rd.—St. Mary's Island. Wind (slight) north. Heavy swell after strong west wind. Large numbers of Little Auks passing north; some settling on rocks and seaweed in water (H. B. Hodgson).

November 5th.—Few still passing north. Seven shot.

November 13th.—Very strong north gale all last night. Very cold. 10.30 a.m.—Numbers making into wind. Three or four shot. None seen after 11.30, when gale abated somewhat.

1913, January 21st.—After week of terrible south-east gale picked up one Little Auk dead.

January 29th. Wind north-east. One found in garden at Whitley, half mile inland, exceedingly thin.

February 17th.—One picked up exhausted at Whitley Bay (V. Coxon).

From the foregoing it would seem that at the period of the south-east gale these birds were not on the move near this point, and that their movements took place in the the late autumn. This is the earliest date for a big migration that I know of for this coast. Compared with last year of course their numbers were very small. J. M. CHARLTON.

[Mr. J. Beddall Smith informs us that there were numbers of Little Auks at Wells, Norfolk, on November 15th, 1912, and others were recorded elsewhere at the end of October and beginning of November (*supra*, p. 226).—EDS.]

EARLY NESTS.—In the *Field* of January 25th, 1913, Mr. H. H. Wardle gives an interesting list which he has compiled of cases of early nesting in the last three winters. Those for 1912-13 include: Yellow Bunting, October 28th, two eggs, Great Horkesley, Essex. House-Sparrow, November 15th, one egg, Netherby, Yorks.; December 4th, one egg, Poulton-le-Fylde, Lancashire. Blackbird, December 25th, four eggs, near Horsham, 1913.—January 2nd, three eggs, Kirkby Overblow, Yorks. Starling, January 4th, four young, near Kineardine. Song-Thrush, January 6th, two eggs, New Leake, Lines.. January 8th, three eggs, Neston, Cheshire, January 12th, four eggs, Alfreton, Sussex, January 14th, two fledged, St. Neots.

In the same journal (18.i.13, p. 140) Mr. A. Bird records that a Wood-Pigeon was found sitting on two eggs on January 11th, at Horsley.

SCARLET GROSBEAK IN ROSS-SHIRE.—Miss A. C. Jackson records (*Scot. Nat.*, 1913, p. 42) that a female *Carpodacus erythrinus* was captured on September 8th, 1912, at the Tarbatness Lighthouse by Mr. Allan, the lightkeeper, and sent to her. This is the first record of the species for the mainland of Scotland.

FEMALE GREENLAND WHEATEAR IN MALE-PLUMAGE.—In our last number (p. 283) it was suggested that a mistake might have been made in the case of a Greenland Wheatear in the plumage of an adult male and with a wing of 106 mm. which was sexed as a female. The Duchess of Bedford, who reported the bird to the *Scottish Naturalist*, very kindly sends me the following particulars provided by Mr. C. Kirk, of Glasgow:

The specimen was skinned by George Stout who, on discovering it was a female, brought it to Mr. Kirk for confirmation, and it was further examined by a third qualified party. The ovaries, which were examined under a lens, were

quite normal for an adult female at that season of year, some of the embryonic eggs being rather more developed than others, but not to any great extent. The fact that the bird was in male-plumage naturally caused greater attention to be paid to the reproductive organs than would have been the case had the plumage and the sex agreed.

This seems to me very satisfactory evidence that the bird was sexed correctly, especially as the fact that the plumage was abnormal for a hen-bird was noticed at the time.

By the kindness of the Duchess of Bedford I have been able to examine the specimen, and in plumage it cannot be distinguished from an adult male in summer. It is curious that in both this specimen and that reported by the Misses Baxter and Rintoul, the feathers on one side only of the tail have white tips. When freshly grown in the autumn, all the feathers of the tail have white tips but then gradually wear off until by May they have disappeared. In the case of the specimen I have examined I think the feathers on one side of the tail had been accidentally lost and replaced by new feathers so recently that the tips had not become worn.

It is very curious that the ovary in this specimen appeared to be normal, since in the case of female game-birds assuming male-plumage the ovary is always found to be diseased or injured. In all such cases the organs should be preserved for examination by an expert. H.F.W.

HOOPOE IN FORFAR.—Mr. T. F. Dewar records (*Scot. Nat.*, 1913, p. 18) that a specimen of *Upupa epops* was obtained at Newbarns, Lunan Bay, Forfar, on September 3rd or 4th, 1912.

HOBBY IN MIDLOTHIAN.—Mr. R. Tomlinson notes (*Scot. Nat.*, 1913, p. 19) that a Hobby (*Falco s. subbuteo*)—a rare bird in Scotland—was picked up dead outside a wired-in poultry-run (having apparently come in contact with it) on October 14th, 1912, near Musselburgh.

GLOSSY IBIS IN YORKSHIRE.—Mr. E. W. Wade records (*Naturalist*, 1913, p. 115) that two *Egatheus f. falcinellus* were seen (one, a female, being shot) near Aldborough in Holderness, Yorkshire, on October 18th, 1912. This is very near the date of the Essex examples (*supra*, pp. 223 and 280).

LITTLE BITTERN IN FIFESHIRE.—Mr. J. Campbell reports (*Scot. Nat.*, 1913, p. 44) that a specimen of *Ixobrychus minutus* was shot on the banks of the Eden, Fifeshire, on May 17th, 1912.

GADWALL NESTING IN CAITHNESS.—Mr. H. Alston states (*Scot. Nat.*, 1913, p. 20) that three *Anas strepera* were shot near Wick on November 7th, 1912. In the next number of the same journal (p. 44) Miss A. C. Jackson reports her interesting discovery of a pair of Gadwall with a brood on a loch in Caithness in July, 1912. This is by far the most northern breeding-record for the species in Great Britain.

BREEDING-HABITS OF THE TUFTED DUCK.—In the *Scottish Naturalist* (1912, pp. 265-71) Mr. S. E. Brock publishes some interesting notes on this subject in which he describes the sexual displays of the male, the vigorous and frequent preening of the feathers, and a curious habit of grass-plucking, by both sexes at about the time of nest-construction.

REPORTED OCCURRENCE OF SAND-GROUSE IN YORKSHIRE.—In the *Naturalist* (1913, p. 115) Mr. R. Fortune repeats, as has already been reported in the daily Press, that a flock of birds identified as Sand-Grouse (*Syrhaptus paradoxus*), some one hundred and sixty strong, were seen on October 20th, 1912, on a moor at Lockton, Yorkshire. The matter was reported to Mr. W. H. St. Quintin by Mr. Cooper, of Aislaby Hall, who says that they flew past near the ground within about twenty yards of him, and that he heard their "twit, twit" note before he saw them. Mr. Cooper adds that he had considerable experience of the species in several parts of Yorkshire during former irruptions. If these birds were really correctly identified, it is very curious that so large a flock should have passed unnoticed elsewhere. Moreover, the time of year is unusual for their arrival, and we have not heard of any having been seen on the Continent.

SANDWICH TERN NESTING IN CLYDE.—Mr. T. Thornton MacKeith reports the discovery in June, 1912, of several Sandwich Terns (*Sterna sandvicensis*) (five were seen) among the breeding Common Terns in the Clyde Estuary, and the finding of one egg (*Scot. Nat.*, 1913, p. 20).

GREAT SKUA IN BUTE.—Mr. C. Kirk records (*Glasgow Nat.*, Vol. V., p. 45) that an example of *Stercorarius s. skua* was obtained near Rothesay on November 13th, 1912.



LETTERS



GEESE AND GULLS IN ICELAND.

To the Editors of BRITISH BIRDS.

SIRS,—As reported by me in the *Field* a few weeks ago, in reference to the hybridization of Grey Lag and domestic Geese, I saw a large number of Grey Lag-Geese (*Anser anser*) at Hêradsfoi on the north-east coast of Iceland on August 3rd, 1911.

The surf prevented my landing, and the high beach obstructed the view, but upwards of one hundred Grey Lags ran along the beach in front of my launch. They were unable to fly, and when hard pressed some disappeared over the bank and others took to the sea. I shot one of these in order to see the condition of the flight-feathers.

I take this opportunity of saying that I saw a Black-headed Gull (*Larus ridibundus*) on the north coast of Iceland, a few days earlier, and was also shown one in the possession of the Danish Consul at Akureyri which he had shot a few days before my arrival. As the Lesser Black-backed Gull (*L. fuscus*) appears to be considered a rare bird, and only to have been reported once, it may be of interest to mention that I saw these birds on the East coast both in 1910 and 1911.

M. BEDFORD.

THE GEESE OF ICELAND.

To the Editors of BRITISH BIRDS.

SIRS,—I am obliged to the Rev. F. C. R. Jourdain for his editorial note to my letter (*supra*, pp. 286-7), but I am afraid, interesting though his remarks are, they do not tend to get us much forwarder. When speaking of the "down" I should perhaps have said "nest" for I naturally included "feathers" in my use of the word "down." I gather from Mr. Jourdain's remarks that he can readily find differentiating characters between the "nests" of *Anser brachyrhynchus* and *Anser f. fabalis* when comparing "nests" which are authentically known to belong to these two species respectively—by authentic I take it Mr. Jourdain refers to cases in which the parent bird was shot from the nest or identified in some other equally satisfactory way, and in which no shadow of doubt could creep in. If this be so, then I take it Mr. Jourdain should, by means of these differentiating characters, be able, at once, to identify any "nests" of these two species of goose in which no authentic record of the bird is known. Surely Mr. Jourdain is somewhat unhappy in speaking of "flank-feathers"!! All the feathers I have seen in "nests" have been much smaller than any flank-feather, and appear to me to be plucked,

together with the down, from the regions of the belly. There are other points which should be taken into consideration and investigated : e.g. does the male goose contribute any down or feathers to the nest ? does he take any active part in the duties of incubation ? and are there any known differences, however slight, between the plumages of male and female "Grey Geese" ? If there are any sexual differences in the feathers I should like to know them, for at present I am inclined to think that there are none. F. W. SMALLEY.

SIRS,—The question of the breeding species of Geese in Iceland has never been definitely settled, but in my opinion the Grey Lag, Pink-footed and White-fronted all nest there. A breeding-place of the White-fronted Goose (*Anser albifrons*) was discovered in June, 1911, almost in the middle of the country, and eggs were obtained from this locality again in 1912. During the past 15 years I have received from Iceland a number of sets of eggs of *A. brachyrhynchus*, and also obtained about three sets of *A. albifrons* about six years ago. R. PLUMB.

[Although the term "flank-feathers" has been very generally applied to the small feathers found among the down, there seems to be no justification for its use, and feathers taken from nests of geese appear, as Mr. Smalley rightly says, to be plucked from the belly. Once or twice I have found a genuine flank-feather present, but this is probably merely accidental. Mr. H. F. Witherby informs me that he has never seen a flank-feather in a duck's nest.

The only nests of *A. brachyrhynchus* which I have been able to examine closely were all obtained on Spitsbergen, and were undoubtedly authentic, as no other Grey Goose breeds on that group. Probably a few also nest in North Iceland, but I have not been able to examine any nests from this locality critically. The few authentic eggs and nests of *A. fabalis* which I have seen were obtained in North Russia and the interior of North Scandinavia. Many nests of so-called "Bean Goose" from Iceland and the coasts of Norway and the Gulf of Bothnia (usually if not unauthenticated in any way) have proved to belong to *Anser anser*. The most useful distinction between the nests of the two birds lies in the eggs, but the feathers of *A. fabalis* (and probably the down also) are appreciably darker, and *A. brachyrhynchus* makes a much more substantial nest than its ally.

In practical work these distinctions are not of much use, for the simple reason that the locality alone is enough to separate them. The two birds not only do not breed in the same districts, but do not nest within six hundred miles of one another.

In Iceland on the other hand it is necessary to be able to distinguish the nests of *A. anser*, *albifrons* and *brachyrhynchus*, and in North Russia and Scandinavia we have *A. anser*, *albifrons*, *fabalis*, and *finmarchicus* breeding. Mr. Smalley speaks of the down of *A. fabalis* as being "light, like that of *A. anser*." As he includes feathers in his use of the word "down," and the nest-feathers of *A. fabalis* differ widely from those of *A. anser*, it would be interesting to know the locality of the nest to which Mr. Smalley refers, and whether it is authenticated in any way. I am not aware of any evidence that the male goose shares in incubation, but with regard to the other points, definite information would be very acceptable. F. C. R. JOURDAIN.]

SENSE OF SMELL IN THE STONE-CURLEW.

To the Editors of BRITISH BIRDS.

SIRS,—In reference to Dr. Penrose's "Field-Notes on a Pair of Stone-Curlews," in the last number (pp. 266-9), I had a somewhat similar experience to the author's one day when photographing a Stone-Curlew's nest on the Hampshire Downs. My camera was hidden in tufts of grass and was provided with an electric release leading fifteen yards away to a blind or hide composed of branches where I lay hidden for a considerable time, with the wind blowing from the camera towards me. One of the parent birds returned and began the usual wandering around the nest-area, and was about to settle on her eggs when the wind suddenly changed, as it often does on the Downs, and blew directly from me towards the bird. She suddenly straightened herself and cautiously approached my blind, somewhat after the manner of a pointer dog drawing on a point. She came close up and actually peered through the leaves in front of my face, then flew off uttering startled cries. I am quite sure the bird scented me.

In my opinion birds, as a rule, have very weak olfactory powers. Dr. Penrose mentions ducks as having this power fairly developed, but in my experience their sense of smell is not acute. For instance, I have drifted in my punt before the wind within forty or fifty yards of a flock without being detected.

J. E. H. KELSO.

THE SWALLOW RECOVERED IN NATAL.

To the Editors of BRITISH BIRDS.

SIRS,—If there was no other result of the Scheme for Ringing Birds organised by Mr. Witherby, the Swallow record from Natal is sufficient reward. May I, in this East African connection, draw attention to the Swift which was found dead in New Ross, co. Wexford, in May, 1886, with a piece of paper tied to it bearing the inscription "Mary Elsam, Suakin, Egypt, 10.3.86"? As I interviewed the man who found the bird and am satisfied the occurrence took place as above-stated, it may do no harm to mention this event, though already recorded in the *Birds of Ireland*, p. 103.

RICHARD M. BARRINGTON.

[We have always regarded the record of the Swift with a piece of paper "tied under its tail" as having origin in a practical joke, perhaps perpetrated by a soldier recently returned from the Soudan. Is there any proof that the piece of paper was not tied on after the Swift's death? What proof is there that it was tied on at Suakin? As the Mahdi was in possession of the Soudan at the time and had advanced not far from Suakin, it may have been a clumsy attempt to make people suppose that one Mary Elsam was imprisoned there. But such "records," being of no scientific value whatever, should not be seriously considered.—Eds.]



REVIEWS

Report on the Immigrations of Summer Residents in the Spring of 1911; also Notes on the Migratory Movements and Records received from Lighthouses and Light-vessels during the Autumn of 1910. By the Committee appointed by the British Ornithologists' Club. (Forming Vol. XXX. Bull. B.O.C.). 19 Maps. Witherby & Co. 6s. net.

THE seventh annual Report by this indefatigable Committee is even more packed with facts than the previous one, and bears evidence that the band of observers who contribute observations grows both in numbers and energy. We are much indebted both to them and to the members of the Committee who have tabulated the records with such care and labour.

The arrival of the summer residents in the spring of 1911 appears to have proceeded on what may be regarded as fairly normal lines, though some unusual observations were made and these may here be briefly referred to, with other items of interest culled from the Report.

With regard to the great immigration of Continental Great Tits (*Parus m. major*) in the autumn of 1910 (*cf. B.B.*, IV., p. 247, V., p. 200) it is interesting to note that Great Tits were observed at a number of Lights on the east coast during October and November. In the spring of 1911 there was evidently a return migration which was observed in Suffolk on February 26th as well as in March and April, and in Kent in March. One bird obtained from a flock in east Kent on March 10th proved to be of the Continental form. Movements of Golderests in the autumn of 1910 were very considerable and lasted from the end of August until the middle of November. It is considered probable that at any rate up to the end of September the birds were of the British form, but that after that they were mostly Continental. The earliest specimens of *Regulus r. regulus* came from east Kent on October 14th, Sussex coast on the 24th, and the Isle of Wight on the 26th. An identified example is also recorded for south Yorkshire on April 18th, 1911.

A Chiffchaff (*Phylloscopus c. collybita*) was seen at the end of February in Staffordshire, and some remained in the Scilly Isles all the winter. It is probable that some remain every winter somewhere in our islands. A Lesser Whitethroat

(*Sylvia c. curruca*) is reported as having been shot in Herefordshire on December 15th, 1910—a remarkable record.

Common Sandpipers (*Tringa hypoleuca*) were noted as wintering in Devonshire.

A specimen of *Ph. trochilus evermanni* was taken at St. Catherine's Light (Isle of Wight) on May 26th, 1911. Continental Song-Thrushes (*Turdus p. philomelus*) were noted at the same Light in early March, 1911, while on March 30th large numbers, all of this form, were taken there; large numbers (mixed with the British form) also occurred there on October 14th, 23rd, 24th, 26th, and 28th, 1910, and this information may be added to that given in our *Hand-List*. Greenland Wheatears (*Enanthe æ. leucorrhœa*) were taken in Guernsey so early as April 20th, 1911, and at St. Catherine's on the 22nd and in Pembroke and Guernsey on the 25th. The Wheatears obtained at Lights after May 1st, 1911, were all, except three, of this race, as were all those after September 26th, 1910, on the autumn-migration. Nightingales (*Luscinia m. megarhyncha*) were considered to be unusually abundant in 1911 in Essex, Suffolk, Worcester, Hereford, Lincoln and Shropshire (cf. *B.B.*, V., p. 23). Although Turtle-Doves (*Streptopelia t. turtur*) had eggs in Essex as early as May 1st, 1911, passage-migrants were passing up the east coast as late as June 1st.

There are a considerable number of Lighthouse records of Water-Rails (*Rallus aquaticus*) both in spring and autumn and the following from Bardsey Lighthouse (Carnarvon) are especially noteworthy owing to the large numbers noted, viz. March 29th, 1911, "about sixty seen and thirty killed," March 30th, "about fifty seen and thirty killed," April 1st, "about thirty seen and twelve killed" and "many" on the same night at St. Catherine's. These records should be compared with parallel ones from Bardsey in the autumn of 1909 (cf. *B.B.*, V., p. 168).

Amongst the "Isolated Records" we find the following previously unrecorded items of importance. A Barred Warbler (*Sylvia n. nisoria*) was killed at the Skerries Lighthouse (Anglesey) on the night of September 10th, 1910. This is a new bird to Wales. A Water-Pipit (*Anthus spinoletta*) was seen at Pevensy (Sussex) on September 30th, 1910. A Blue-headed Wagtail (*Motacilla flava*) flew on board H.M.S. "Africa" in Knock Deep on June 1st, 1911. Twenty Magpies (*Pica p. pica*) were seen arriving at Thanet (Kent) from the north-east with Continental Jays on

September 28th, 1910, and fifteen on October 14th—two most interesting observations, since evidence of true migration in the case of the Magpie is very slight. A Stork (*Ciconia c. ciconia*) was seen on Romney Marsh in March, 1911, near Pevensey on April 9th, and at Littlehampton on May 6th. A Kentish Plover (*Charadrius alexandrinus*) was killed at St. Catherine's on October 9th, 1910. A Whiskered Tern (*Hydrochelidon l. leucoparcia*) is reported to have been "clearly identified" at Hollesley Bay (Suffolk) on September 16th and 17th, 1910, but such records cannot be accepted without evidence of identification.

Altogether this Report is full of genuine good work, and it should be in the hands of everyone who is keenly interested in British birds.

H.F.W.



B.B., Vol. VI., Pl. 9.

James Sweeney
Henry Redison

Born August 29th, 1850.

Died February 8th, 1913.

BRITISH BIRDS

EDITED BY H. F. WITHERBY, F.Z.S., M.B.O.U.

ASSISTED BY

REV. F. C. R. JOURDAIN, M.A., M.B.O.U., AND NORMAN F. TICEHURST, M.A., F.R.C.S., M.B.O.U.

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HENRY JOHN PEARSON.

A MEMOIR

BY

COLONEL H. W. FEILDEN.

[PLATE 9.]

WITH deep regret we have to record the death of our esteemed friend Henry John Pearson, which took place at Assiut, Egypt, on February 8th. His remains were buried in the English Cemetery at Cairo on February 9th. 1913.

Henry Pearson was born at Chilwell in the county of Nottingham on August 29th, 1850, the eldest son of Mr. J. R. Pearson and Elizabeth his wife. From an early age he took an interest in natural history and this inclination, especially towards birds, began, as is so often the case, in a boy's collection of their eggs. Entering into business as quite a young man, his ability and energy were crowned with success, but many years elapsed before he could spare the time to indulge in extended absences from home, and expeditions to the Arctic Regions in pursuit of his beloved ornithological investigations. Still in his short summer holidays spent in Norway and elsewhere Ornithology was not forgotten, and additions were made to his collection of eggs. His first recorded trip was made in the summer of 1893, in company with his brother Charles and Mr. Edward Bidwell, an account of which is published in the *Ibis* for 1894 as a "Birds' nesting excursion to the north of Norway." Their notes on the birds observed are interesting, and the result of the expedition was the acquisition of eggs of forty-seven species, taken by themselves.

In 1894 with his brother Charles Pearson he visited the southern Fiskevötn district of Iceland. The ornithological results were published in a communication to the *Ibis*, 1895. This paper contains some interesting field-notes on the birds observed, especially in regard to the nesting of the Harlequin-Duck.

In 1895 Pearson and his brother Charles chartered the small yacht "Saxon," a good sea-boat of fifty tons registered and one hundred and seventeen tons yacht-measurement, with the intention of reaching Novaya Zemlia. The Rev. H. H. Slater and the present writer were included in the party. In this voyage the Murman coast of Russian Lapland was visited and some time passed in the vicinity of Lutni on the Ukanskoe river. Ten days were spent on the desolate island of Kolguev and a considerable stay was made in Novaya Zemlia. The great pleasure of the British ornithologist is to see in these northern regions the summer-haunts and breeding-stations of many birds only known to us in this country as winter or casual visitors. It was an extreme satisfaction to Pearson to be able to gather with his own hands the eggs of Buffon's Skua in Lapland, the young of Bewick's Swan and the eggs of Little Stints and Grey Plover in Kolguev, and to visit the breeding-places of Glaucous Gulls, and the vast colonies of Brunnich's Guillemots in Novaya Zemlia. The ornithological results of this cruise were published by Pearson in the *Ibis* for 1896.

In 1897 he chartered the s.s. "Laura," a Norwegian sailing ship fitted with auxiliary steam-power. The veteran Arctic-navigator, Kjeldsen, was the sailing-master, with a Norwegian crew. The present writer was again one of the party, and on this occasion Mr. Frederick Curtis accompanied us, as medical officer to the expedition. In this voyage the island of Waigats was well explored in its northern, southern, and eastern quarters; Habarova and the mainland of Russia in that vicinity were visited, also the little-known island of Dolgoi; a prolonged stay was made in Novaya Zemlia and Lutke Land, the Matotschin Scharr was navigated, the Kara Sea entered, and the Pachtussoff Islands in lat. $74^{\circ} 24'$ on the east coast of Lutke Land reached. The weather at the time of the visit was brilliantly fine, and no ice was visible on the eastern horizon. The Kara Sea was on

its best behaviour. Pearson was extremely desirous of continuing his voyage along the east coast of Lutke Land, as far at least as Barents winter-quarters, but the supply of coal in the bunkers was only sufficient to take the "Laura" back to Norway, so very reluctantly the vessel's head was turned to the Matotschin Scharr. The ornithological results of this voyage were published in the *Ibis* for 1898.

Subsequently, under the title of *Beyond Petsora Eastward*, Pearson published an account of these two last expeditions. It is a most agreeable narrative of life and exploration in the Far North of Europe. It is profusely illustrated by photographs, many of them very beautiful, all taken by himself. This book fills an important place in our knowledge of European Arctic ornithology, geology, and botany.

As when two polar winds, blowing adverse,
Upon the Cronian Sea, together drive
Mountains of ice, that stop the imagin'd way
Beyond Petzora, Eastward.—MILTON.

In subsequent years Pearson made three visits to Russian Lapland during 1899, 1901, and 1903. In the first of these expeditions he was accompanied by his brother Charles. The localities examined were the Pechinga River and the islands in the gulf of the same name; the surrounding district was likewise closely investigated. In the second expedition his son, Hetley Pearson, was his companion. The Murman Coast was examined at various points from Kildin Island to Sviatoi Noss, a visit was paid to Kanin Peninsula, on the eastern side of the White Sea, and a short landing, not without difficulty, was made on Korga Island, at the north-east corner of the peninsula of Kanin.

In the third expedition with Mr. J. P. Musters he resolved to see something more of the interior of Russian Lapland, and accordingly the country between Kola, Pulozero, and southwards was visited and carefully examined. The chief aim of this expedition was to take the eggs of the Bar-tailed Godwit and Dusky Redshank,

both of which birds were discovered to be breeding in the district by Mr. Witherby in 1899. Notwithstanding all endeavours the eggs of these birds were not found until, as Pearson expressed it, they were hatched, and although the young in down which were brought home were no great recompense to so keen an egg-collector, they were nevertheless of more real scientific interest than the eggs, which were already well known.

The results of these three visits are recorded by Pearson in a most interesting book, very admirably illustrated, entitled *Three Summers among the Birds of Russian Lapland*. These two volumes remain as a lasting memorial to a hard-working, zealous, and accurate ornithologist.

Henry Pearson was a man of fine physique, capable of long and continuous exertion. He never spared himself and never recorded an observation until he had thoroughly convinced himself of its accuracy. In the preparation for and carrying out of his numerous expeditions he showed his marked ability for organization. In the memories of those who had the privilege of sharing in his adventures, he will be remembered as a very pleasant and agreeable companion, and a most considerate host. For several years past he spent his summers in his much loved Norway, where he had acquired a salmon-river.

For a number of years Henry Pearson was on the council of the Royal Horticultural Society, he was a Fellow of the Royal Geographical Society, and a Member of the British Ornithologists' Union and Club.

NOTES ON MORTALITY IN NESTLING-CUCKOOS.

BY

J. H. OWEN.

DURING the last few summers I have paid special attention to the development of the nestling-Cuckoo (*Cuculus c. canorus*), and have been very lucky in finding plenty of Cuckoos' eggs and young Cuckoos, but in other ways I have not been equally fortunate. A large proportion of the eggs disappeared during incubation, though not by the hand of man. This was obvious, because the eggs in the nest were taken one by one, and curiously enough the Cuckoo's egg, the largest in the nest, was invariably the first egg taken. Last year another element of "luck" was against me, for in each of five nests I found a solitary egg, and that a Cuckoo's, and in every case the victimized bird deserted it. In another case the Cuckoo turned out all the Sedge-Warbler's eggs, and the Sedge-Warbler, after incubating the Cuckoo's egg for nearly eight days, finally deserted it. Three nests were also destroyed by Jays.

When the young Cuckoos hatched they were apparently no safer than the eggs. The number which failed from various causes to grow up, was far nearer fifty per cent. than forty of those found. In this estimate I only reckon birds of which I have definite records in the nest, and do not take into account young Cuckoos which had left the nest a day or two. I have also omitted from the following lists three young Cuckoos which were reared in 1911, as I am fairly certain they were removed by country boys and afterwards died, and for the same reason I do not include two 1912 birds.

Lists of nestlings are appended for 1911 and 1912. Where it is stated that the bird was removed it must be understood that it was destroyed before it was old enough to leave the nest. Number 9 in 1911 ejected the Tree-Pipit's eggs, and I have in the Felsted School Museum an infertile egg ejected by the young Cuckoo. Number 10 (1911) furnished me with some amusement

and great interest, as it was hatched and reared in a small evergreen in front of the School laboratory door, and was almost touched daily by scores of boys and not found until it had left the nest. Notes have already appeared in BRITISH BIRDS about Numbers 15 and 16 in my 1912 list.

It is remarkable that the percentage of loss should be exactly the same in 1911 and 1912, and tends to show that this high death-rate may be normal.

YOUNG CUCKOOS, 1911.

1. In a Pied Wagtail's nest. Removed by rats between June 1st and 3rd.
2. In a Golderest's nest. Removed on June 2nd.
3. Found on June 21st in a Reed-Warbler's nest. Removed before June 27th.
4. In a Pied Wagtail's nest. Removed by a rat soon after hatching on June 21st.
5. Left Sedge-Warbler's nest on June 30th.
6. Left Hedge-Sparrow's nest on July 3rd.
7. Ready to leave Bullfinch's nest on July 8th. Left the nest alive.
8. Removed from a Robin's nest on July 4th when 10-11 days old.
9. Left Tree-Pipit's nest on July 14th or 15th.
10. Left Linnet's nest on July 20th.
11. Found killed and partly eaten in a Hedge-Sparrow's nest on July 20th.
12. Left Hedge-Sparrow's nest on July 25th.

Numbers 1, 2, 4 were pointed out to me by Mr. H. S. Davenport, and it was a great disappointment when number 2 was taken. Number 8 was probably removed by a stoat.

The total number of young birds observed in the nest in 1911 was twelve, of which six, or fifty per cent., came to untimely ends.

1912.

1. Hatched on May 29th in a Common Whitethroat's nest. Died from natural causes (possibly apoplexy) on June 11th. It was exceedingly fat but rather backward in feathering, as it had not been able to dispose of the

Whitethroats, which hatched first, until they were more than four days old.

2. Found on May 27th when 9 or 10 days old in a Hedge-Sparrow's nest. It had hatched before the other eggs hatched. It was found dead and partly eaten, but quite recently, on May 31st.
3. Hatched on June 3rd in a Common Whitethroat's nest. Left the nest on June 24th.
4. Hatched on June 5th in a Sedge-Warbler's nest. Removed (means unknown) on June 16th. This bird hatched before the other eggs and ejected the remaining eggs in less than twenty-four hours. It was doing very well when it was taken.
5. Found on June 8th when about 14 days old in a Hedge-Sparrow's nest. Found killed in the nest on June 11th.
6. Found on June 8th when about 16-17 days old in a Hedge-Sparrow's nest. It left the nest rather prematurely on June 11th and was seen for two or three days afterwards.
7. Found on June 10th when about 11 days old in a Hedge-Sparrow's nest. Found killed and partly eaten in the nest on June 16th.
8. Left a Hedge-Sparrow's nest on June 11th.
9. Found on June 12th when 17-18 days old in a Sedge-Warbler's nest. Left the nest on June 15th.
10. Hatched on June 19th in a Reed-Bunting's nest and removed (probably by a rat, as I saw one near the nest on the previous day) on July 2nd.
11. Hatched on June 23rd in a Hedge-Sparrow's nest. It was removed on June 27th. This bird was hatched from the largest fertile Cuckoo's egg I have ever seen.
12. Found on June 23rd when 13 days old in a Hedge-Sparrow's nest. Left the nest on July 1st.
13. Found on July 1st when 17-18 days old in a Hedge-Sparrow's nest. The nest was watched for me and I am informed that the bird left the nest safely.
14. Found on July 1st when about 7 days old in a Hedge-Sparrow's nest. Removed on July 3rd.
15. Left a Wren's nest in safety.
16. Found on July 5th when about 8-9 days old in a Hedge-Sparrow's nest. It was afterwards cared for by a Wren and left the nest safely on July 16th.
17. Hatched in a Hedge-Sparrow's nest on July 4th. Removed on July 8th.
18. Found on July 5th, when fully feathered, in a Robin's nest. Left the nest on July 8th.

- 19 and 20. Found when fully feathered in Hedge-Sparrows' nests. Both left the nests safely between July 5th and 8th.
21. Found killed when about 14 days old in a Hedge-Sparrow's nest.
22. Found dead when about 11 days old near a Linnet's nest on July 6th.

Of these, numbers 18, 19, and 20 were found and watched by one of the boys of Felsted School. Numbers 21 and 22 I did not trouble about, as I found them dead.

In addition to those above recorded I saw about six young Cuckoos which had left nests not kept under observation by me.

The total number of young observed in the nest in 1912 was twenty-two. Of these eleven came to untimely ends, which gives exactly the same percentage of loss during the nestling-period as in 1911, viz. fifty per cent. During the two years thirty-four young were found, of which seventeen failed to leave the nest alive.

NOTE ON THE EJECTION OF THE LINING-MEMBRANE OF THE GIZZARD BY THE CURLEW.

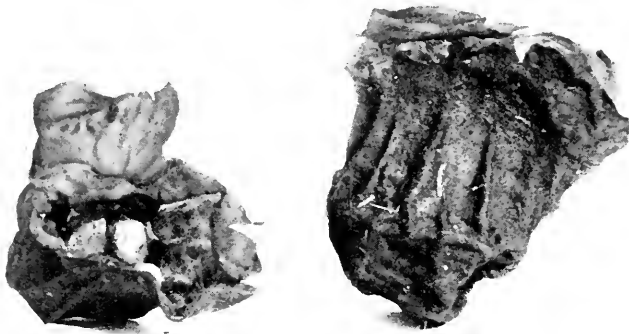
BY

H. HAMMOND SMITH.

IN the *Field* of March 1st, 1913, a letter from Mr. Dugald Macintyre was published in which he said that Curlews periodically eject the lining-membrane of the gizzard "still retaining the grit used in digestion," and in proof of this he forwarded samples of these lining-membranes of the gizzard. These were examined by Mr. R. H. Burne, of the Royal College of Surgeons, who states that they are the lining-membrane of the gizzard, and I am indebted to him for referring me to notes of the *Proceedings of the Zoological Society* in which it is shown that the Wrinkled Hornbill (*Buceros corrugatus*), when in the Zoological Gardens, was observed to eject the lining-membrane of its gizzard.

In Newton and Gadow's *Dictionary of Birds*, the gizzard or stomach is described as varying greatly, in different species of birds, in size, shape, strength, and position—chiefly according to the kind of food eaten. On the whole, the walls of the gizzard retain the same layers as the rest of the alimentary canal, but the muscular layer is more strongly developed, while the *tunica mucosa* or lining-membrane contains mucous glands alone, and none producing any specific or chemically-acting secretion. Two kinds of gizzard, the simple and the compound, may be conveniently distinguished, though they are connected by intermediate stages. In the simple gizzard the *tunica mucosa* contains simple glands secreting a soft cuticular lining, which is constantly renewed and easily peels off as a viscous yellow coating; the compound gizzard is lined with a thick brownish cuticle, formed by the hardened secretion of the *tunica mucosa*, consisting of numerous lamella which are continuously reproduced by the secreting-cells to supply those that are worn down by the constant trituration of the food through the action of the lateral muscles.

According to Messrs. Newton and Gadow, as a rule this cuticle of the gizzard, which exists also in the simple gizzard, though not in the hardened form, is continuously wearing away and being reproduced, but many cases are known in which most of the lining is suddenly cast off and ejected through the mouth, as has been observed in the Rose-coloured Starling (*Pastor roseus*), the Common



EJECTED LINING-MEMBRANES OF THE GIZZARD OF CURLEWS.

Starling (*Sturnus vulgaris*), the Mistle-Thrush (*Turdus viscivorus*), the Little Owl (*Athene noctua*), the Cuckoo (*Cuculus canorus*), and especially in the Hornbill (*Buceros*).

An account of the casting up of the cuticle of the gizzard by the Hornbill (*Buceros*) is given by Bartlett (*Proc. Zool. Soc.* 1869, p. 142); also by Professor Flower (*ib.*, p. 150). Mr. Bartlett was given the recently ejected lining-membrane of the gizzard of the Hornbill by a keeper in the Zoological Gardens; it was examined by Professor Flower, who stated that it consisted of the entire epithelial lining of the gizzard, and the specimen is now in the Museum of the Royal College of Surgeons. At a meeting of the Zoological Society on May 29th, 1874, Dr. James Murie read a paper on this specimen and showed illustrations of what he termed the "gizzard-sacs" of the Subcylindrical Hornbill (*Buceros subcylindricus*).

Mr. Dugald Macintyre, since his first letter, sent a further supply of these gizzard-sacs to the *Field* with two fresh specimens of Curlews, in order that the ejected sac might be compared with the lining of the fresh gizzard, and there can be no doubt about the two being identically the same. These specimens are now in the Royal College of Surgeons, where they will be preserved in the Museum, so that students of Natural History can see them for themselves. A photograph of two of them, one showing the outside and the other the inside and the grit-contents are here reproduced. A note on the subject appeared in the *Field* of March 15th, 1913.

From these notes, and from the examination of the gizzard-sacs sent by Mr. D. Macintyre, and by examination of the gizzards of the fresh Curlews, it would seem that we must add to the list of birds that are able to eject the lining-membrane of their gizzards, the name of the Curlew (*Numenius arquata*.)

ARE STARLINGS DOUBLE OR SINGLE BROODED?

BY
N. F. TICEHURST, M.A., M.B.O.U.

AT the meeting of the British Ornithologists' Club on February 12th, 1913, Mr. R. H. Read related that in 1912 he had found second layings of Starlings' eggs in nests from which a brood had been previously hatched out, and that these were the first instances he had ever met with of a second brood in a Starling's nest. As reported in the *Bulletin* (p. 64), no proof is given that these second-layings were the produce of birds that had already reared broods, and in the discussion that took place on this point it seems to have been the general opinion that the second brood occasionally reared in a nest was the offspring of different parents. In support of this Mr. Bidwell cited the experience of Mr. J. Whitaker at Rainworth, who had put up ninety boxes for Starlings. "When every box was occupied there were sometimes two or three pairs which used them after the first brood had flown. These were all birds which had not previously been able to find a nesting place. When the ninety boxes were not all used there were never any late nests. If the Starling was double brooded, many of these boxes would have been occupied a second time. These observations were the result of nearly forty years' experience." Now, it seems to me that the only possible way of proving whether these later broods are the offspring of parents that have or have not reared young already, is by making a series of observations on ringed birds, although Mr. Whitaker's facts show that at any rate in Nottingham the large majority of Starlings are single brooded.

The subject is an interesting one, and not unimportant, and it is to be hoped that anyone who has any facts bearing on the matter will make them public, so that a definite conclusion may be arrived at.

Some years ago I put up a few nesting-boxes for Starlings in my father's orchards in Kent, and when my brother started marking the birds in 1908 we increased the accommodation for them by adapting sundry old woodpecker and natural holes in the old trees in various ways, so that they were not only suitable to the birds but convenient to us to reach the young ones when old enough for ringing. Since then I have kept a careful account of all the broods reared and marked. In most years the majority of the holes have been used for first broods, though never all, which may mean, though I do not regard it as a certainty, that the supply is slightly in excess of the demand. Every year also a considerable percentage are occupied later, and I always have a second

crop of ringing to do about the third week in June, but whether these young ones are the progeny of birds that have already reared one brood, there has been no proof until 1912, though I have always considered that some of them were.

With a view to reaching some definite conclusions, I have analysed my records for 1912 (the first year that marked birds have been recovered in any numbers) and the results are somewhat surprising. I find that I have records of thirty-two nesting-places, and there were at least three or four besides that were never occupied at all. Of these thirty-two, nineteen contained young nearly ready to fly which were ringed between May 18th and 24th; to these may be added five more that contained eggs or small young at the same date and which may with certainty be reckoned as first broods, though perhaps those of birds that had been previously disturbed. This leaves eight "boxes" unoccupied, besides those mentioned above. The second layings commenced very soon after the young ones flew, and in two instances at least at an interval of only three days in the same boxes. There were no less than twenty-two of these later broods, leaving ten boxes unoccupied, while no less than fourteen boxes were used twice over. The young in these broods were large enough to ring between the 16th and 20th of June.

On these facts it would seem as though a considerable percentage of these Starlings were double-brooded, but it would be unsafe to draw this conclusion as the number of earlier nests in 1912 was distinctly below the average, and it may well have been that for some reason or other some at least postponed their nesting-operations until late in May. Be this as it may, there is definite proof from marked birds that at least two pairs did rear two broods, and in concluding with the evidence for this I would urge others who may be aware of any similar instances to publish them.

Box 57.—Adult female ringed while sitting on eggs (No. B.B. 7109), May 20th, 1911.

Caught on eggs, April 21st, 1912.

Young ringed May 18th and flew 20th.

Caught on eggs June 6th, young subsequently flew.

Box H.—Adult female caught on eggs and ringed (No. B.B. 14512), April 21st, 1912.

Young ringed May 18th and flew 20th.

Box J.—Adult female (14512) caught on eggs, June 6th.

Young ringed June 20th.

The above facts were briefly recorded (*supra*, p. 97) in the list of marked birds recovered, but in the mass of statistics their significance is perhaps not very apparent.

ABNORMAL FEATHERS OF A DOMESTIC PIGEON.

BY
ANNIE C. JACKSON.

THE feather which is shown in the accompanying illustration was submitted for examination by Mr. H. L. Orr to Mr. Nevin H. Foster. It is the contour-feather of a Magpie-pigeon, and appeared with two other similar feathers near the vent in the second autumnal moult of the bird. The feather is remarkable in that it bears at its distal extremity a small contour-feather. The rachis of this distal feather merges with a semi-transparent calamus, which is somewhat flattened and in which there is no trace of pulp or pith. This calamus in turn is continuous with the rachis of the proximal feather.

The probable explanation of the abnormality appears to be, that at the commencement of the autumn-moult the feather now designated as distal was not fully matured, and hence the calamus did not dry up in normal fashion with consequent shedding of the feather, but became continuous with the rachis of the growing feather beneath.

A parallel example may be cited in the case of the Emus and



ABNORMAL FEATHERS OF MAGPIE-PIGEON.
(About one-third larger than actual size). ;

Cassowaries where the old feathers adhere for a certain period to the tips of the feathers which succeed them. The calamus of the "ejected" feather eventually dries up and the feather is shed. It is probable that the distal feather under consideration would have been shed in a similar way in the ordinary course of events.

A precisely similar case is that of the feather (one of the innermost secondaries of a Knot) which was exhibited by Mr. J. L. Bonhote at a meeting of the Zoological Society of London (*P.Z.S.* 1906, p. 901). In this specimen the summer-feather had not been shed but was continuous with the new autumn-feather. The summer-feather was shorter than in the normal condition and, Mr. Bonhote believed, was possibly not full grown when the autumn-moult commenced. Mr. Bonhote is of the opinion that the abnormality may have been caused by the replacement of an injured feather by a new feather, the growth of which was cut short by the intervention of the autumn-moult and the consequent activity of the follicle which, instead of completing the half-grown feather, began to form another feather, the stem of which was continuous with that of the feather already full grown.

The small size of the distal feather in the pigeon cannot be due to the fact that it was only partially grown, as it has a distinct calamus, but it may have been due to lack of nutrition or some other physiological cause, such as the loss of a feather owing to some injury between successive moults, and a not entirely successful attempt on the part of the follicle to replace the feather.

With the exception of the Knot's feather already referred to, there is apparently no other recorded instance of a similar kind.

NOTES

THE HEBRIDEAN SONG-THRUSH.

Turdus philomelus hebridensis Clarke.

IN the *Scottish Naturalist* (1913, pp. 53-5, Pl. 1) Mr. W. Eagle Clarke gives a name to the Song-Thrush of the Outer Hebrides and defines its characteristics. For this we are very grateful. Mr. Clarke's action crystallizes the vague references to this bird which have been current for years and will enable ornithologists to collate the facts with regard to it which would never have been done had not the bird received a name and had its distinctive characters defined.

Mr. Clarke points out that the most striking feature of this bird is in the great number and intense blackness of the spots on the under-surface. The mantle and wings are dark (clove) brown, the head slightly redder and the rump and upper tail-coverts olive. The upper-parts appear to be not so reddish as in the British form, and thus more like the Continental bird but darker. There is very little buff on the throat, breast and flanks, even less apparently than in Continental birds. The buff of the under wing-coverts is richer (i.e. redder) than either British or Continental Song-Thrushes. The wing measures from 116 to 120 mm. or about the average of other Song-Thrushes.

Mr. Clarke makes as the types, a pair from Barra obtained on April 24th, 1912 but he does not state whether the description refers to these birds, and this is rather important because there is a good deal of difference between a freshly-moulted autumn Song-Thrush and a worn summer-bird.

The bird is widely distributed in the Outer Hebrides and so far as our knowledge goes at present it is confined to that group of islands, but we hope that Mr. Clarke will state from exactly which islands he has identified specimens and whether any examples have yet been detected or migration. He notes however, that it does not breed in St. Kilda, and that the Song-Thrushes which now nest in woods of recent growth in the grounds of Stornoway Castle are probably of the British race, since a breeding bird obtained there in July, 1906, undoubtedly is so.

Mr. Clarke states that British and Continental Song-Thrushes seek the Outer Hebrides in winter, and do not quit them until the nesting-season of the native birds has set in.

There is little doubt that the Continental form does visit those islands, although we do not know of any actual records, but presumably Mr. Clarke has seen specimens.

CROSSBILLS BREEDING IN BEDFORDSHIRE AND HAMPSHIRE.

I HAVE to-day (March 4th, 1913) been watching a Crossbill (*Loxia c. curvirostra*) in the Woburn Woods, which is sitting very closely on its nest. The nest is at the top of an old stunted Scotch fir, about 35 ft. from the ground.

After watching the bird for half an hour, a flock of six Crossbills alighted on a neighbouring tree: two of them were males in very red plumage. In less than a minute, one of them flew down to the nest and turned the female off, but she soon returned to it. Seeing that the male was one of a breeding pair, it seemed to me curious that he should be flying about with the flock
M. BEDFORD.

Two nests of Crossbills (*Loxia c. curvirostra*) were found at Beaulieu in the last week of January, 1913—one with four eggs on which the old bird was sitting, and the other with one egg. I reported a nest from the same locality last year (*cf. supra*, p. 61).
THOMAS H. C. TROUBRIDGE.

SKY-LARK AS FOSTER-PARENT OF CUCKOO.

IN the February issue (p. 278) it is said that there are very few authenticated instances of the Cuckoo (*Cuculus c. canorus*) selecting the Sky-Lark (*Alauda a. arvensis*) as a foster-parent, and I therefore give below an instance which came under my notice last year. My friend Mr. Taylor, of Raphoe, co. Donegal, showed me a Sky-Lark's nest containing two typical eggs and one of the Cuckoo—an undoubted egg of the greenish type and perfectly distinct from those of the fosterer. Unfortunately, circumstances prevented us from again visiting the locality to see if the young were successfully hatched.
C. V. STONEY.

BEARDED TIT IN ESSEX.

MORE than twenty years ago, I expressed the opinion (*Birds of Essex*, p. 92, 1890) that the Bearded Tit (*Panurus b. biarmicus*) still bred occasionally in the county—had continued to do so, in fact, ever since the beginning of the nineteenth century, when it did so not uncommonly in certain localities.

At the present day, I am still as unable as I was then to demonstrate the truth of my belief, but later occurrences

of the species all tend to support it. Thus, Dr. Laver has recorded (*Essex Naturalist*, IX., p. 52) an example picked up dead near Harwich on 30th March, 1895, when it was probably about to breed. Again, on the 21st April, 1896, Dr. J. H. Salter, of Tollesbury (who now owns the specimen above mentioned) saw and watched for some time, in a roadside reed-bed in the eastern part of the county, an unmistakable example which, at the date in question, must surely have been breeding, or about to breed, in the vicinity.

Now comes news that an adult male (which has been seen by Dr. Laver, who informs me of the occurrence) was obtained out of a party of seven, on or about the 13th inst. (Feb.), at a locality, which is in every way well suited to the habits of the bird, in the northern portion of the county. Its exact whereabouts need not be disclosed to the exterminator. The birds can hardly have been breeding at so early a date, but the number of the little flock suggests strongly that it was composed of a family party which had been bred in the immediate vicinity during the previous summer.

MILLER CHRISTY.

[We do not consider that the presence of a little flock in winter necessarily points to breeding in the district.—EDS.]

FIRECREST IN GLOUCESTERSHIRE.

I OBSERVED a Firecrest (*Regulus i. ignicapillus*) on February 16th, 1913, at Clifton, near Bristol. The bird was much more shy and restless than a Golderest, but I identified it thoroughly by means of the light stripe over the eye, and the note, which was very different from that of the Golderest.

D. MUNRO SMITH.

PROBABLE INHERITANCE OF EGG-COLOUR IN SPOTTED FLYCATCHERS.

IN 1911 a pair of Spotted Flycatchers (*Muscicapa s. striata*) raised a brood from eggs of the pale blue variety at Felsted, Essex. I do not know whether a second brood was raised, as I did not find the second nest. In 1912, in the same place, there were two nests belonging to two pairs of birds within forty yards of each other, and in each nest were light blue eggs from which broods were raised. This instance seems to point to the fact that the young follow the mother in the matter of egg-colour.

J. H. OWEN.

CHIFFCHAFFS AND WHEATEAR IN WINTER IN THE BRITISH ISLES.

I SAW and heard two or three Chiffchaffs (*Phylloscopus collybita*) at Farringford near Freshwater, Isle of Wight, on February 22nd, 1913. I also saw a Wheatear (*Eenanthe wanthe*) on Freshwater down on the same day.

E. G. B. MEADE-WALDO.

A FRIEND of mine, Mr. Evan T. Jones, informs me that he listened to a Chiffchaff (*Phylloscopus c. collybita*) singing, though somewhat fitfully, in Bodafon Wood, Creuddyn Peninsula, Carnarvon, on February 15th, 1913, and that he subsequently heard the bird in the same wood on some two or three occasions between that date and the middle of March. There can be no doubt as to the accuracy of his identification of the song, for we have both listened to the bird when walking together through the woods at Gloddaeth.

RICHARD W. JONES.

AQUATIC WARBLER AND MARSH-WARBLER IN THE ISLE OF WIGHT.

AMONG the birds forwarded to me (for the Osborne College collection) during last summer from St. Catherine's Light-house, Isle of Wight, were specimens of the Marsh-Warbler (*Acrocephalus palustris*) and Aquatic Warbler (*Acrocephalus aquaticus*), the former having been obtained on June 7th and the latter on August 17th, 1912. Both birds were males in fine plumage and are now in the Osborne College collection.

This appears to be the fourth specimen of the Aquatic Warbler obtained in the Isle of Wight. The Marsh-Warbler may not be so rare as is supposed, but possibly this record may be of interest.

A. M. C. NICHOLL.

[The Marsh-Warbler recorded above should be carefully compared as there is the possibility of its being an example of Blyth's Reed-Warbler (*Acrocephalus dumetorum*). Unfortunately, owing to the bird being cased with others, Mr. Nicholl is unable to send it to us for comparison.—Eds.]

BLACK REDSTART IN SURREY.

ON February 20th, 1913, I saw near the Kent House, Buckfields, Penge, a Black Redstart (*Phœnicurus o. gibraltariensis*). It was not very wild, but I cannot state the sex as it was in immature-plumage, and several birds I have had under notice which agreed in all particulars with adult hens in winter, moulted out "cocks."

ALLEN SILVER

NOTES FOR 1912 FROM YORKSHIRE.

SHOVELER (*Spatula clypeata*).—A flock of “upwards of thirty” was reported upon reliable authority as frequenting for a short time during July a private lake much resorted to by wild ducks, not far from Scarborough.

SHAG (*Phalacrocorax graculus*).—Formerly quite an unusual visitor to this part of the coast, the Shag has been a winter-visitor in annually increasing numbers since 1907. In February of that year I saw six—all immature birds—which frequented the Scarborough Harbour until well into the spring. Each autumn since then this district has been visited by Shags, whose numbers have increased year by year. Probably a couple of hundred birds have wintered with us during the past six months. They do not remain to nest.

SOOTY SHEARWATER (*Puffinus griseus*).—A specimen was shot from a boat off Scarborough on the evening of October 10th, and was brought to me in the flesh.

COMMON GUILLEMOT (*Uria troille*).—On July 9th I saw passing Filey Brigg, at a distance of about fifty yards, a Guillemot which appeared to be as dark-coloured beneath as on the back. No white was discernible. The bird was in company with several other normally-coloured Guillemots, and was certainly not *U. grylle*, being much too large and lacking the white patches upon the wings.

LITTLE AUK (*Alle alle*).—A smaller movement than that which took place in January was observed in the neighbourhood of Scarborough during early November, when for about a week specimens might be seen almost at any time, swimming or flying past. The weather being calm, no great mortality took place, but even under these favourable conditions several birds, all very thin and weak, were picked up alive on the beach.

W. J. CLARKE.

TEAL × WIGEON HYBRID.

ON November 30th, 1912, while staying near Southminster, Essex, a duck which had been caught the previous day in one of the few remaining Essex decoys, was brought to me alive. It was at once apparent that this bird, which was a male in almost full plumage, did not belong to any of the usual British species. At first sight much like a drake Teal (*Anas c. crecca*) though larger, it had the characteristic slate-coloured bill of the Wigeon (*Anas penelope*) and in other respects, as will be seen, resembled the latter bird. The

decoyman, who, in his long experience has handled many thousands of Teal and Wigeon, was of opinion that the bird was a cross between these two species, and I myself came to the same conclusion. This opinion has been confirmed by Mr. H. F. Witherby, to whom I took the bird for examination, and who has very kindly made a thorough comparison of it with Teal and Wigeon.

I kept this bird alive for about a week, during which time, especially at night, it frequently uttered a call very similar to the well-known "whee-ou" of the Wigeon. It was extremely wild and had evidently never been in captivity, and I think must have been bred in a wild state.

The bird weighed about 17 ounces. The colouring of the soft parts was as follows: *Iris* hazel, pupil black; *upper mandible* chiefly slate-colour with some black on top; *nail* black; *lower mandible* black; *legs and feet* slate-colour; *webs* black.

The following notes are by Mr. Witherby:—

Measurements in Millimetres, taking Average Measurements of First-Winter Male Teal and Wigeon for Comparison.

	TEAL.	HYBRID.	WIGEON.
Wing	180	221	253
Bill, from base of skull to tip	42	45	45
Bill, from feathers to tip	37	39	34
Bill, breadth at nostrils	13	17	17
Bill, depth at nostrils	12	14	14
Bill, length of nail	6	7	6½
Tarsus	29	36	38
Middle toe and claw	40	50	49

COLOUR AND MARKINGS

compared with those of male Teal and Wigeon in the same stage of plumage.

Head, most like Teal, but light cream-coloured line round lores and crown absent; chesnut of crown not quite so dark as in Teal, green stripes not quite so brilliant.

Mantle and back, like both species; the lower-back and rump is not finely barred black-and-white as in Wigeon in full plumage, but the bird is not completely moulted into full plumage though nearly so.

Wings. Lesser and median coverts like young Teal, but indistinctly margined with pale grey, not so distinctly as in young Wigeon. Greater coverts brownish-grey tipped with buffish-brown, not with black as in Wigeon nor chesnut-buff and white as in Teal. Green patch on secondaries like Wigeon but brighter, but not so brilliant and not so blue a green as in Teal.

Throat blackish down the middle as in Wigeon.

Upper-breast pearly-pink like Wigeon, but with many black spots not quite so large or extensive as in Teal, but much more so than in Wigeon.

Flanks barred more coarsely than in Wigeon and resembling Teal.

Under tail-coverts blackish like Wigeon.

J. BEDDALL SMITH.

THE "BIMACULATED DUCK."

HOWARD SAUNDERS says (*Manual*, 2nd ed., p. 432) that the Bimaculated Duck is a hybrid between Wigeon and Teal. This is evidently taken from the same author's *Yarrell* (4th ed., Vol. IV., p. 389) where it is said that Mr. Hancock had examined the British specimen of the so-called Bimaculated Duck and found it to be a hybrid between these two species. Turning to Hancock (*N. H. Trans. Northumberland and Durham*, Vol. VI., p. 153) we find that he states that he has examined the specimen figured by Yarrell and Bewick and that there can be no doubt that it is a hybrid between Teal and Wigeon. The bird figured in the first edition of *Yarrell* (Vol. III., p. 165) was taken with a female in a decoy at Ma'don, Essex, in 1821, and was presented to the Zoological Society and afterwards reached the British Museum. There can be no doubt that this bird is a Mallard \times Teal hybrid, as is indeed evident by the figure in *Yarrell* and the description taken from Selby (*Illustrations of British Ornithology*, Vol. II., p. 321, 1833). Meyer gives a coloured figure of the bird and most recent authors have considered it to be a Mallard \times Teal hybrid, including Salvadori in *Cat. Birds B. M.*, Vol. XXVII. It is indeed difficult to understand how Hancock and, following him, Howard Saunders could have supposed it to be a Wigeon \times Teal hybrid.

In my edition of Bewick (1805 large paper) the bird is not figured but a description of it is given quoted from Latham. This description is taken almost word for word from Pennant (*Brit. Zool.*, 1776, Vol. II., p. 510, pl. c, No. 287) who appears to have been the first to have described a bird under this name. The specimen he describes was taken in a decoy in 1771 and is apparently not in existence. His description differs somewhat from that given in *Yarrell*, and although it is quite clear that Pennant's bird was a hybrid, and that a Mallard was one parent, it is difficult to decide whether the other parent was a Teal or a Wigeon. He mentions a large oblong ferruginous spot behind each ear, which if drawn in the correct position in the figure would be just where there

is a broad green stripe in the Teal, but perhaps this ferruginous spot should have been more towards the throat. The spotting of the breast is distinctive of the Teal, though a Mallard \times Wigeon hybrid in Mr. Rothschild's collection at Tring has a few spots on the upper-breast. The "lower" (i.e. greater) wing-coverts, he says, are streaked with rust-colour and if he means the tips of the feathers this is also distinctive of the Teal.

Yarrell's Bimaculated Duck was thus a hybrid between Mallard and Teal, while Pennant's specimen was *probably* the same hybrid though *possibly* a Mallard \times Wigeon.

H. F. WITHERBY.

GREAT MORTALITY AMONG SHAGS IN ORKNEY.

It may be of interest to state that during the past winter there has been a great mortality among the Shags (*Phalacrocorax g. graculus*) in Orkney, owing to starvation, due to the stormy weather having driven the shoals of fish away from the coast-line into deep water; but the recent mortality is not as great as that of the winter of 1893-4, when thousands died of starvation.

The birds in their stress for food lost all fear of man and came to die in poultry- and cow-houses, even entering dwelling-houses, and some old sheds situated near high-water mark had their floors covered with dead and dying Shags. Rats made short work of them, attacking many even before they were dead.

H. W. ROBINSON.

CREAM-COLOURED COURSERS IN KENT.

ON February 21st, 1913, a fine pair of Cream-coloured Coursers (*Cursorius gallicus*) were obtained at Jury Gap. I examined them in the flesh on February 22nd, and found them in perfect condition, having the full spring-plumage. Like many of the wanderers obtained on our shores, these birds owe their fate to the fact that probably from an adverse wind they have been driven out of their course and arrive in a more or less exhausted condition, which accounts for the so-called "tameness" which makes them an easy prey to the collector.

The protective colouring in this species is most marked, the black effectively breaking up the outline of the general colour, and when one sees the bird running on the sands, it must indeed be a difficult task to keep it in view.

H. W. FORD-LINDSAY.

BAR-TAILED GODWITS IN ORKNEY.

I HAVE seen Bar-tailed Godwits (*Limosa l. lapponica*) in Orkney on two or three occasions, but being unaware that they were considered scarce visitors there, I have unfortunately only kept one record. This was a bird seen on Westray on May 4th, 1911. It was getting its summer-plumage.

M. BEDFORD.

WOODCOCK'S DISEASED FEET.

In December, 1912, Mr. H. S. Gladstone sent the feet of a Woodcock that had been picked up dead at Thornhill, Dumfriesshire, to Mr. Witherby, who forwarded them on to me for an opinion. The under-surface of the base of the toes, corresponding to the metatarso-phalangeal joints, was the seat in both legs of a moderate-sized elastic swelling. On cutting into this I found that it was due to a chronic inflammatory condition of the sheaths of the large flexor tendons that pass over the posterior aspect of the joint into the toes. The tendons were embedded in a quantity of caseous material for a distance of about three-eighths of an inch and the lining membrane of the sheaths was injected, but the joints were quite free and healthy. Had the subject been human and not avian, I should not have hesitated to have ascribed the condition as due to tuberculosis. It is frequently seen in wading birds kept in captivity, and was always supposed at one time to be a manifestation of this disease, but is now I believe referred to other causes. It must be quite rare, I think, in wild birds of this family and perhaps worthy of record. I regret that I was unable to have a microscopical examination made. With the arrangement recently made with an expert veterinary pathologist whereby such material as the above can now be examined (*see* Feb. No., p. 282) more valuable opinions will be at the disposal of readers than I am able to give.

N. F. TICEHURST.

MALE PIED FLYCATCHER RETURNING TO NESTING-PLACE WITHOUT A MATE.—In 1911, the Rev. H. N. Bonar reported the nesting of a pair of Pied Flycatchers (*Muscicupa h. hypoleuca*) in Haddington (*cf.* Vol. V., p. 84). In 1912 on visiting the same spot on May 2nd he found the male already there and watched it beginning to build a nest, but there was no female. Mr. Bonar kept a watch on the bird for the whole of the month, but no female ever turned up nor did the male continue nest-building, though he stoutly defended the nesting-hole and sang incessantly. Mr. Bonar was abroad from the end of May to June 24th, by which date

the Pied Flycatcher had disappeared (*Scot. Nat.*, 1913, pp. 17-18). In the succeeding number of our contemporary (pp. 41-2) Mr. T. Blackwood reports a somewhat similar case, except that the female in this instance disappeared in the first year after she had laid eggs, but before they were incubated. The cock remained on, and appeared again the following year without a mate. These cases are interesting as showing how easily a locality can be deserted by a species on the outskirts of its range.

COURTSHIP OF THE BLACKCOCK.—In the *Naturalist* (1913, pp. 96-8), Mr. E. Selous sums up his observations on this subject, the chief points being (1) the cocks courted the hens “by a slow, formal, pompous display,” and the hens “showed unmistakable evidence of predilection”; (2) the “dancing” of the cocks was distinct from courtship “being probably, in its origin, a challenge to rival males”; (3) the actual fighting of the males was little as compared with that in the Ruff and the hens cared nothing for it; (4) there was no attempt on the part of the cocks to collect harems; and (5) the courtship was gone through apparently in silence.

RARE MIGRANTS IN SCOTTISH ISLANDS.—In recent numbers of the *Scottish Naturalist* interesting articles have appeared on migrants observed in 1912 by The Duchess of Bedford and Mr. Eagle Clarke, in Fair Isle, and by the Misses Rintoul and Baxter in the Isle of May. The rarer occurrences recorded are mentioned below, page references being to the 1913 volume of the *Scottish Naturalist*.

NORTHERN BULLFINCH (*Pyrrhula p. pyrrhula*). At Fair Isle a female on October 29th, 1912 (p. 28).

SCARLET GROSBEAK (*Carpodacus erythrinus*). At Fair Isle a young female on September 20th, and a young bird on the 28th (p. 28).

ORTOLAN BUNTING (*Emberiza hortulana*). At Fair Isle one on May 18th and several on October 1st (p. 28).

LITTLE BUNTING (*Emberiza pusilla*). At Fair Isle ten between September 28th and October 11th (p. 28). At the Isle of May two or three between September 28th and 30th (p. 52).

LAPLAND BUNTING (*Calcarius l. lapponicus*). At Fair Isle thirteen between September 14th and October 22nd (p. 28).

WOOD-LARK (*Lullula a. arborea*). At Fair Isle one on October 9th (p. 28). At the Isle of May one between September 28th and 30th (p. 52).

SHORE-LARK (*Eremophila a. flava*). At Fair Isle one on October 17th (p. 28).

RICHARD'S PIPIT (*Anthus richardi*). At Fair Isle one seen on October 2nd (p. 28).

SCANDINAVIAN ROCK-PIPIT (*Anthus s. littoralis*). At Fair Isle one on May 22nd (p. 7).

GREY-HEADED WAGTAIL (*Motacilla f. thombergi*). At Fair Isle single birds on September 26th and 29th and October 1st (p. 29).

RED-BACKED SHRIKE (*Lanius c. collurio*). Now known as a regular migrant at Fair Isle, this species was again observed but in smaller numbers than usual. One is also recorded from Lerwick, Shetland, on August 26th (p. 67).

RED-BREADED FLYCATCHER (*Muscicapa p. parva*). At the Isle of May one between September 28th and 30th (p. 52).

SCANDINAVIAN CHIFFCHAFF (*Phylloscopus c. abietinus*). Except in Fair Isle where the bird appears to be a regular migrant very little is known about the passage of this race in the British Isles. Unfortunately it is difficult to distinguish from the common Chiffchaff, its clearest characteristic being its large size. A good many are now recorded for the Isle of May as occurring between September 28th and 30th (p. 52).

WOOD-WARBLER (*Phylloscopus s. sibilatrix*). At Fair Isle one occurred on May 27th (p. 7).

BLYTH'S REED-WARBLER (*Acrocephalus dumetorum*). At Fair Isle four or five occurred on September 24th, 26th, 29th and 30th, and October 1st (p. 28). This is very interesting especially in view of the fact that one has already been recorded in our pages at Holy Island, September 25th and another in Holderness, Yorkshire, on September 20th (*supra*, pp. 206 and 217). Yet previous to the autumn of 1912 the bird was only known to have occurred once in the British Isles, viz. at Fair Isle on September 29th, 1910.

ICTERINE WARBLER (*Hypolais icterina*). At Fair Isle examples occurred on August 5th, 10th, 21st (two) and 22nd (p. 28). The earliest date for an autumn occurrence previously recorded appears to be September 4th.

BARRED WARBLER (*Sylvia nisoria*). At Fair Isle six were observed between August 22nd and September 28th (p. 29). At the Isle of May two appeared on September 12th (p. 51) and one between the 28th and 30th (p. 52). Three are recorded (p. 67) from near Lerwick, Shetland, by Mr. T. Kay, one on September 3rd, one on the 9th and one on the 16th. This autumn was remarkable for the number of Barred Warblers—twelve being recorded as above for Scotland, one for Ireland and seven for England, or twenty in all, which is nearly half the total number of previous records.

LESSER WHITETHROAT (*Sylvia c. curruca*). Now known to be a regular migrant on Fair Isle and the Isle of May, this bird was again observed on several dates and one is recorded from Lerwick, Shetlands, on October 2nd (p. 67).

CONTINENTAL SONG-THRUSH (*Turdus ph. philomelus*). Vast numbers of Thrushes, the great majority being of this form (but there were also some *T. ph. clarkei*) arrived at the Isle of May between September 28th and 30th (p. 52).

BLACK WHEATEAR (*Ænanthe leucura* ? subsp.). At Fair Isle a male of this species was present from September 28th to 30th. It was several times clearly seen but was not obtained, and the race to which it belonged not ascertained. The only other recorded instances of the occurrence of this species in the British Isles are the two in Sussex in 1909 (*cf.* Vol. III., p. 289).

BLACK REDSTART (*Phœnicurus o. gibraltariensis*). At Fair Isle one on April 25th (p. 29), at the Isle of May one on October 4th (p. 52), at Lerwick, Shetland, one on October 12th, and one November 9th (p. 67).

RED-SPOTTED BLUETHROAT (*Luscinia svecica* ? subsp.). At Fair Isle one on May 10th (p. 29).

CONTINENTAL REDBREAST (*Dendalagus r. rubecula*). At the Isle of May several found dead after the "rush" between September 28th and 30th (p. 52).

CONTINENTAL HEDGE-SPARROW (*Prunella m. modularis*). At the Isle of May one on September 24th and one on October 9th (pp. 51 and 53).

HOOPOE (*Upupa c. cypops*). At Fair Isle one on May 9th (p. 29).

TEMMINCK'S STINT (*Erolia temminckii*). At Fair Isle single birds on June 8th, 14th and 15th (p. 8), and one on August 8th (p. 26). There are only three or four previous occurrences recorded for Scotland.

WOOD-SANDPIPER (*Tringa glareola*). At Fair Isle single birds on May 13th and August 21st and 22nd (p. 29). The bird is very rarely recorded in Scotland.

GREEN SANDPIPER (*Tringa ocropus*). At Fair Isle an extraordinary number occurred, no less than seventy being observed between August 1st and 26th (p. 27).

GREAT SNIPE (*Gallinago media*). At Fair Isle one on September 21st (p. 29).

LETTER.

FLANK- AND CHEST-FEATHERS.

To the Editors of BRITISH BIRDS.

SIRS,—With reference to the remarks of Messrs. Smalley and Jourdain in your issue of March, 1913, it may be of interest to record that I have a nest of a Grey Lag-Goose taken by myself in Sutherlandshire, containing two flank-feathers. They measure approximately $2\frac{3}{4}$ in. in length by 1 in. at the tip. At the base the coloration is much the same as that of the "down," becoming very considerably darker towards the tip, where it assumes a slightly burnished hue, the extreme tip having a small white border.

I have also nests of Mallard and Shoveler, each containing one flank-feather.

A phase of the Tufted Duck "down"-feathers appears to have escaped much comment—the usual "down"-feathers of this species, so far as my experience goes, consist of all-white feathers and feathers which are greyish at the base and become considerably darker, in some cases almost black, at the tip; but in some nests these latter show distinct white tips, varying upwards to approximately $\frac{3}{32}$ in. Mr. Ogilvie-Grant was good enough to examine for me one such example taken from the "down," and pronounced it to come from the chest of a female.

C. S. MEARES.

[I quite believe that flank-feathers are found *occasionally* in nests, and no doubt breast-feathers too. The chestnut-tipped feathers found in small quantities in Sheld-Ducks' nests come from the breast rather than the belly. But for purposes of identification one cannot depend on "accidental" circumstances, which may or may not be present.—F.C.R.J.]

BRITISH BIRDS

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EARLY "DRUMMING" OF THE SNIPE AND ITS SIGNIFICANCE.

BY

CAPTAIN H. LYNES, R.N., M.B.O.U.

SNIPE were "drumming" unusually early this year over some of the South Hampshire marshes. The following are some records of several observers (including myself) who are well acquainted both with the localities and the Snipe's habits:—

Jan. 30.	Near Longstock (Test Valley)	One	} About three-quarters of an hour after sunset; too dark to see the birds performing.
Feb. 7-8.	Meon Valley	Several	
Feb. 22	Near Portsmouth	One or two	
Onwards up to March 1 when observations ceased.	Longstock and Meon Valley.	Several	} At same hour, and also in the forenoon.

The majority of well-known writers agree in giving the normal period of "drumming" in the British Islands as from early or mid-March to late summer; and in regarding the performance as a special feature of the breeding-season. There are, however, a few authentic records of Snipe "drumming" during the winter and even autumn months, and a few writers suggest analogy between such out-of-season performances and the winter-song of our Thrushes, Robins, etc.*

That out-of-season "drumming" does occasionally occur no one who has seen the latter records will attempt to deny, but I think that their scarcity is sufficient proof that the performance is quite exceptional, and is suggestive rather of the occasional pseudo-erotic evolutions (such as carrying nesting-material, partial displays, etc.) which certain species are occasionally observed to indulge in during their non-breeding season, than to "winter-song" which is carried out with great regularity by a number of species in our Islands.

* *Vide Brit. Birds*, IV., p. 341; V. p. 336; Stevenson's *Birds of Norfolk*; Kelsall & Munn, *Birds of Hampshire and Isle of Wight*; and others.

But however this may be regarded, the present instance in which the "drumming" has increased in frequency throughout February up to its normal period, seems to me indicative rather of a general ante-dating of the period of sexual activity among a proportion of the Snipe present.

Throughout the whole of the past winter the weather was unusually open, and Snipe correspondingly plentiful without apparent fluctuation in numbers, until February when there was a decided increase. Thus, during that month, it may fairly be assumed that among the birds present some were English breeders, some Scotch, and some Continental, with sexual organs in varying conditions of activity, and that whatever the condition of the organs of the south English breeders, those of the Continental and most if not all of the Scotch birds, whose breeding-grounds are not open until much later in the year, would still be in their winter shrunken condition.

The following examination of some of the Snipe selected at random from among those shot in these particular marshes is at any rate not inconsistent with the foregoing supposition, and if we recognise "drumming" to be normally a breeding-season function it may be still further suggested that the "drumming" birds were among the English breeders.

		<i>Sexual organs.</i>
Feb. 22.	One female.	Distinctly commencing to enlarge.
Feb. 24.	One male.*	Just commencing to enlarge.
Feb. 26.	One male.	No enlargement.
Feb. 27.	Three females, one male.	No enlargement.
Mar. 1.	One male.*	Well advanced.

Easy winter-conditions of life, whether produced artificially or naturally, are well known to quicken sexual activity, and if we regard the mild winter as the factor that has accelerated the breeding instincts of the Snipe wintering in the south of England, it is after all only doing what is commonly accepted as the explanation of this year's unusually early awakening of plant-life

* These birds, shot at dusk, were specially selected by the shooter as being very probably actual "drummers."

or of the February sparrows' nests, leverets, etc., that we have seen recorded lately. That the more northern-breeding Snipe, which may also have wintered in these parts and experienced equally easy conditions, should still show no signs of sexual activity is in no way out of keeping with the foregoing assumption, since the effect of a similar acceleration superimposed on a state that normally produces May or June breeding (as suited to the climate of the nesting-area), would be merely a latent one so early as February.*

Another point worthy of notice is the fact that no one ever seems to have recorded Snipe drumming at any time of the year except at (or near) a district in which the species is known to breed. Colonel Irby particularly notes it in connexion with Spain (*vide* also *Brit. Birds*, IV., p. 341).

I have been out in many marshes with Snipe present in quantities, either stopping or passing through on migration, in autumn, winter and spring, both in the Mediterranean and China, and never met with a case of "drumming" nor do I know anyone who has, and this holds good, be it noted, whether the sexual organs are enlarging or not (*vide* note for Yangtze, *antea*).

The points that I would suggest about Snipe "drumming" and which seem to be borne out by recorded observation on the subject are :—

(1) That normally it is a performance of the breeding-season, and is directly connected with the seasonal activity of the sexual organs.

* NOTE.—Among many Snipe of three species, viz. *G. gallinago*, *stenura* and *megala*, shot and examined by the writer when passing through the Yangtze Basin in the beginning of last May, in only a very small proportion was there perceptible enlargement of the sexual organs. *G. stenura* and *megala* were then about half-way between their winter- and summer-quarters. *G. gallinago* probably about the same distance from its summer-quarters, but with winter-quarters in temperate as well as tropical zones. It appears that the two former species are confined to tropical zones during winter-time, and that the breeding-range of all three species lies to the northward of the middle kingdom of China (*i.e.* China proper).

(2) That exceptionally it may be observed at other seasons, but never at any season except within the breeding-range of the species.

(3) That out of season "drumming" is the *irregular* performance of an exceptional individual, and probably better regarded as arising from some pseudo-erotic impulse or as the expression of some unusual excitement than as analogous to the *regular* winter-song of certain well-known Passerine birds.

(4) That the exceptionally easy conditions of existence experienced by Snipe spending very mild winters in our Islands are conducive to an unusually early revival of sexual activity accompanied by "drumming" and probably also early breeding.

One further remark with reference to "winter-song." Although considering the analogy between it and out-of-season "drumming" is not a good one, I would like to draw attention to the rather peculiar relationship which *both* performances seem to bear to the breeding-ranges of the respective species. Supposing we take the list of well-known songsters of the British Islands given concisely in the Messrs. Alexanders' list (*Brit. Birds*, Vol. I., pp. 367 *et seq.*), one cannot fail to notice that among all those recorded as singing regularly in winter-time there is not one species that has not its representation of "resident" individuals (or perhaps even races) in the British Islands in winter. Three of the best known and most persistent winter-singing species, viz. Robin, Hedge-Sparrow, and Wren, are almost certainly composed entirely of resident individuals, since the Continental races of the two first species probably do not winter in Great Britain, or if they do, not in appreciable numbers. Another prominent winter-singer, the Song-Thrush, is represented in our Islands in winter by two races, one mainly resident (*T. p. clarkei*) the other (*T. p. philomelus*) only a winter-visitor. We are not informed at present as to whether the winter-songsters are resident or wintering individuals

or both, but it would be an easy matter and an interesting one to investigate and decide.

When however we turn to the Mediterranean region where the Continental races of Robin, Hedge-Sparrow, and Song-Thrush are only known in winter-time, we find the two last named silent and skulking, and the Robin (whose breeding-range by the way is not very far to the northward) practically the only singing representative among the winter-visitors, and even then it gives but a poor performance compared with that in more northern latitudes.

The Sky-Lark which commences to sing regularly in January in England is another silent Mediterranean winterer, and in general we find that song is almost absent from these parts in winter-time, when the majority numerically* of the singing Passeres are represented by "winter-visitors" only.

Exactly the same state of affairs occurs in the Lower Yangtze Basin, a region that zoogeographically has a somewhat analogous position to the Mediterranean, and if we go to zones still further south and more remote from the breeding-range of these species, we find the same condition still more accentuated; at least this is my own experience, and is confirmed so far as I can find by recorded information on the subject.

That no birds sing when actually on migration is, I believe, generally accepted. Such is certainly my own experience. All this seems to me very suggestive of a connexion between "winter-song" and "migratory movement," and as if it were not very far from the truth to say that winter-songsters are those *individuals* which are sedentary or perform comparatively short migration journeys. In other words, that "winter-song" and "migratory-movement" are in inverse ratio to one another in the *individual*.

* In number of species the "resident" and "winter-visitors" are about equal.

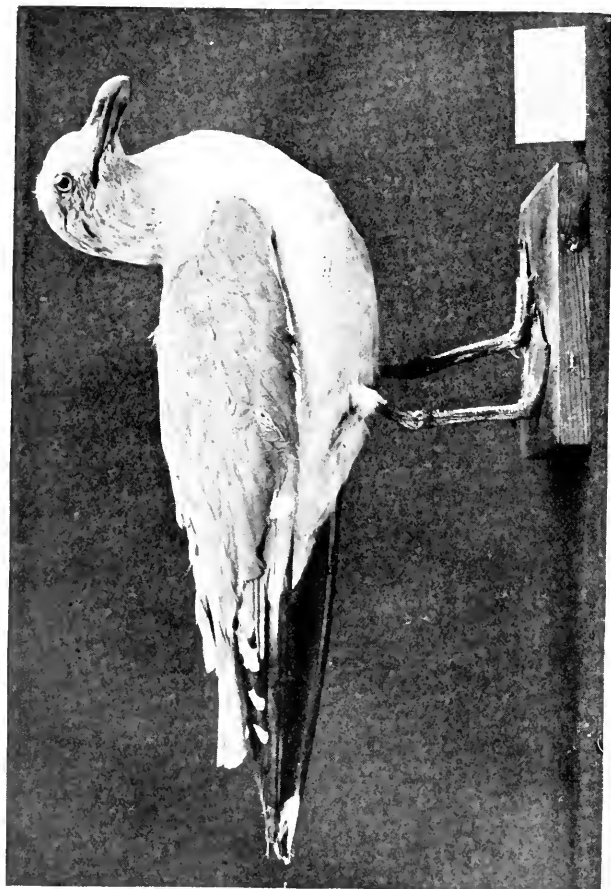
To venture further than merely to suggest a connexion of this nature is not my intention, neither is it possible without further information than is now available as to the migratory movements of *individuals*. Much concerning "migration-range" has been, and continues to be gained by the study of geographical races, but the great desideratum is unquestionably a precise knowledge of the winter- and summer-quarters of a sufficient number of *individuals*, to enable a comprehensive survey of the movements of each species and race to be made, and one can only hope that the marking-schemes which have already yielded a few priceless records of this description may continue to flourish and expand.

THE LESSER BLACK-BACKED GULL OF THE
BRITISH ISLANDS.

BY
TOM IREDALE.

IN the first number of this volume of BRITISH BIRDS (pp. 2-7, Plate 1) Dr. P. R. Lowe showed that the bird known in the British Isles as the Lesser Black-backed Gull did not deserve this name, as the coloration of the back was in no sense black: at the same time he pointed out that the form called by Linné *Larus fuscus*, more appropriately answered to that name. As the British form seemed well-differentiated he named it *Larus fuscus britannicus*, no previous writer having fixed the pale form though many claim to have recognised the differences. The justice of Dr. Lowe's action is now made more apparent, as it has caused the recognition of an earlier misapplied name and cleared up an anomaly in a most satisfactory manner.

In a paper on the Birds of Greenland published in the *Vidensk. Meddel (Kjobn.)*, p. 78, Dr. Reinhardt described a Gull under the name *Larus affinis*. As it was a solitary specimen, Reinhardt was unable to fix definitely its relationship and compared it with *L. argentatus*, noting it was much darker than that species but appeared to be a variety: he concluded that it agreed somewhat with the description of Audubon's *Larus occidentalis*, but that species was larger than *L. argentatus* whilst *L. affinis* was smaller. A digest of this paper appeared in the *Ibis* for 1861, and reading this I was struck by the statement regarding the size of *L. affinis*. When Saunders wrote his "Revision of the Gulls" in the *Proceedings of the Zoological Society* for 1878, he used Reinhardt's name for a large Gull which had been recently procured in Siberia. He examined Reinhardt's type and noted the agreement in coloration, but ignored the discrepancy in size, for whereas Reinhardt stated that his bird was less than *L. argentatus* the bird Saunders called *L. affinis* is much larger.



TYPE OF *LARUS AFFINIS REINHARDT*, 1853.
Obtained in Greenland, 1851.

Herr H. Winge in *Conspectus Faunæ Grænladiæ, Aves* (*Meddelelser om Grønland*, Vol. XXI., 1898, pp. 176-178) showed how Reinhardt's type was less than the Siberian bird, but concluded that it might be considered as referable to that form which he, following Saunders, considered a race of *L. argentatus*.

The measurements given by Reinhardt differed so considerably from the Siberian bird, that they suggested to me comparison with Dr. Lowe's *Larus fuscus britannicus*. Careful measurement convinced me that theoretically Reinhardt's *Larus affinis* was certainly identical with the British form of *Larus fuscus* and was not Saunders's Siberian bird.

The only way to settle such a question was by an appeal to the type itself, and I therefore wrote Herr H. Winge of the Copenhagen Museum where the type is preserved and it was at once courteously forwarded for examination. Herr Winge expressed his doubts as to my suggestion being well founded, indicating the long, slender tarsus and short toes of *Larus fuscus* as the difference most noticeable. The specimen is stuffed, and has been since 1851, and consequently had to be handled with great care. I had the accompanying photograph taken on account of the conclusion arrived at. The bill is not as massive as would here appear: this is simply an effect due to the turn of the head presented to the photographer. My own examination confirmed my suggestion, but in order that no doubt should persist regarding the identification the type of *Larus affinis* Reinhardt has been examined by Mr. W. R. Ogilvie-Grant at the British Museum, in comparison with the series of birds Dr. Lowe studied, Dr. Lowe unfortunately being unable to attend. Dr. Hartert, who is at work on Palearctic birds and the Hon. Walter Rothschild also carefully criticised the specimen in conjunction with the collection at Tring and unhesitatingly agreed with my conclusions. I then exhibited the type at the meeting of the British Ornithologists' Club on

March 19th. The unanimous conclusion is that *Larus affinis* Reinhardt is a specimen of the pale form of *Larus fuscus* and that this form must be known as—

LARUS FUSCUS AFFINIS Reinhardt

and that, unfortunately, *Larus fuscus britannicus* Lowe must be considered a synonym of this. Herr H. Winge still considers the matter unsettled on account of the metatarsal differences, so that the following explanation may be helpful. The measurements of the metatarsus and middle toe and claw given by Reinhardt are 56 mm. : 56 mm. Herr Winge's measurements are given as 59 mm. : 57 mm. These are taken from the bird as stuffed and do not agree exactly with those of fresh skins of *Larus fuscus britannicus* which are 65 mm. : 59 mm. A stuffed bird of the British race gives however 61 mm. : 60 mm. which is very close indeed and points to the discrepancy being due to stretching in the setting up. Mr. Witherby (*in litt.*) gives me the measurements of his British specimens as—♂, tarsus 56, middle toe and claw 57 : ♀, tarsus 55, middle toe and claw 54 : and ♀, tarsus 58, middle toe and claw 55 ; so that no difference at all is seen between these birds and the type. In the other measurements, such as culmen and wing, the type agrees exactly with a normal British bird, whose culmen gives 50, wing 410. The Siberian bird, for which I have provided the name *Larus fuscus antelius*, is a much larger bird, an average specimen giving the measurements : culmen 58, wing 450, metatarsus 71, middle toe and claw 62 mm.

At the meeting of the B.O. Club Mr. Witherby stated that Lesser Black-backed Gulls from the Færoes examined by Dr. Lowe were like the British bird, and that recently Lesser Black-backed Gulls had been observed by the Duchess of Bedford* in Iceland, so that it might reasonably be suggested that the type of *Larus affinis* Reinhardt had straggled to Greenland from that island.

* See *antea*, p. 319.

I would consider that research in that locality might discover an Iceland breeding-race that was separable from the British, in which case Reinhardt's name might be restricted to the former and Dr. Lowe's name revived for the latter. In the meanwhile Reinhardt's name must be used as above noted.

It only remains to acknowledge the extreme courtesy of Herr H. Winge in forwarding the type for inspection and for his kindly criticism of my conclusions in correspondence, and to thank Herr Henrik Grönvold for his aid in studying the original description of Reinhardt and Herr Winge's remarks in the *Conspectus Faunæ Grœnlandicæ*.

"BRITISH DIVING DUCKS."*

MR. MILLAIS, who has already published a fine work on the British Surface-feeding Ducks, has contrived to give us in the first volume devoted to the Diving group not only a beautiful book but a very useful one on a most fascinating subject. It is so full of well-arranged information and so lavishly illustrated with both beautiful and useful plates that the many who are keenly interested in the subject will either speedily acquire the work or greatly covet its possession.

This first volume treats of the Red-crested, Common and Baer's Pochards, the Ferruginous, Tufted and Scaup Ducks, the Common and Barrow's Goldeneyes and the Buffel-headed Duck, as well as the Long-tailed and the Harlequin. We are very glad to see that Mr. Millais carries the synonymy back to 1758 and that all the specific names used by him are the same as those employed by us in our *Hand-List*. Mr. Millais explains in a footnote that his work had gone to press before our *Hand-List* appeared (though it is nearly a year ago since that event) and he differs with us somewhat in his generic groups. Thus while he places the first six mentioned Ducks in the genus *Nyroca* as we do, he groups the Goldeneyes, Long-tailed and Harlequin in the one genus *Clangula*, whereas we keep the Goldeneye with the Pochards and separate the Long-tailed† and Harlequin Ducks. But after all generic groupings are to a large extent artificial in our present state of knowledge and we fear that it will be a long time before complete agreement can be reached on this point.

The inclusion of Barrow's Goldeneye as a British species has recently (*cf. antea*, p. 272) been shown to be entirely unwarranted and this is mentioned by Mr. Millais in a footnote added while his work was "in the press." We must take exception, too, to the inclusion of Baer's Pochard, whose status as a British bird rests on the one example shot at Tring on November 5th, 1901. In these days when water-fowl from all parts of the world are kept in semi-captivity in this country it is not advisable to admit such a species on the strength of one occurrence. Moreover

* *British Diving Ducks*. By J. G. Millais, F.Z.S., M.B.O.U., Vol. I. With twenty-two coloured and ten monochrome plates from drawings by A. Thorburn, O. Murray Dixon, H. Grönvold and the Author. (Longmans.) Two Vols. £12 12s. net.

† Mr. Millais is of course in error in stating (p. 4) that we place the Long-tailed Duck in the genus *Nyroca*.

although at the time Mr. Rothschild and Dr. Hartert considered that the only examples of Baer's Pochard in captivity were at the Zoological Gardens (see *Brit. Birds*, Vol. I., p. 63), it has since transpired, as noted by Mr. Millais, that there were at the time examples at Woburn and that *they may have bred there!* It would have been perhaps less debatable had Mr. Millais included *Nyroca collaris* which was found in Leadenhall Market by Donovan a hundred years ago.

Following the synonymy a list of English and many foreign vernacular names is given, then we have a good description of the egg (in which Mr. Millais frequently acknowledges the help of Mr. Jourdain), a full description of the various plumages from the down stage to the adults of both sexes, a detailed statement of the distribution of the bird, and finally an interesting account of its habits.

The most valuable part of the letterpress is in the descriptions of the various plumages and the accounts of the habits, and especially the courting-displays, of these birds. Both these sections are greatly helped by the Plates. Mr. Thorburn contributes eight lovely pictures of the adults in full plumage, while Mr. O. Murray Dixon gives some very pleasing drawings of birds in eclipse plumage and Mr. Grönvold depicts the ducklings in down. The Author, who, we think, excels rather with the pencil than the brush, has included a number of his own delightful studies, notably of courtship attitudes, in monochrome, besides several pictures in colour. Finally we have seven colour plates from skins, which, though not particularly well reproduced, will undoubtedly be very useful to the student.

Mr. Millais has made the British ducks a speciality for many years and has had (or has made) exceptional opportunities for observing and collecting them at different times of year not only in this country but in Iceland, America, North Africa and elsewhere. It is difficult therefore to criticize his accounts of the sequence of plumages and habits, and it must be left to those who have specialized on the subject to say whether he has interpreted the facts correctly.

Attention may be drawn to the excellent life-histories of the Pochard and the Long-tailed Duck as well as to that of the Goldeneye, in which the author suggests that the comparative rarity of adults in the more southern parts of Great Britain is due to the fact that the young come further south than the old birds. His description of the display of the Goldeneye should be compared with that given of the American form by Dr. C. W. Townsend in the *Auk* (1910,

pp. 177-181),* more especially as the two accounts differ somewhat in detail and that this phase of the life-history of the Goldeneye has been seldom recorded.

Mr. Millais has some very interesting remarks to make about the methods used by different species in diving and the depth to which they go as well as the manner in which they feed under water. Of the Long-tailed Duck he writes (p. 122) as follows:—

" When feeding, Long-tailed Ducks seem capable of diving to a greater depth than most of the genus except the Eider, the Scaup, and the Velvet Scoter. Usually their feeding grounds are in ten to thirty feet of water, and they seem able to remain below in considerable currents. The whole flock sometimes dive together, but more often in twos and threes, leaving no sentries on the surface, and usually remain below from half a minute to one minute. In diving they use the feet only, and turn and twist to avoid sea-weed with great skill. Often they descend to the bottom in spiral curves."

A point which seems to require considerable further observation is as to what extent any of the diving ducks use their wings under water for propulsion. It will be noticed that Mr. Millais says of the Long-tailed Duck in the passage quoted above that it uses its feet only, while Dr. C. W. Townsend (*Auk*, 1909, p. 240) contends that this duck as well as the Harlequin, the Eiders and the Scoters use their wings under water.

In the accounts of " Habits " we find a number of quotations from Naumann placed within inverted commas, and often without any statement that they are translations. On pages 125 and 139 there are two quotations from an article in the *Ibis* by Messrs. H. J. and C. E. Pearson, and in comparing these with the original we found to our astonishment that they were paraphrases and not even correct in detail. Slipshod work of this character can easily be avoided, and such errors should not occur in any scientific work and especially in a monograph of this kind. But we regret to find further evidence of careless quotation as well as a number of misprints, e.g. the name of the Goldeneye is given in the Contents as *Clangula glaucion*, but in the text as *Clangula clangula*; on page 6 we have W. E. Clark for Clarke and Carmagne for Camargue; on page 19 Howard Saunders is referred to as W. Saunders and Mr. Millais has evidently not consulted the original from which he quotes; on page 83 we find Garganay and on page 94 "there" instead of "then"; on page 8 *British Birds* (Vol. II., p. 416) is given as the authority for the statement that the

* This account seems to have escaped Mr. Millais's attention.

Red-crested Pochard has occurred twice in Yorkshire whereas it is there expressly stated that both records refer to the same bird. Enough has been said to show that Mr. Millais is not by any means reliable in those parts of his work which depend upon the observations recorded by others.

In the accounts of distribution we find the following records which do not seem to have been previously published —

Red-crested Pochard (p. 8).—One obtained near Cambridge and “others” at Ely in the winter of 1882 and two at Oban in the winter of 1898.

Common Pochard (p. 19).—Breeding in Nottinghamshire (J. Whitaker).
Scaup (p. 68) stated to have bred on South Uist in 1910.

Harlequin (p. 136).—A bird obtained by a man named Cuthbertson at the Farnes is an adult and not an immature bird as stated by Mr. Bolam, but we do not see how Mr. Millais fixes the date of the capture of this bird as 1882 and claims it as an additional record. It seems more likely to have been one of the three observed at the same place in 1886, unless there is good evidence for the date 1882.

As we have already mentioned, critical discussion of the interesting sequence of plumages in these birds must be left to those who have specialized in the group. But the author of this book has been remarkably well equipped with material, for he has not only had his own fine series to work upon, but he has had free access to the wonderful collection of duck-skins in the possession of Mr. E. Lehn Schiöler of Copenhagen.

The descriptions which will probably attract most attention are those of the eclipse plumage of the Common Pochard, about which very little is known, and of the winter, “summer,” and “semi-eclipse” plumages of the adult male Long-tailed Duck, for the author avers that this bird has two partial moults and one complete moult in the year.

We hope that in his second volume, which we believe is to appear in the autumn, Mr. Millais will provide keys not only to differentiate the adults in full plumage, but also to show at a glance how the males in eclipse and immature plumages differ from each other, especially when half moulted, and how the females differ from the immature males. This would be a very useful piece of work, and it is one that is much wanted.

Mr. Millais, as is well known, has for some years been one of the chief exponents of the theory of colour-change in the fully-grown feather. That the colour of a feather can change by the loss of certain portions and by disintegration in the cortex everyone admits, but Mr. Millais argues that changes

of colour occur which can only be brought about by actual re-pigmentation or re-arrangement of pigment. In this volume he does not bring forward many instances of this, but we notice that he claims a "colour-change" in the flanks of the immature male Scaup, apparently in the under tail-coverts of the adult male Tufted Duck, and in the cheeks and lores of the adult male Long-tailed Duck. In his opening chapter, however, he invites criticism on the subject by his remarks, and cites as a clear case the scapulars of the adult male Wigeon,

"which are new and come in half winter, grey and vermiculated, and half eclipse, rich black and chestnut. These feathers are not again moulted, but change to all grey with vermiculations in a few weeks by colour change."

We have examined eleven specimens of adult male Wigeon moulting from eclipse to winter plumage, and in these specimens all the feathers which were growing or had sheaths attached were normal winter-feathers, and we were unable to find a single *new* feather as described by Mr. Millais. In most eclipse specimens, however, some of the scapulars are partially barred (or vermiculated), and these in our opinion are so when newly grown and remain so until they are shed. How does Mr. Millais prove that the feathers which he describes as growing in the autumn with partial eclipse colouring are not moulted again? It seems to us that such feathers might occur in individuals in which part of the pigment developed was of the same nature as that producing the previous plumage.

Some years ago, in an article entitled "On the Change of Birds to Spring Plumage without a Molt" (*Ibis*, 1896, pp. 451-7, plate x.), Mr. Millais instanced the Sanderling as a bird which changed "by a complete recoloration of the feathers in new form throughout the whole plumage, only a few being moulted and replaced by new summer ones." In this bird Mr. Millais says there is no moult in April, May, and June, and he gives illustrations of feathers taken from different individuals in those months to prove that they change colour. We happen to have examined a good series of spring-Sanderlings and can assure Mr. Millais that he is entirely wrong in supposing that they have no moult, on the contrary the moult for a spring-moult is a *fairly* complete one. In this case certainly and possibly also in others, Mr. Millais has misinterpreted the evidence and appears to have overlooked the following facts which apply not only to the Sanderling but to many other birds which undergo a spring-moult: (1) the moult is gradual; (2) different individuals moult

at different times; (3) individuals vary both in the extent to which old feathers are cast and new ones acquired, as well as in the intensity of colouring and markings; (4) the feathers themselves in the same region of the body vary greatly, and it is therefore impossible to prove "colour-change" by comparing individual feathers.

Mr. Millais states in the work under review, that Mr. Pycraft has microscopically examined feathers and is unable to find "any channels by which colour or 'life' can be passed up the quill and the *rami*," but, adds Mr. Millais, he has admitted that his microscope is not a very powerful one. Mr. Millais is evidently unaware of the very careful and prolonged investigation on "The Development of Color in the Definitive Feather" undertaken by Mr. R. M. Strong at the Museum of Comparative Zoology at Harvard College, U.S.A., under the direction of Professor E. L. Mark.*

In our judgment this investigation disposes of the possibility of re-pigmentation or redistribution of pigment in a feather. Mr. Strong's paper is long and highly technical but we may with advantage quote the following conclusions from the section devoted to "Change of color without Molt," more especially as many British ornithologists appear to be ignorant of Mr. Strong's investigations:—

"The arguments against change of color without molt through repigmentation or regeneration of pigment may be summed up as follows:—

1. Most feather pigments are too resistant to chemical reagents to warrant belief in their solution and redistribution.
2. Pigmentation of the feather has been observed to take place only in the younger stages of the feather germ.
3. At the end of cornification melanin granules have a definite arrangement, which is permanent.
4. When cornification has ensued, the various elements of the feather are hard, more or less solid, structures, and their pigment contents are effectually isolated from one another.
5. There is no satisfactory evidence of the occurrence of repigmentation, and all the histological conditions render such an event highly improbable."

We have been led away from the Diving Ducks along what is after all only a side-issue by the author's firm belief in colour-change without a moult. Mr. Millais's book remains as a fine expression of ornithological art and observation.

H. F. WITHERBY.

*"The Development of Color in the Definitive Feather." By R. M. Strong. *Bulletin of the Museum of Comparative Zoology at Harvard College*, Vol. XL., pp. 147-186, plates 1-9 (1902).

NOTES

ARE STARLINGS DOUBLE- OR SINGLE-BROODED ?

THE question whether the Starling breeds more than once in the year (*cf. supra*, p. 337) has long been a matter of controversy, and many letters and much contradictory evidence on the subject will be found in the *Naturalist*, 1889, pp. 112, 366, etc., the *Zoologist*, 1903, p. 390, etc. Although many pairs are undoubtedly single-brooded, I have long been convinced that some breed twice, and a nesting-box within a few yards of my window at Ashburne, Derbyshire, has held two broods in each season for four years past. The nesting-material was thrown out within a few days of the time when the first brood flew, and on one occasion, when a single young bird remained for some time in the nest after the rest had gone, cleaning out began the day after it left. I did not ring these birds, but two years ago one of the pair lost a feather or two from one wing, which rendered it recognizable, and careful watching convinced me that this bird was in attendance on both broods.

F. C. R. JOURDAIN.

CROSSBILLS BREEDING IN NORFOLK AND SHROPSHIRE.

ON March 8th, 1913, in Norfolk I saw a nest of a Crossbill (*Loxia c. curvirostra*), with four eggs, which had been taken on March 1st, and a nest with young about nine days old. On March 16th the former pair had built a second nest and had laid four eggs. One other pair appeared to be nesting in the vicinity, but this I failed to find.

In 1911 I saw seven nests of Crossbill in this immediate neighbourhood—two nesting pairs in 1913 being in the same belts of trees respectively as in 1911. In 1910 and 1912, I am informed on quite reliable authority that Crossbills also bred in this same vicinity—in 1910 abundantly, and in 1912 some four or five nests were found.

On March 24th, 1913, Mr. D. H. Meares and I found a Crossbill just commencing to build at Grinshill, north Shropshire. We spent some hours watching the female building and breaking off dead pine twigs from adjacent trees for the outer structure. The male visited the nest once. On 25th the nest had advanced considerably, and she was gathering nesting-materials from the ground.

This is probably the first authentic record of the Crossbill nesting in Shropshire, and, if not subjected to depredations by squirrels or jays, the pair should rear successfully.

On April 18th, 1898, and following days we watched a brood of young birds at the same place, which had in all probability been bred there. The nest recorded for Llanyblodwel in September, 1880 (*Fauna of Shropshire*—H. E. Forrest) is also claimed for Montgomery (*Fauna of N. Wales*—H. E. Forrest), and seems to rest on slender evidence. There was one other undoubted pair in the same coppice this year, which had apparently not commenced to build—and several other single birds were seen.

Incidentally the above nest is less than 100 yards from the site of the only authentic nest of Siskin for Shropshire—also found by Mr. D. H. Meares with one egg on April 22nd, 1906, and subsequently destroyed, presumably by a squirrel.

C. S. MEARES.

CIRL BUNTING BREEDING IN ESSEX.

ON March 29th, 1913, I saw a Cirl Bunting (*Emberiza cirlus*) near Felsted, and this may prove of interest as the bird is very rare in Essex. In June, 1910, I found a pair nesting in the same district. I did not send a note at the time as I did not then know that the nesting of this bird in Essex had not been previously recorded.

J. H. OWEN.

NOTES ON A PIED BLACKBIRD.

LAST year, 1912, a pair of Blackbirds (*Turdus m. merula*) were feeding young at a nest in my garden at Norwich about the middle of April, and again at the same nest at the end of May.

At the end of June and during the first few days of July, young birds were again being fed at this nest, but on this occasion I was surprised to see that the cock in attendance was a bird heavily pied with white upon the head and neck, and with a few white feathers in the mantle, and wings—the original cock having been a normal coloured bird.

I did not notice this pied bird during August, and I was away during September and the first part of October, but he reappeared in my garden on October 30th, to my great joy, in all the splendour of his new plumage, having moulted out pure white all over except his under-parts, which were still black, a few flecks of black upon the mantle, and a black feather or two in wings and tail.

Since that day he has been seen in my garden, I might almost say every day, but certainly every week during the

remaining months of 1912, and up to the present date (April 6th) in 1913.

He began to sing on February 10th, which is the earliest date upon which I have ever heard a Blackbird sing, and has sung most days since then.

Towards the end of March, he was often in the company of a hen bird, but as he now seems to be solitary again, I expect she has begun to sit, though so far I have been unable to locate the nest. During the last few weeks his plumage has undergone a further change. About the middle of March he began to show some small black feathers about his head and neck. This has gradually become more marked, until at the present time (April 6th) his whole head and neck is finely speckled with black.

I think the history of this bird over twelve months, brings to light several points of ornithological interest.

In the first place his mate of 1912 made use of the same nest no less than three times, in which to rear her brood, though on the last occasion having paired with a different cock, and I believe there are only a few recorded instances of three broods of young Blackbirds being reared from the same nest.

In the second place, it is always a matter of some difficulty to ascertain the exact degree to which some of our so-called "resident breeding birds" are migratory or non migratory, and the history of this bird shows the very sedentary disposition of, at all events, one individual Blackbird—he having been seen in one garden every week of the twelve months, with the exception of August and September.

The other points of interest are the assumption of the white plumage at the autumn-moult, and the reappearance of black in the plumage of the head and neck this spring.

B. B. RIVIERE.

[Mr. Riviere's notes are interesting and the fact that the same nest was used for the third time is strong, though not conclusive, evidence that it was occupied by the same female. Blackbirds normally do not have a spring-moult and it is quite possible that some of the feathers of this bird have merely white tips which in wearing away would show the black underneath.—H.F.W.]

SNOWY OWL IN IRELAND.

ON April 5th, 1913, I received from Tory Island, Donegal, a fine specimen (male) of the Snowy Owl (*Nyctea nyctea*). The measurement of the extended wings from tip to tip of the

longest primaries was $57\frac{1}{2}$ in.—or 2 in. short of 5 ft.—the weight, 3 lb. 9 oz.

There are about thirty Irish records in the nineteenth century, and a few since—the great bulk of them being, as might be expected, from the northern and western counties, especially Mayo.

RICHARD M. BARRINGTON.

RED-NECKED GREBE IN HERTFORDSHIRE.

OF the three species of Grebe—Red-necked, Black-necked, and Slavonian—which occasionally visit the Tring Reservoirs, the Red-necked (*Colymbus g. griseigena*) is perhaps the rarest, and it may be of interest to record the occurrence on March 16th, 1913, of a bird in summer-dress. I have been about the reservoirs frequently during the past five years, but have only once before seen a Red-necked Grebe—a bird in winter-plumage, on December 18th, 1910. When in summer-dress the Red-necked is easily distinguished in the field from the Great Crested Grebe, but in winter there is a general resemblance in the plumage of the two species, although the back of the Red-necked appears to be rather darker than that of the more common bird. The Great Crested, it is true, is rather the larger, but unless the birds are side by side the difference in size is not very noticeable. The Red-necked, however, always appears to be more stoutly built, with a body broader in proportion to its length and a neck shorter and less slender, than the larger bird; and this stouter habit will serve at all seasons to attract one's attention to it, even when the bird is too far off for the details of its plumage to be made out.

CHAS. OLDHAM.

WHISKERED TERN IN SUFFOLK.

THE record of the Whiskered Tern (*Hydrochelidon l. leucopareia*) mentioned in the March Number of BRITISH BIRDS, p. 324, was sent in to the B.O.C. Migration Committee by me. As your reviewer casts some doubt on this record I think it is as well that I should supply the following details: The bird—an adult—was seen and clearly identified by me at Shingle Street. It was amongst a large flock of Common Terns. I saw it at close quarters on September 16th and 17th, 1910.

M. J. NICOLL.

[I did not "cast doubt" upon the record, but stated that it could not be accepted without evidence of identification. This must especially be insisted upon in records published in the *Migration Reports*, because the authority for the records is unfortunately not given: but in all cases of rare birds seen, evidence of identification is *most* desirable.—H.F.W.]

LITTLE TERN BREEDING IN NORTHUMBERLAND.

As the Little Tern (*Sterna m. minuta*) is not recorded as breeding north of the Tees on the East Coast of England, it may be well to state that I found on the Northumbrian coast one pair in 1911; the nest contained one egg on July 2nd. In the same locality in 1912 I found two nests, one contained one egg and the other contained two eggs, on July 7th.

CATHARINE HODGKIN.

IVORY-GULL IN IRELAND.

A BEAUTIFULLY marked but immature specimen (female) of the Ivory-Gull (*Pagophila eburnea*) was shot at Teelin Pier, Carrick, co. Donegal, on March 25th, 1913, and forwarded to me in the flesh. This rare Arctic-visitor is the fifth Irish record and the second this spring—all were obtained in the first quarter of the year. Like many Arctic birds which straggle to Ireland this Gull was readily approached and comparatively fearless of man.

In a general way the wing resembled that of a very old male Greenland Falcon. The feet were very dark (not black)—relatively small—with stout rough scalloped webs—and sharp skua-like claws—the “well defined web” of *Saunders Manual*, between the tarsus and hind toe was not well marked—and was more a thickening of the skin at the base of the toe, than a web.

A perfectly fresh specimen of an Ivory Gull is seldom available for examination in the British Isles, hence these details.

RICHARD M. BARRINGTON.

[The record referred to by Mr. Barrington is one by Mr. R. Warren in the *Zoologist* (1913, pp. 108-9), where it is stated that on February 17th, 1913, a man went into the shop of Mr. Rohu, taxidermist of Cork, with the wing, leg and foot, and part of the breast of a freshly killed Ivory-Gull. He had observed a “large hawk” in one of the trees which line the Marina (an embankment separating the City of Cork Park from the River Lee), and as he passed the hawk, it dropped the remains of this Gull.—H.F.W.]

EARLY NESTING OF MOORHEN.

ON March 27th, 1913, I noticed a pair of Moorhens (*Gallinula ch. chloropus*) making a nest on a pond near Felsted, Essex. On going to see how far operations had been carried, I was surprised to find that the nest, not as large as my hand, had an egg in it: the birds were making the nest about the egg.

This is not an unusual occurrence with Moorhens. I then visited a pond where a pair of birds always nest early (as reported in BRITISH BIRDS, *antea*, p. 23), and found a nest containing eight eggs on which the bird had been sitting three or four days. This means that laying could not have commenced later than March 17th. In 1911, in Shropshire, I saw young Moorhens, a few days old, on April 27th. In 1912 I found young ones, also a few days old, on April 23rd. These instances with those previously recorded in BRITISH BIRDS show that it is not very unusual for the Moorhen to begin laying in March.

J. H. OWEN.

LETTER.

DISEASED FEET OF WOODCOCK.

To the Editors of BRITISH BIRDS.

SIRS,—I need hardly say how interested I was to read the report on the feet of a Woodcock which I sent you in December, 1912, and in which Dr. N. F. Ticehurst states: "Had the subject been human and not avian, I should not have hesitated to have ascribed the conditions as due to tuberculosis." On July 23rd, 1905, I picked up a Lapwing in a moribund state, which I forwarded after death to Dr. C. G. Seligmann. He found that it was "the subject of advanced tuberculosis," and a short description of it together with a plate (fig. 3) duly appeared in *The Proceedings of the Royal Society of Medicine* for December, 1907. May I add how glad I am to feel that I was in some way instrumental in bringing about your decision (expressed in Vol. VI., p. 282) as to undertaking "Post-mortem examination of Birds" on behalf of contributors to your Magazine.

HUGH S. GLADSTONE.

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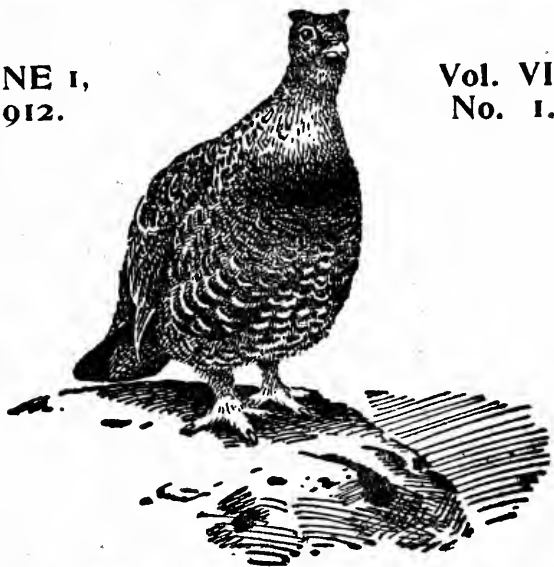
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