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BRITISH BIRDS

AN ILLUSTRATED MAGAZINE DEVOTED
TO THE BIRDS ON THE BRITISH LIST

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EDITED BY

H. F. WITHERBY F.Z.S. M.B.O.U.

29

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PREFACE.

THE year covered by our fourth volume has been marked by a steady advance rather than by any very striking event in British ornithology.

The interest in the Marking Scheme continues to grow, and the recoveries already announced show excellent promise for the future. Such an inquiry must necessarily be continued for some years before results of real value can be obtained, but we now feel assured that the ringing of birds, if conducted on a scale equal to that of last year, will be the means of our gaining a considerable knowledge of the exact movements of individual birds—a subject of which we now know practically nothing. We may here again express our gratitude to those numerous readers who, by their enthusiastic co-operation, are making the scheme a success.

The Crossbill irruption and the resultant nesting have again engaged the careful attention of many contributors, and never before has such a visitation been so well and thoroughly recorded.

The value of a careful study of geographical races is becoming more widely recognized, and the knowledge gained by this means of the origin of a number of immigrants, as in the case of Jays, Great Tits, and Woodpeckers recorded in the pages of this volume, must surely convince the most sceptical that the subdivision of species into racial forms is of real practical value to the student of migration, apart from its undoubted interest to the evolutionist.

Notes on various interesting points connected with the life-history and distribution of our birds have again shown a growth both in number and importance, and we hope that this valuable feature will continue to increase.

A word must be added regarding the vexed question of nomenclature. Up to now we have adopted, so far as possible, the nomenclature employed by Howard Saunders in his "List," published in 1907, and failing a more up-to-date standard, no other course is open to us. We have for some time, however, been at work, in conjunction with Dr. Ernst Hartert, upon a *Handlist of British Birds*, the nomenclature of which will be strictly in accordance with the rules laid down by the International Commission on Zoological Nomenclature. Although when adopted this will involve a good many changes in the names at present used in the Magazine, any inconvenience so caused will, we feel, be amply compensated for by the gain in world-wide uniformity and stability, which should be the result of following rules framed by an international authority.

The proposed *Handlist* will contain a sufficient synonymy, and a careful account of the distribution of each bird. It is hoped that it will be ready in the autumn, but in order to avoid any confusion, and to give readers time to study, and in some measure to become acquainted with, the new "List," the nomenclature at present in use will be continued throughout Volume V. of BRITISH BIRDS, and the nomenclature of the new *Handlist* will not be adopted until the sixth volume.

THE EDITORS.

April 29th, 1911.

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BRITISH BIRDS

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

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THE COURTSHIP OF THE MALLARD
AND OTHER DUCKS.

BY

H. WORMALD.

By far the most interesting time of year in which to watch the ducks is the breeding season, when the attitudes assumed by the various species during courtship will well repay a careful study. Mallards (*Anas boschas*) seem to have five distinct postures in their spring "show." The performance usually begins by four or five drakes swimming round a duck with their heads sunk, and their necks drawn back, and in this attitude they have the appearance of being most unconcerned. This I will call action No. 1 (see Fig. 1). After swimming



FIG. 1. MALLARD DRAKE. COURTSHIP ACTION NO. 1.

(Drawn by H. Wormald.)

round in this fashion for some little time, the Mallards will suddenly lower their bills so that the tips of them are under the surface, and as they do so they stand up in the water and then rapidly pass their bills up their breasts.



FIG. 2. MALLARD DRAKE. COURTSHIP ACTION NO. 2.
(Drawn by H. Wormald.)

Mr. J. G. Millais in his beautiful work, *The Natural History of British Surface-feeding Ducks*, says, "all the drakes simultaneously stand up in the water and rapidly pass their bills *down* their breasts," but after very careful observation, I am certain that he is in error here, and I have satisfied myself that they pass their bills *up* their breasts (see Fig. 2). This motion is performed with somewhat of a jerk, and if one observes



FIG. 3. MALLARD DRAKE. COURTSHIP ACTION NO. 3.

(Drawn by H. Wormald.)

very closely, a tiny jet of water will be seen to be thrown out in front by the bill being jerked from the water; this is interesting, as one also finds this jet of water in the spring "show" of the Goldeneye, but in this case it is made by the drake kicking out a small jet of water with his foot while he quickly throws back his head.

The Mallard while performing action No. 2 as I will designate it, utters a low note rather difficult to describe,

but I think it may be said to be a low whistle with a suspicion of a groan in it, as though it caused the bird an effort to utter.

Following this, the Mallards lower their breasts and raise their tails two or three times in quick succession; and this, which we may call action No. 3 (see Fig. 3), is often followed by a repetition of actions Nos. 1 and 2. A quick "throw up" of head and tail, with



FIG. 4. MALLARD DRAKE. COURTSHIP ACTION NO. 4.

(Drawn by H. Wormald.)

the feathers of the head puffed out, is action No. 4 (see Fig. 4), and this is followed quickly by action No. 5 (see Fig. 5), in which the drakes stretch out their necks with their throats just over the water and swim rapidly about in different directions, when, apparently by common consent, they all come back to action No. 1, and go through the whole performance over again.



FIG. 5. MALLARD DRAKE, COURTSHIP ACTION NO. 5.
(Drawn by H. Wormald.)

The order of these actions is very often reversed, for instance, that which I have given as No. 2 is very frequently followed by No. 4, but No. 1 is almost always the first, while No. 5 is the last, and is always gone through by the drake immediately after treading has taken place.

The courtships of the Teal (*Nettion crecca*), Pintail (*Dafila acuta*), and Gadwall (*Anas strepera*) are very similar to that of the Mallard, but I have never seen any of them perform action No. 5. The Teal and the Pintail utter a beautiful, low, double whistle, and the Teal in action No. 4 makes the back of its head and tail meet over its back.

Adult Mallards commence "displaying" in October so soon as their winter-plumage is complete, and I have seen them "display" when in full eclipse-plumage! Immature drakes begin to "display" about the same time, even before they are in full winter-dress. I have seen immature Garganey drakes (*Querquedula circia*) displaying when only just beginning to assume their adult-plumage, but this is not so surprising if one judges by the age of the bird since immature Garganeys do not come into winter-plumage until months after Mallards of the same age, and adult drakes are much longer in eclipse-plumage than other surface-feeding ducks with the exception of individual Shovelers. The courtship of the Garganey is a very dull affair compared to that of the Teal. One finds this autumnal display in many birds, for instance, Blackcock repair to their playing grounds and go through a half-hearted spring "show" so soon as they have finished the moult. One often hears cock Pheasants utter their spring-call followed by the characteristic whirr of their wings in November. Snipe drum freely during this month just before dark, though I have never heard a Snipe drumming in the day-time during November, but I daresay that other people may have done so.

THE BIRD-WATCHER'S GUIDE.

BY

F. B. KIRKMAN.

I.—SPRING AND SUMMER.

1. ARRIVAL OF SUMMER - MIGRANTS. — Date. Time. Place. Number. Direction of flight. Sex of the successive arrivals of the same species. Meteorological conditions.

2. LOCAL DISTRIBUTION.—A *map* showing (a) the position of each nest in a given area ; (b) the character of the ground and of the growth in the area ; (c) the boundaries of the “estates” of those pairs which confine themselves strictly to a limited feeding-ground. Add the history of each nest in respect to (1) the fate of eggs, young, parents ; (2) any of the points detailed below under the head nest-building ; nest ; eggs ; incubation ; nestlings ; mortality ; leaving nest ; life of the young after leaving the nest ; the second brood ; departure from the nesting-area. Note whether the young of the first brood play any part in feeding the young of later broods.

3. SONG AND NOTES.—Months in which the bird is heard to sing. Does it sing at night ? Variation in the song of the same species ; of the same individual in respect to length, notes, quality. Does the hen sing ? On what occasions ? Number and description of the various notes (call-notes, alarm-notes, etc.) used by the cock, hen and young. Occasions on which each is used. How many of these notes form part of the song ? Does the species sing when fighting ? Cause of the fights. Note whether any recrudescence of song in autumn months.

4. COURTSHIP.—Exact description of courting or other sexual actions, noting the number of individuals of either sex taking part and the rôle played by each. Note whether the hen selects and how, or whether she is merely appropriated by the strongest. Description of the sexual displays which occur *after* mating. Instances of birds attacking imaginary rivals in windows or mirrors.

5. NEST-BUILDING.—Which sex chooses the site? Which builds? If both, state share of each. If hen, what does cock do meanwhile? What time of day does building take place? How long does it take to complete the nest? Detailed description of the bird's method of building (how it starts, fashions the nest, where and how it collects the material). Interval between the completion of the nest and laying of the first egg. Causes of desertion.

6. NEST.—The material, inside and out (in detail). Is there a layer of different material between the inside and outside? Site of the nest. Is the material of the nest available near the site? Variation in the nests of the same species building in the same area or the same kind of site. Difference between the first and subsequent nests of the same bird, and between those of young and old birds. Note quarter to which the nest is exposed, and how protected from sun, wind, water, or detection. Note fate of eggs and young in the case of each nest described.

7. EGGS.—Date and time of day when each egg in the clutch is (1) laid; (2) hatched, the eggs being numbered. Number in clutch added. If the eggs are not numbered, the incubation-period should be reckoned from the date on which sitting commenced. Effect of weather and the situation of the nest on the period of incubation. Weight of each egg before incubation. Loss of weight as incubation progresses.

8. INCUBATION.—Which sex incubates? If both do so, their respective shares, and the hours at which they sit. Is the incubating-bird fed? Her (his) actions when fed. Are the eggs covered when left, and with what material? Are the eggs turned, how often, and in what manner?

9. NESTLINGS.—(a) A series of specimens or photographs showing the development of the nestling from day to day (all parts of body, pterylography, coloration); (b) weight of same nestlings from day to day, taken at the same hour; (c) measurements (*i.*) from tip of beak to

pygostyle, the nestling lying on its belly ; (ii.) along arm of wing, a separate measurement for each segment of the limb ; (iii.) ditto for foot measurements ; (d) colour of the markings of the inside of the mouth, and relative sensitiveness of its various parts to stimulation by food ; (e) wing-claws, how long retained ? (f) "heel-pads," when present, and observations as to their use ; (g) distribution of down where present when first hatched ; whether two down-plumages are developed ; date and process of development of down after hatching ; dates of shedding of down, and sprouting of quills ; process and dates of development of quills.

10. FEEDING OF NESTLINGS.—Share of each parent in the feeding. Visits per hour. Time of day when feeding visits are most frequent. Distribution of the food among the young. Do any receive more than their share and why ? Description of the act of feeding. Nature of the food given at each stage. Is it regurgitated by the parent ? If so, to what extent is it digested ? (To find this, insert a quill into the throat of the nestling immediately after it has been fed, and examine under a lens the matter adhering to the quill. Failing this method, the nestling may be made to regurgitate by pressure or tickling.) How long are the nestlings fed on regurgitated, how long on fresh, food ? Do the cock and hen birds bring different food to the nest ?

Experiment.—Place a nestling (at various stages of growth) in a conspicuous place at the foot of the nest or near it, and note if the parents feed it or take any notice of it.

11. CLEANING THE NEST.—Methods adopted at various stages of the nestling's growth. When the fæces are removed by the parents, note whether they are eaten, or merely carried away and dropped. If the latter, at what distance from the nest.

12. PROTECTION OF NESTLINGS (a) by coloration or behaviour, whether of the nestlings or the parents ; (b) by the situation of the nest or nesting-place.

13. LEAVING THE NEST.—Date of the hatching of each individual in the clutch and of its departure from the nest. What caused it to quit the nest? Its proceedings on quitting the nest.

14. DESCRIPTION OF THE COLORATION OF THE YOUNG BIRD PREVIOUS TO AND AFTER ITS FIRST MOULT.—(1) Of the plumage in detail; (2) of the soft parts.

15. LIFE OF THE FLEDGLING AFTER LEAVING NEST.—Where they go. How fed. Their enemies. Self-protection (running, diving, crouching, coloration, etc.). Protection by parents (feigning wounded, etc.) Mortality and causes of death. First efforts at flight, swimming, running. To what extent has skill to be acquired.

16. SECOND BROODS.—Date of commencing second nest (with date of departure of last nestling from the first nest). Relations of parents with first brood after the second nest is started. Is there a second courtship? What form does it take? Is the second nest built in the same feeding-area as the first? Is the first nest used for the second brood, and, if so, is it altered or renewed in any way?

17. QUITTING THE NESTING-AREA.—Date at which pairs quit the feeding-areas to which they have confined themselves during the breeding-season. Movements of parents and young, and their relations after quitting the area.

18. MOULT, BOTH OF YOUNG AND ADULT.—Date it begins. Order in which the various parts of the plumage are moulted. Length of moulting-period. Behaviour of the birds during the moult.

19. DEPARTURE OF SUMMER-MIGRANTS.—See *Arrival of Summer-Migrants*. Note also behaviour of the species previous to departure.

II.—AUTUMN AND WINTER.

1. ARRIVAL OF WINTER-IMMIGRANTS.—Date. Place. Time. Number. Sex. Young or old. Direction of flight. Wind and weather.

2. PLUMAGE-CHANGES.—Descriptions made on arrival, in December, and before departure.

3. FEEDING-HABITS.—Whether in flocks, large or small, families, pairs, singly. Do the flocks, etc., confine themselves to a definitely limited area? Do they resent intrusion by members of their own species or of other species? Method of feeding. Nature of food. Time of feeding. Alarm and call-notes.

4. LOCAL DISTRIBUTION.—Map showing (i.) feeding-areas of selected species, *e.g.*, Robin, Starling, Dipper, Mallard; (ii.) showing the distribution of all the bird-life in any given area, noting also flight-lines.

5. SELF-PROTECTION.—Methods of protection adopted by the species (*e.g.*, posting sentinels, night-feeding, etc.). Note causes of protective colouring. Against what protective. In what environment protective.

6. ROOSTING.—When and where. Distance and route travelled to reach the roost, size of the area from which the birds come, whether the sleeping-quarters are in the feeding-area. Behaviour previous to entering the roost. After entering it. In the morning before and after quitting it. Behaviour when disturbed.

III.—GENERAL.

1. HABIT AND INSTINCT.—Note what acts are (1) congenital or performed without previous experience; (2) acquired, or the product of experience (including imitation), *e.g.*, chirping in the egg is congenital; fear is largely the result of experience or imitation. (For further details see Lloyd Morgan. *Habit and Instinct.*) Note further the extent to which congenital acts, *e.g.*, swimming, flight, nest-building (assuming the latter to be a congenital act), are improved by practice.

2. IMITATION.—Note all acts that seem to be the result of imitation.

3. EXPRESSION OF THE EMOTIONS.—Note in detail all the outward signs of fear, anger, and other emotions,

such as erecting feathers, snapping the mandibles, and hissing.

4. **PLAY.**—Exact description of anything in the nature of play.

5. **LOCOMOTION.**—A comparative study of various species in respect to the character of their flight, movements on the ground, and in or under water.

6. **MORTALITY.**—Examples to show the various ways in which birds may lose their lives.

7. **FOOD.**—Record of food of species month by month, based upon examination of the crop or stomach or regurgitated pellets.

ON A CURIOUS HORN-LIKE EXCRESCENCE
ON A LAPWING.

BY

C. B. TICEHURST, M.A., B.C., M.R.C.S., M.B.O.U.

ON February 9th, 1910, I received for examination through the Editor of BRITISH BIRDS from Messrs. W. J. Williams, taxidermists, of Dublin, a skin of a female Lapwing (*Vanellus vulgaris*) which had been shot a few days before in co. Waterford, Ireland. Springing from the root of the tail was a large horn-like "growth," which hung down over the basal half of the tail. This "horn" measured in total length 7 inches; its base, which was the widest part, measured 2 inches in circumference and $\frac{3}{4}$ inch in diameter; it gradually tapered to a blunt point, and formed one spiral and a half, curling from right to left; its surface was smooth, very hard, and in places irregularly striated. On examining its origin more closely I found that it sprung from a part of the oil-gland, and, indeed, was continuous with the remains of that structure, which still retained some of its secretion. The oil-gland is a bilobed structure situated beneath the skin on the last free vertebra and the bases of the rectrices; the two lobes, which are separated anteriorly, are united posteriorly, and open in a common cavity or an elongated process; this process in many birds (*Gallinaceæ* and aquatic birds, etc.) is encircled by a small tuft of feathers. The gland consists of closely-packed, parallel, filiform tubules, which secrete the sebaceous unguent with which the plumage is preened; it is largest in aquatic birds, small in passerine birds, whilst in some (*Otis*, *Casuaris*, *Struthio*, *Rhea*, some pigeons and parrots) it is said to be absent. The secretion is usually only slightly odorous, except in *Anas moschata* and *Upupa epops*, in which it has a pronounced smell. The gland is encapsuled in a covering which contains

muscle-tissue, the latter doubtless being brought into play in voiding the secretion. If the capsule were torn and the tubules damaged the secretion would involuntarily make its escape through the rent, and, if circumstances allowed it to accumulate, it would harden; the hardened part would be pushed on by the ever-oozing fresh secretion,



LAPWING WITH A LARGE SEBACEOUS "HORN."

which in turn would be hardened and pushed on. In this manner these curious sebaceous "horns" are formed.

Sebaceous "horns" are, perhaps, best known from their occasional occurrence in the human subject, and may be formed on any part of the skin where sebaceous glands occur, but are commonest on the scalp. These glands also occur in other mammals, and there is in the

Royal College of Surgeons Museum a specimen of a sebaceous "horn" on the head of a mouse. There are also in the museum a few specimens of bony horn-like growths in birds arising from bone, and in a Thrush (*Turdus musicus*) there is a tumour on the skull, said to be sebaceous in origin, but as there are no sebaceous glands in this position such a diagnosis seems improbable. There is, however, a specimen of a pigeon with a tumour on each side of the pygostyle which may have originated in the oil-gland, but it is not a horny excrescence.



NOTES

RAPID NEST-BUILDING BY A ROBIN.

ON April 19th, 1910, a gardener here (Basingstoke) hung up his coat at 9.15 a.m. on a tree. At 1 p.m. he took it down to put on, when a nest of a Robin (*Erithacus rubecula*), almost completed, fell from the folds of the coat. In three and three-quarter hours, therefore, the site was selected and the nest nearly finished.

W. S. MEDLICOTT.

DARTFORD WARBLERS NESTING IN HEATHER.

STATEMENTS have so frequently been repeated to the effect that nests of the Dartford Warbler (*Sylvia undata*) have in this country always been found amongst the lower portions of thick furze-bushes, that some information with regard to a departure from this habit will doubtless be of interest.

During the past three years I have examined some numbers of nests in a certain Surrey breeding-haunt of the species, and in this locality the majority of birds build in long thick heather (*Calluna vulgaris*), growing either amongst or near extensive furze-coverts.

I have also seen the nest placed in heather growing in open moorland country, furnishing no cover beyond that afforded by a luxuriant shrub-like growth of that plant, and two or three gorse-bushes growing at wide intervals, and at some distance from the nesting-site; but this latter situation seems to be quite exceptional.

HOWARD BENTHAM.

[In the *Avicultural Magazine* (November, 1909, p. 32) Mr. Allen Silver mentions that an informant of his always found the nests in heather, but he does not state in what district. Mr. E. Hart (*Field*, 23, x., 1909, p. 751, and 7, v., 1910, p. 821) states that he has always found the nests in heather in Hampshire. I have myself found several nests in heather in Hampshire, but many more in gorse.—H. F. W.]

NUTHATCH IN ANGLESEY.

WHILST on a visit to Anglesey I was cycling with my friend Mr. Laisters F. Lort on May 14th, 1910, when, as we passed through Llangoed (a village east of Beaumaris) in a place where the road was overshadowed by trees, I caught sight of a bird moving about the upper branches of a large oak in the manner peculiar to the Nuthatch (*Sitta cæsia*). Knowing that

this bird had never been met with in Anglesey, I called a halt, and, bringing field-glasses to bear upon it, I was delighted to find that my surmise was correct. Both Mr. Lort and I watched it for some time; it flitted soon to another tree, where in a few moments it was joined by a second bird, no doubt its mate. Both continued to climb about as long as we stayed, going from one tree to another every now and then. From this we judged that they had not got a nest, and we could not see any likely hole from the roadway. Returning in the evening we looked at the place again but could not then see them.

H. E. FORREST.

EARLY BREEDING OF THE GREENFINCH.

THIS morning, April 23rd, I found in my garden at Chester a young Greenfinch (*Ligurinus chloris*), which had evidently just left the nest. It was fully feathered, but unable to fly. It is usually quite a month later than the above date that one sees the first of the young Greenfinches in this locality, and one can only suppose that the warm weather during the middle of March was responsible for the early date.

C. KINGSLEY SIDDALL.

GREENFINCHES FEEDING ON COTONEASTER BERRIES.

FOR some weeks every winter Greenfinches resort to the precincts of the Citadel on Plymouth Hoe to feed on the berries of a species of cotoneaster (*C. microphylla*). They are not to be seen there at any other time of the year.

W. I. BEAUMONT.

WHITE WAGTAIL IN CO. WEXFORD.

As the White Wagtail (*Motacilla alba*) has seldom been recorded from the east coast of Ireland (*cf.* Vol. I., p. 111; Vol. III., p. 130), it is worth noting that on April 30th, 1910, I saw a party of eight (males and females) feeding in some small fields adjoining some sand-dunes on the Wexford coast. On the following day I could see the birds nowhere, and I think they had passed on. On May 2nd I saw two pairs together in the same fields, and I am inclined to think that these birds were new arrivals.

H. F. WITHERBY.

GREY WAGTAIL NESTING IN KENT.

THE pair of Grey Wagtails (*Motacilla melanope*) referred to by Dr. Ticehurst in his *Birds of Kent* as having been seen by Mr. H. G. Alexander feeding their young by the county-

boundary stream near Tunbridge Wells in 1908-09 again made their appearance this spring. The accompanying photograph shows the female about to brood over her first



GREY WAGTAIL AT ITS NEST NEAR TUNBRIDGE WELLS,
KENT, APRIL, 1910.

(Photographed by Miss E. L. Turner.)

newly-hatched young on April 25th, 1910. I am indebted to Mr. Alexander for finally discovering this nest after vainly hunting for it myself.

E. L. TURNER.

LATE STAY OF THE BRAMBLING.

ON April 14th, 1910, I saw about twenty Bramblings (*Fringilla montifringilla*) in a flock at Basingstoke, Hampshire, while on May 4th I saw two fly over. This is, I think, unusually late.

W. S. MEDLICOTT.

[This is certainly late for the south of England. I saw Bramblings in the New Forest up to April 10th.—H. F. W.]

CROSSBILLS NESTING IN ENGLAND.*

IN BERKSHIRE.

CROSSBILLS have been very numerous in the pine-woods of south Berkshire. Nests I myself have seen are as follows :—

March 16th, nest with 3 eggs (fresh).

March 28th, nest with 4 eggs (fresh).

April 1st, nest with 3 eggs (fresh).

April 4th, nest with 4 eggs (slightly incubated).

April 12th, nest with 4 eggs (slightly incubated).

April 18th, nest with 4 eggs (slightly incubated).

•April 20th, nest with 3 eggs (much incubated).

In addition, I have heard of a nest of four eggs being taken, also two nests with young birds.

Towards the end of April numerous parties of (usually) six birds, young and old, were about, which apparently soon left. At the time of writing, May 18th, there are still a few pairs which have not quite finished nesting.

A. S. TOMLINSON.

IN HAMPSHIRE.

SINCE Crossbills arrived in the New Forest district in July, 1909, many birds have been constantly reported, and considering the large area of fir-woods in the forest and its outskirts, it is most likely that a number have bred; in the Burley district Mr. Witherby records at least four broods of young fledged on April 2nd (Vol. III., p. 401). I saw pairs of birds during the months of February and March, but had not an opportunity to make a search for nests till April 5th, when with my friend Mr. R. G. Townsend I started on an expedition near the south-eastern boundary of the forest, near Sowley Pond, where we met only with moderate success, finding one nest. But the finding of this nest is, I think, worth recording in detail, as my experience agrees exactly with that of Mr. Gilroy and Mr. Stanford, the presence of the cock bird and his behaviour leading directly to the discovery of the nest.

* For previous notes on this subject, see Vol. III. Index.

We were on a road leading through a small wood and came suddenly on this bird as he sat on an oak within a few feet of us ; on his taking a short flight and perching on a tree in a field, we followed and watched him for some time. He seemed so contented, singing, and at intervals preening his feathers, that I concluded his mate was near. So we retraced our steps and found that in the wood and by the roadside opposite to the oak where we first saw the bird, were a few Scotch firs. A short search revealed the nest situated next the stem of the tree near the top and about thirty feet from the ground. The hen bird was on the nest, and with glasses we were able to see her most distinctly, but I regret that a nearer examination of the nest was impossible owing to the tree being, for us, unclimbable.

The cock bird was not in very bright red plumage. Not far from this nest we found another pair of birds in a large wood of old firs. These birds were rather restless and gave no indication of the situation of a nest. The cock bird was generally perched on the top of a tree while the hen fed in the lower branches.

R. E. COLES.

CROSSBILLS have been present in a small flock at Beaulieu since before Christmas, and about a week after Easter some boys found a nest in a Scotch fir. Shortly afterwards, in another part of the woods, a young bird was seen being fed by an old one. On May 1st I saw two nests and heard of two more, from one of which the young had only flown the week before. There are, no doubt, other nests which have not been found, as the woods are large and there are a good many Crossbills about.

THOMAS H. C. TROUBRIDGE.

IN KENT.

ON April 23rd I saw at least two broods of young Crossbills at Middingstone Hoath, Kent. They were being fed by the old birds by the side of a road on the outskirts of a wood of old, but small, larch in which were a certain number of Scotch pine.

E. G. B. MEADE-WALDO.

AFTER watching Crossbills for several weeks in the neighbourhood of Ashford we saw on April 9th a female evidently preparing a nest, and on the 10th we were able to locate the position and saw the female go on to the nest. On April 17th I climbed to the nest, which was placed in the topmost twigs of a Scotch fir on a small branch about forty feet from the ground, and found that it contained four perfectly fresh eggs.

CHARLES F. STEDMAN.

IN NORFOLK.

CROSSBILLS still (April 28th) seem numerous in the neighbourhood of Castle Rising. On March 26th a keeper found a nest and showed it to me. It was about two feet from the top of a very tall spruce, and was fully seventy feet from the ground. The nest was a large one, made principally of dry grass and decayed wood, and contained four fresh eggs. It appears to me that most of the Crossbills are not breeding as they still seem to be in flocks.

N. TRACEY.

IN SUSSEX.

SOME Crossbills seem to have nested in the Uckfield district. I saw one young bird being fed on April 29th and two on May 5th at Uckfield.

ROBT. MORRIS.

IRRUPTION OF CROSSBILLS.*

CHESHIRE.—A number have frequented the fir-woods in one portion of Delamere Forest all the winter and spring. I saw about a score so late as May 2nd, but can get no evidence of nesting (*T. A. Coward*).

KENT.—None since April 1st at Edenbridge (*H. H. Farwig*). On May 16th I saw a flock of about eighteen in a wood near Tenterden that I had not previously visited (*N. F. Ticehurst*).

NORFOLK.—None since April 26th at Keswick (*J. H. Gurney*).

NORTHUMBERLAND.—Over a dozen have been seen for several weeks past (May 6th) at Blaydon-on-Tyne (*J. Clark, Jr.*).

SURREY.—A small party passing overhead on April 2nd near Dormans, and evidence of more by the quantity of cones strewn beneath a belt of pines close by (*H. H. Farwig*).

SUSSEX.—Several flocks of from fifteen to twenty birds on May 1st in Ashdown Forest (*H. H. Farwig*).

BIRDS FEEDING ON FIR-CONES.

As I keep squirrels and require several bushels of fir-cones during the winter months, I happen to know that in the neighbourhood of Tunbridge Wells the Scotch fir has been unusually fruitful during 1909-10. During the winter of 1908-09 both fir-cones and larch-cones were scarce. The April snow and frosts in 1908 entirely destroyed the larch-fruit in some districts, and the same may have happened with regard to many of the young Scotch firs.

* For previous notes on this subject, see Vol. III. Index. Only records of nesting, departure, marked decrease or increase, or arrival in a new locality are now required.

I do not believe that any birds except Crossbills can extract seeds from fir-cones before they begin to ripen and split during April, *then* many seed-eating birds will be found feeding on them, especially Marsh-Tits; whereas the seeds of larch-cones form the principal food of Tits, Crossbills and some of the finches all the winter.

E. L. TURNER.

ON p. 411 (Vol. III.) there are two notes recording the fact that Chaffinches, Goldfinches and other birds feed on the seeds of fir-cones, and suggesting that this habit is new or at any rate unusual. Many years ago I watched Chaffinches extracting the seeds from the cones of the Scotch fir, and shortly afterwards in another locality from those of the Austrian pine or some allied conifer. I have also on two occasions seen a Song-Thrush pecking at a fir-cone, presumably for the sake of the seeds. I drew attention to these facts in two papers published in the *Journal of the Royal Agricultural Society* in 1892 and 1894, and also mentioned that the Goldfinch behaves in the same manner as the Chaffinch, though I have never observed it myself.

CHARLES F. ARCHIBALD.

MOUTH-COLORATION OF THE NESTLING YELLOW BUNTING.

WITH reference to Mr. A. G. Leigh's correction of the mouth-coloration of the nestling Yellow Bunting (Vol. III., p. 417), it may be noted that at birth the inside of the mouth is not always of a pink colour. In one brood which I had under observation the colour was yellowish, and this was associated, as a coincidence or otherwise, with absence of the usual dusky tinge on the tip of the bill. Within twenty-four hours the duskiess appeared, as well as a number of pink spots, over the inside of the mouth. These gradually spread and had coalesced by the second day. As a general rule, the pink colour fades from the sixth day onwards; on or about the ninth day it lingers as a number of spots, which soon disappear completely.

J. M. DEWAR.

NUTCRACKER IN SUSSEX.

A FEMALE example of the Nutcracker was shot at Three Oaks, Guestling, near Hastings, Sussex, on March 4th, 1909. The bird was examined in the flesh by Mr. L. Curtis Edwards, and is now in my possession. This bird's bill appears to be exactly the same as that of the male obtained at Brede, Sussex,

in 1907 (*cf. antea*, Vol. I., p. 185), and this was identified as an example of the west European form *N. c. caryocatactes*, not *N. c. macrorhynchus*, as printed, this being the name of the slender-billed form (*cf. Hartert, Vög. pal. F.*, 26). A bird shot on November 17th, 1885, at Strode Park, Herne, Kent (*cf. N. F. Ticehurst, Birds of Kent*, p. 193), is now in my possession, and I find that its bill is nearly a quarter of an inch longer and is rather more slender than that of the bird shot on March 4th, 1909. The Strode Park bird therefore appears to be an example of the slender-billed Siberian form *N. c. macrorhynchus*, Brehm.

J. B. NICHOLS.

HOOPOE IN NOTTINGHAMSHIRE.

ON May 20th a Hoopoe (*Upupa epops*) settled on the lawn at Chilwell House, Notts., while Mr. and Mrs. D. H. Pearson were at breakfast. As the bird was only three or four yards from the window they had a very good view of it, with its crest erected, during the one or two minutes it was on the ground. It was then disturbed by a cat, and disappeared over the house.

As this species has been very rarely recorded in Nottinghamshire, the above occurrence seems worth noting.

HENRY J. PEARSON.

UNUSUAL NESTING-SITE OF THE TAWNY OWL.

AN unusual nesting-site for a Tawny Owl (*Syrnium aluco*) was brought to my notice recently. Just before Easter I was told of an Owl's nest in a rabbit-hole some twelve miles from Scarborough, and on April 3rd, 1910, I went out to photograph it. On reaching the place we found that someone had taken the eggs in the meantime, but the farmer who had originally found the nest knew the Tawny Owl well and showed us the place. It was not a rabbit-hole as at first reported, but a slight scraping about three inches deep on the ground in a small pine-wood. There was no protection for the eggs or bird of any sort, the nest being quite as open and conspicuous as a Woodcock's, and placed near the foot of a Scotch pine. There were a few bits of bark and pine-needles in the nest, and several pellets and feathers on the ground round about. The position was the more remarkable because the district affords any number of normal nesting-sites, and there were several old nests of Crows or squirrels in the wood.

A fortnight later I found a fresh Tawny Owl's egg and the broken shells of two others on the ground in the same wood,

and the keeper then told me that since the first nest was robbed he had found three eggs on the ground, each one in a different place.

E. ARNOLD WALLIS.

[It is remarkable that both this species and the Long-eared Owl, which normally breed in trees at some distance from the ground, though in very different sites, occasionally depart from their usual habits and breed either on the bare ground at the foot of a tree or even in a hole in the ground. With regard to the Tawny Owl, instances of nests on the ground at the foot of trees have been recorded from North Wales (C. B. Wharton, *Zool.*, 1866, p. 346), Loch Lomond (J. Lumsden, *Proc. N. H. Soc., Glasgow*, V., p. 209), and Lüneburger Haide, North Germany (*Orn. Monatsschrift*, 1892, p. 294); while nests in rabbit and other holes have been recorded several times from North and South Devon, as well as from Wales and Scotland (*cf.*, *Ibis*, 1879, p. 378; *Ann. Sc. Nat. Hist.*, 1896, p. 95; *Vert. Fauna of N. Wales*, p. 212; *Field*, March 30th, 1901, etc.).—F. C. R. J.]

WHITE-BREASTED VARIETY OF THE COMMON CORMORANT.

THE white-breasted variety of the Cormorant described by Mr. Frohawk (Vol. III., p. 385) is certainly not restricted solely to the Scilly Isles. I have observed similar birds in the Mull lochs—salt and fresh—every year. Indeed, I was under the belief, considering the number of examples observed, that *all* Common Cormorants had pure white breasts at some period subsequent to the dirty-white breast of the first year, but, of course, I had no absolute proof of the age of the pure white-breasted birds. It is this frequent whiteness in the coloration of the under-parts that has given rise to the prevalent popular belief in Mull that the Common Cormorant at a certain period in its life-history is changed into a Red-throated Diver.

D. MACDONALD.

I WAS much interested in Mr. F. W. Frohawk's account of a white-breasted bird of this species, for on April 29th, 1910, while visiting an enormous Cormorant rookery on the Lower Danube, consisting of over a thousand nests on submerged willows, I noticed a single bird of this form sitting close to its nest. Seen through the glass at close-quarters its under-surface was exactly like that figured on p. 387 (Vol. III.).

It was evidently a breeding bird. Dr. Hartert (*Bull. B.O.C.*, XXV., p. 89) mentions having seen similar specimens in the breeding season on Herm and in Marocco.

F. C. R. JOURDAIN.

MIGRATION OF COMMON SCOTERS AND OTHER DUCKS.

IN connection with the appearance of Common Scoters (*Edemia nigra*) in Hertfordshire, Buckinghamshire, and Cheshire on April 10th, 1910 (Vol. III., pp. 414, 415) I may note that on April 13th I witnessed an enormous migratory movement of this species off Dungeness Point, Kent. As soon as it was daylight flock after flock of these birds passed the point coming from the west and flying east. This migration lasted for at least two and a half hours, the flocks passing almost without intermission the whole time, and had for the most part finished by 8.30 a.m. So numerous were the birds at the height of the migration that I counted thirty-two flocks (from ten to sixty birds in a flock), passing the point in twenty minutes. Besides Common Scoters I saw five flocks of Brent Geese (*Bernicla brenta*), five single Divers and several small parties of Terns (*Sterna fluviatilis* or *S. macrura*), all steadily going eastwards. It would be interesting to know whether these birds kept on eastwards or whether after passing the Foreland they turned north.

On April 2nd in two different places in Romney Marsh, Kent, there were masses of Mallard (*Anas boscas*), Wigeon (*Mareca penelope*) and Teal (*Nettion crecca*), and in one place some Tufted Duck (*Fuligula cristata*), Pochard (*F. ferina*), Pintail (*Dafla acuta*) and many Shovelers (*Spatula clypeata*); some had left in a day or two, and most had gone by the 16th. Garganey (*Querquedula circia*) had arrived by the 10th.

CLAUD B. TICEHURST.

BLACK TERNS IN OXFORDSHIRE.

It may be of interest to record that on May 15th, 1910, I watched two Black Terns (*Hydrochelidon nigra*) hawking over a stretch of the Isis between Oxford and Eynsham. A week later they were gone.

A. RITCHIE.

BLACK-THROATED DIVER IN CARNARVONSHIRE.

ON April 30th, 1910, I watched for upwards of an hour a Black-throated Diver (*Colymbus arcticus*) in Llandudno Bay, and the fact that it approached to within a distance of

eighty yards from the shore enabled me to watch its movements closely and take careful note of its plumage. It was, however, difficult to determine beyond a doubt whether or not the bird was still immature, for while the crown, the sides, and the back of the neck were distinctly grey, and the front of the neck down to the breast was black, the colour of the feathers on its back, tail, and wings was not indicative of an adult in full nuptial plumage. These parts of the body were dark brown, and were not nearly so conspicuously barred and speckled as are those of mature individuals; indeed, it was only when the bird half turned itself from me that I was able to see the faint indications of the white bars. The half collar of white streaks could be detected only when the bird was nearest to the shore. The Black-throated Diver is an addition to the avifauna of the county.

R. W. JONES.

BIRDS IN NORFOLK IN 1909.

In his "Ornithological Report for Norfolk" for 1909 (*Zool.*, 1910, pp. 121-136) Mr. J. H. Gurney gives, as usual, much interesting information.

Mr. Gurney reports that during the end of December, 1908, and January, 1909, Mr. F. Coburn received from King's Lynn fourteen examples of Brent Geese, which he identified as belonging to the American form *Bernicla brenta nigricans* (Lawrence). All the birds were reported as shot in the Wash—two on January 19th, 1909, and seven more on the 26th. Mr. Coburn now considers that at all ages and seasons, and in both sexes, the black or slaty-black under-parts are constant, and that after the first plumage there is always a larger amount of white on the neck; he adds, however, that females are of a paler slaty-black than males. There is no information as to whence Mr. Coburn's material came to enable him to arrive at this conclusion, which is, by the way, practically the same as that expressed by M. S. Alphéraky (*Geese of Eur. and Asia*, pp. 162-5). We should have liked more exact information as to how these birds differed from the typical *B. brenta* (*cf.* Vol. II., p. 27).

On January 29th, 1909, an Iceland Gull (*L. leucopterus*) was shot near Yarmouth.

On February 10th a Black-breasted Dipper, presumably *Cinclus cinclus* (*L.*), was shot at Coltishall; an interesting record which would be made far more valuable were the bird carefully compared and identified, so that we might know to what geographical race it belonged.

On April 18th the first Spoonbills (*Platalea leucorodia*), three in number, arrived at Breydon, and stayed until the 29th; while two more arrived on May 1st, and one appeared on June 29th and stayed until July 8th, and was again seen on July 22nd and 29th, and August 3rd and 8th. One was also seen at Cley on April 18th.

An Avocet (*Recurvirostra avocetta*) visited Breydon on July 15th, and was seen on the 18th and 29th, and again on August 3rd; while three were present for two hours on August 8th, and then went probably to Blakeney, where three were seen on the same day (*cf. t.c.*, p. 196).

On August 3rd Mr. Bird put up near one of the Broads a young Marsh-Harrier (*Circus æruginosus*), which he believed was bred locally.

On August 19th a Golden Oriole (*Oriolus galbula*) was shot at Cley.

On December 1st a Wheatear (*Saxicola ænanthe*) was seen at Eccles-on-the-Sea, while another was seen at Twyford on January 3rd, 1910.

A Flamingo (*Phœnicopterus roseus*) was seen on the Wash in June, 1909, but this and two Snow-Geese (*Chen hyperboreus*), which arrived at Holkham with the Pink-footed Geese at the end of October, may have been "escapes."

Mr. Gurney gives some interesting details regarding a Cuckoo (*Cuculus canorus*), showing that the parent Cuckoo made a search in an ivy-covered wall several days before it deposited its egg in a Wagtail's nest which was hidden in the ivy; that two of the Wagtail's eggs were eventually removed, though how is unknown; that the Cuckoo's egg took fourteen days to hatch; and that one young Wagtail was ejected when the young Cuckoo was twenty-four hours old, another three hours later, and the third and last an hour and a half afterwards.

H. F. W.

AMERICAN BIRDS LIBERATED ON THE SCILLY ISLANDS.

In April the New York Zoological Society forwarded to us per the s.s. "Minnehaha" the following American birds:—Three Guiana Parrotlets (*Psittacula guianensis*); four Northern Ground Doves (*Columbigallina passerina terrestris*); six Inca Doves (*Scardafella inca*); six Columba Crested Quail (*Eupsychortyx leucopogon*); four Sonoran Red-wings (*Agelæus phœniceus sonoriensis*); six Purple Grackles (*Quiscalus quiscalus*); six Bronze Grackles (*Q. q. aeneus*).

The "Minnehaha" was wrecked on the Scilly Isles, and I now learn that all of the birds were liberated, so if any report

of their being shot should come to hand ornithologists will know their origin.

D. SETH-SMITH.

Zoological Society's Gardens,
Regent's Park.

INCUBATION AND FLEDGING PERIODS IN BIRDS.—Mr. S. E. Brock contributes an interesting note on this subject to the *Zoologist* (1910, p. 117), in which he states that the *Mistle-Thrush*, *Song-Thrush*, *Blackbird*, *Sedge-Warbler*, *Pied Wagtail*, *Spotted Flycatcher*, *Greenfinch*, and *Yellow Bunting* have an incubation-period of 13–14 days, and that the young leave the nest from 13–14 days after hatching; the *Whitethroat* has an incubation-period of 11–12 and a fledging-period of 11 days; the *Willow-Wren* an incubation-period of 12–13, and a fledging one of 13–14 days; the *Hedge-Sparrow* an incubation and fledging-period of equal lengths, viz., 12–13 days; the *Dipper* an incubation-period of 15–17 days; the *Swallow* one of 15–16 days, and a fledging-period of so many as 21–22 days; the *Starling* takes only 12–13 days to incubate, but the young take 21–22 days to fly; the *Magpie* and *Rook* have incubation-periods of 17–18 days, and fly in 29–30 days; while the *Carrion-Crow* takes 18–19 days to incubate, and 33–34 days to fly; the *Long-eared Owl* takes 28–30 days to incubate, the *Sparrow-Hawk* 30–32, and 28–30 to fly; while the *Moorhen* takes 19–20 days to incubate. Mr. Brock also makes some interesting remarks on the regularity, irregularity, times, and intervals, of laying of different birds. Comparing these incubation-periods with those given by Mr. W. Evans (*Ibis*, 1891, pp. 52–93, 1892, pp. 55–58), we find fair agreement, except that Mr. Evans makes the *Willow-Wren* 13–16 days, and the *Yellow Bunting* 12–13 days. As regards the *Sparrow-Hawk* Mr. Evans has no observation of his own, and those he quotes seem not very reliable. Dr. J. H. Salter made the incubation-period as much as 37–38 days by observation of a nest in Wales (*Zool.*, 1894, p. 341); while Mr. J. Steele Elliott estimates the period during which the young stay in the nest as about 27–28 days (*t.c.*, 1909, p. 466). Jourdain's notes show that the incubation-period is not less than four weeks and possibly more, while Howard Saunders gives five weeks (*Man.*, *Errata*, p. 756).

REMAINS OF BIRDS IN AN IRISH CAVE.—In a paper on "Cave Hunting," Mr. R. J. Ussher mentions (*Irish Nat.*, 1910, p. 41) that among the remains found in the second or lower bed in some caves in co. Clare which he has been

exploring in company with Dr. Scharff and Mr. Coffey, were found some bones of the *Crane* (said to have been common in Ireland in the twelfth century), two bones of the *Great Spotted Woodpecker*, and a "large" mandible of a *Hawfinch*. "These," says Mr. Ussher, "seem to have been members of the ancient fauna, though now rare and accidental stragglers." Reports on these caves appear in the *Transactions of the Royal Irish Academy*, Vol. XXXIII., B., pt. 1, 1906.

ALBINISTIC VARIETIES.—Colonel E. S. Mason sends a photograph of a pure white Crossbill (*Loxia curvirostra*) which was shot in January, 1906, near Newcastle-on-Tyne, and is now in his collection. Mr. W. C. Wright sends a photograph of a female Water-Rail (*Rallus aquaticus*) which is nearly white, but is mottled on the under-parts. The legs and feet were of a "lightish pink" and the bird was shot on December 15th, 1908, in co. Down, Ireland. Mr. A. W. Thornthwaite writes that he saw on March 20th, 1900, near Godstone, a Redwing (*Turdus iliacus*) with the tail and rump almost entirely white and with a band of white on the mantle just below the nape.

CHIFFCHAFF IN SUSSEX IN WINTER.—Mr. R. Morris reports (*Zool.*, 1910, p. 158) that he saw a Chiffchaff at Buxted on January 13th, 1910. Chiffchaffs have frequently been observed in the winter in England, but it should be noted that a specimen sent to Mr. Eagle Clarke from Orkney, where it appeared to be wintering with another example, on February 5th, 1908, proved to be the Siberian Chiffchaff (*P. tristis*) (cf. Vol. I., p. 382), and it is possible that the Chiffchaffs which occasionally winter with us are of this species, and not *P. rufus*. It would be interesting to secure such birds in order to make sure of their identity.

WHITE WAGTAIL NESTING ON FAIR ISLE.—Mr. Eagle Clarke records (*Ann. Scot. Nat. Hist.*, 1910, p. 67) that a pair of *Motacilla alba* reared a brood during the summer of 1909 on Fair Isle. This is believed to be the first record of the bird nesting in Scotland.

STARLINGS EATING WHEAT.—Dr. J. E. H. Kelso brings forward evidence (*Zool.*, 1910, pp. 144-149) to show that *Sturnus vulgaris* eats wheat from the time it is sown until the blade is sprouting from the ground. Dr. Kelso considers that this habit has been acquired during the last twelve years or so, but he concludes that the bird does more good than harm taking the whole year round, and it is from this standpoint that we require much more exact information before the Starling or, indeed, any other bird can be condemned as noxious.

CEREMONIAL GATHERINGS OF THE MAGPIE.—With reference to Mr. F. J. Stubbs' note on this subject (Vol. III., p. 334), Mr. F. B. Kirkman writes us that similar gatherings have been noted in the case of Jays, notably by Mr. W. H. Hudson in *Birds and Man* (p. 232), while further accounts of the gatherings, both of Magpies and Jays, have been recorded by M. Xavier Raspail in the *Bulletin de la Société Zoologique de France* (XXVI., p. 104).

GREENLAND FALCONS IN IRELAND AND SCOTLAND.—Mr. D. C. Campbell records (*Irish Nat.*, 1910, p. 103) the following examples of *Falco candicans*, which seem additional to those already mentioned (Vol. III., pp. 307 and 329), as having occurred in Ireland during the past winter :—November 20th, 1909, female at Burton Port and another near Killybegs ; December 30th, a male at Dunfanaghy ; in the middle of December, a female at Glenties ; in the first week in January, 1910, one seen at Inch, Lough Swilly, and about the same time a male near Derry. In the *Field* (14, v., 1910, p. 860), Mr. J. J. Neale notes that one alighted on a steam-trawler on November 27th, 1909, in the Atlantic, a good many miles south of Ireland, and about the same time another alighted on a steam-trawler off the south-west of Ireland. Both birds were very tired and allowed themselves to be captured. Messrs. Harvie-Brown and Eagle Clarke record (*Ann. Scot. Nat. Hist.*, 1910, p. 119) the following nine occurrences in Scotland :—December 15th, 1909, one shot, and December 25th one seen at Barra ; one seen late in December near Inverbroom ; one seen in December at the Flannan Isles ; an adult female seen on January 4th, 1910, near Pitlochry ; an adult male seen on January 23rd near Blairgowrie ; one seen on January 25th at the Flannan Isles ; one said to have been shot early in the year on Schiehallion ; another seen during most of January in South Uist.

SCOTTISH HERONRIES.—Mr. H. Boyd Watt gives (*Ann. Scot. Nat. Hist.*, 1910, pp. 68–70) additions and corrections to his list of heronries noted in Vol. II., p. 244.

SCOTTISH RECORDS OF THE AMERICAN BITTERN.—Mr. Hugh S. Gladstone gives (*Ann. Scot. Nat. Hist.*, 1910, pp. 70–74) a very useful detailed summary of the seven occurrences of *Botaurus lentiginosus* recorded for Scotland. Full details are given regarding an example recorded as killed on Dinwiddie Moors near Jardine Hall, Dumfriesshire, in the middle of October, 1844, and this record seems to have escaped the attention of the authors of our standard works.

GEESE IN FAIR ISLE.—Mr. Eagle Clarke records (*Ann. Scot. Nat. Hist.*, 1910, p. 67) that a number of Pink-footed Geese (*A. brachyrhynchus*) appeared on Fair Isle during the wild weather from October 7th to 18th, 1909. The bird appears to be an addition to the avifauna of Shetland. During the first three months of 1909 several single Barnacles (*B. leucopsis*) were seen at intervals, and in October an injured *B. brenta* was captured.

MOULT OF THE GREAT BUSTARD AND NOTES ON OTHER BIRDS IN CAPTIVITY.—In his Presidential Address to the Yorkshire Naturalists' Union (December 11th, 1909), Mr. W. H. St. Quintin states (*Nat.*, 1910, p. 112), that the Great Bustards (*Otis tarda*) which he has in captivity moult their wing-feathers gradually with the rest of their plumage during the late summer and autumn, and that they do not shed their primaries all together, as has been stated by various writers. Mr. Abel Chapman, whose experience of wild Great Bustards in Spain has been very extensive, states positively that they cast "all quill-feathers (as wild geese do) almost simultaneously. Hence, at the end of May, they become for a time incapable of flight" (*Wild Spain*, p. 342). Mr. St. Quintin gives some interesting information (*t.c.*, pp. 204-9) with regard to the nesting in his aviaries of the Waxwing (*Ampelis garrulus*), Snowy Owl (*Nyctea scandiaca*), and Raven (*Corvus corax*); a male Snowy Owl, which since its fourth year had been white, except for a few black spots on the tertials, had when about fifteen years old grown many spotted feathers on the wing-coverts.

GREY PHALAROPES IN FAIR ISLE IN WINTER.—Two Grey Phalaropes (*Phalaropus fulicarius*) are recorded by Mr. Eagle Clarke (*Ann. Scot. Nat. Hist.*, 1910, p. 67) as appearing on Fair Isle singly, during the *earliest days* of 1909.

BREEDING HABITS OF COMMON TERNS AND BLACK-HEADED GULLS.—In the *Zoologist* (1910, pp. 137-143) Mr. T. Hepburn has some notes on a colony of Common Terns (*Sterna fluviatilis*) and Black-headed Gulls (*Larus ridibundus*) in Colchester Harbour. No exact observations on the period of incubation could be made, but Mr. Hepburn infers that close-sitting lasts twenty to twenty-one days after the full clutch has been laid. Out of fifty-one nests of Common Tern thirty-six contained three eggs and fifteen two only; while twenty-five nests of Black-headed Gull had three eggs and nine two only.



West & Son, Phot.]

[B.B., Vol. iv., Pl. 1.

Boyd Alexander

Born January 16th, 1873.

Died April 2nd, 1910.

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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BOYD ALEXANDER.

[PLATE 1.]

ALL ornithologists will have received with unfeigned regret the news of the tragic death in the heart of Africa of Lieutenant Boyd Alexander. He was on a journey which, had it been accomplished, would have made him still more famous as one of the most intrepid and successful of explorers. Few details are to hand, but he appears to have been murdered on April 2nd, 1910, by hostile natives while endeavouring to pass through their territory to the north-west of Abeshr in the Wadai.

Boyd Alexander was without doubt a born naturalist, and had he not found a wider scope for his talents he would soon have made a name for himself amongst those who study specially the birds of this country. What British ornithology has lost, the science at large has gained, and although students of British birds must in a way regret that one with such natural gifts of observation and such a talent for committing these observations in an accurate and interesting manner to paper, should have so early abandoned this branch of study, it must ever be a source of satisfaction that the early training in the field of British ornithology should have led to those really remarkable results which Boyd Alexander achieved in the wider field of work to which he was called.

At an early age Boyd Alexander commenced to study and collect the birds in his own neighbourhood of Cranbrook. Indeed, at the age of ten, he was consistently keeping a naturalist's diary, and his boyhood friends recall the fact that when he was about eleven a bad attack of rheumatism, which stopped his playing cricket for a term, did not prevent his climbing trees, and the numbers of eggs and other natural history objects which he amassed during this term put his schoolboy rivals for ever behind in the race of collecting. He soon extended his researches to the neighbourhood of Romney Marsh, and quickly added to his collection of local rarities. It

is recollected of him that once when his host at a shoot had put him as "heading" gun he was heard to fire only one shot, and on the keeper going to find out the reason why, he was found coming back to his stand from another direction, very content at having bagged a small bird that he wanted. His first published note on British birds appeared in the *Zoologist* for 1896, where he recorded and described the first British example of Harcourt's Petrel (*Oceanodroma castro*), which was picked up near Littlestone on the Kent coast on December 5th, 1895, and found its way into his collection. During the spring and autumn of 1896 he passed a great deal of his time on this coast-line, studying the nesting-habits of the birds and their migrations. The results of these observations were published in three papers in the *Zoologist* of the same year under the titles "Ornithological Notes from Romney Marsh and its Neighbourhood" (p. 246). "Notes on Birds in Kent" (p. 344) and "Ornithological Notes from Rye" (p. 408). Many of the notes are in diary form, made day by day while in camp in the marshes and are specially valuable as records of the movements that take place along that much-favoured coast-line. In February of the following year Boyd Alexander left on his first expedition to the Cape Verde Islands, and from that date his time was so fully occupied with his travels abroad and when at home in working out the results, that he had little leisure in which to pursue his earlier studies, but as opportunity occurred he never failed to add to his collection of local birds, and his interest in them was in nowise lessened by his pursuit of greater things. It was in the intervals between his earlier journeys that he found time to compile his chief contribution to the ornithology of his county, namely, the section on "Birds" in the *Victoria History of Kent*. Although necessarily limited by exigencies of space, this contribution reaches a higher standard than most similar articles, and is specially valuable to the county-historian in that it not only takes cognisance of the work of previous authors, but is full of the writer's own

field-notes and observations. Brief reference only need be made here to the work of the last fourteen years, for although of great interest and importance, it has no direct reference to British ornithology and will be dealt with in another and more suitable place by one more fitted for the task than the present writer.

Although only thirty-seven years of age at the time of his death, Boyd Alexander had already made for himself an honourable name amongst the intrepid band of British explorers who have done so much to throw light upon the hidden mysteries of the dark continent. In the course of all his travels his favourite pursuit of ornithology always held a prominent place, and indeed his first expedition to the Cape Verdes in 1897 was undertaken solely from motives of ornithological exploration and may be said to have served as an introduction to the more ambitious researches and travels in the Islands of the Gulf of Guinea and the continent of Africa, which have added so much to geographical and ornithological science and shed such lustre on the name of their author.

Accounts of his various expeditions with special reference to their ornithological aspects were published by him in the *Ibis* as follows:—“On an Ornithological expedition to the Cape Verde Islands” (*Ibis*, 1898, pp. 74, 277); “On an Ornithological Expedition to the Zambesi River” (*op. cit.*, 1899, p. 549; 1900, pp. 70, 424); “On the Birds of the Gold Coast and its Hinterland” (*op. cit.*, 1902, pp. 278, 355); “On the Birds of Fernando Po” (*op. cit.*, 1903, p. 330). The two papers on the birds obtained during his great journey from the Niger to the Nile, which were foreshadowed in the *Ibis* for 1908, p. 203, have not yet been published, although the new species discovered on this journey have been described in the *Bulletin of the British Ornithologists' Club*.

To those who knew him, Boyd Alexander was a charming personality and a well-loved friend. Amongst ornithologists and explorers he was in the front rank. His loss will indeed be hard to bear.

N. F. T.

ON THE NESTING OF THE MARSH-WARBLER IN CAMBRIDGESHIRE.

BY

WILLIAM FARREN.

ONE of the early records of the nesting of the Marsh-Warbler (*Acrocephalus palustris*) in this country may be found in Howard Saunders' *Manual*, and reads as follows:—"The late Mr. F. Bond had a genuine nest and eggs of this species, which he took some years ago in Cambridgeshire, but the pair of birds which he obtained at the same time and place are simply Reed-Warblers." I cannot say that I have devoted much time to serious search for the Marsh-Warbler, yet in consequence of the above record I have always hoped to find the species nesting in Cambridgeshire.

On June 14th, 1909, an undergraduate of Trinity College brought me news of his having that day found a nest of the Marsh-Warbler in a rough willow-copse near the river. It contained four typical eggs and one of a Cuckoo, which latter he had taken. He was well acquainted with the species, having found it nesting near Windsor. Unfortunately he was leaving Cambridge the next day, and so could not take me to the locality. However, he furnished me with ample direction as to the whereabouts of the willow-copse, which I found with but little trouble, but his directions as to the nest were less adequate, or I blundered, for in spite of a most thorough search I failed to discover it. Of the birds there was no doubt, and in spite of my terribly bad ear for distinguishing closely allied bird-notes, I was at once able to pick out the song of the male from the chattering chorus of Reed- and Sedge-Warblers. I will at once confess to an honest doubt whether I should have done so without the knowledge that the Marsh-Warbler was there! Both male and female kept near to the spot

where by the directions given me I felt sure the nest should be. All I could find was the scanty foundation of a nest woven on to a mixture of comfrey and meadow-sweet,



FIG. 1. NEST AND EGGS OF MARSH-WARBLER.

(Photographed by W. Farren.)

so unlike the method of the Reed-Warbler or any other bird I could call to mind but the Marsh-Warbler, that I should have concluded at once that this was the cause of the birds' presence but for the knowledge that three

days before there was a nest with four eggs certainly not many yards away. A week later—on June 23rd—I again visited the copse to investigate this new nest.



FIG. 2. NEST OF MARSH-WARBLER, SHOWING METHOD OF ATTACHMENT TO HERBAGE.

(Photographed by W. Farren.)

From a distance of several yards I could see that it was completed. I tried not to feel too sure as I drew near and looked into the nest, and all who recall the first impression of an

interesting species will realize my joy at seeing it contained three eggs, unmistakably those of the Marsh-Warbler.

The birds came very near and I imagined I could see all sorts of differences distinguishing them from the Reed-Warbler, not differences of colour and markings, but of carriage and movement and temperament. They did not hold themselves so smartly, and they were less sharp and fussy in their expressions of impatience at my presence than are Reed-Warblers under similar conditions. Those who know the Marsh-Warbler well, and who read these notes, will be able to judge how much of this was due to my imagination. Three days afterwards, when the nest contained five eggs, I took several photographs of it, not only from above showing the eggs (Fig. 1), but also from the side to show the method of attachment to the herbage (Fig. 2). This last shows also the extremely fragile structure of the nest, as one egg is clearly visible through the nest-wall. From the behaviour of the female and from my experience with Sedge- and Reed-Warblers, I have no doubt that it would not have been a difficult matter to photograph the bird, but I preferred to wait until the young were hatched, when there would be less danger of causing the birds to desert, and the interest in the photographs would be enhanced. Although it happened that I was a loser by then abstaining from an attempt to photograph the birds, I am quite satisfied that from every point but that of getting a photograph at all hazards, it was the proper course to take. When I next visited the locality, on July 8th, having allowed time for the young to hatch, it was to find the nest empty and dishevelled. The birds were still there, and the fact that the female had lost most of her tail-feathers, coupled with the disarrangement of the nest, pointed to a rat or other natural enemy as the marauder.

As the birds still exhibited interest in this part of the copse, I searched the herbage and found another nest, built but not lined. It was clearly the nest of the same pair of birds. Heavy and continuous rain fell on the

three or four following days, and at the end of a week I again visited the copse, hoping to see these unfortunate Marsh-Warblers settled in their new home. The nest was so changed in appearance that at first I hardly recognised it; it was still empty and unlined, but was, or appeared to be, considerably larger. A closer investiga-



FIG. 3. DOUBLE NEST OF MARSH-WARBLER.

(*Photographed by W. Farren.*)

tion showed that the birds had built a second complete nest on top of the original one (Fig. 3). My explanation is that they were stopped in their building by the rainy days, and afterwards, instead of lining the original nest, had continued to build. Not to prolong the story of these truly unfortunate birds—whose misfortunes I felt that

I had shared—nothing further to my knowledge resulted ; no eggs were laid in the double nest and I saw but little more of the Marsh-Warblers.

Searching in the rough tangle of herbage near the double nest, I found a nest (Fig. 4) with young birds, which at



FIG. 4. NEST OF SEDGE-WARBLER SUSPENDED IN
LONG GRASS.

(Photographed by W. Farren.)

first puzzled me not a little ; it was suspended about three feet from the ground on the stems of a tall reed-like grass (*Phalera arundinacea*). It was wrong in shape and too solidly built for the Reed- or Marsh-Warbler, and some moss woven in the lower part of the nest, and

the scolding of a pair of Sedge-Warblers suggested that it belonged to that species. But it was so far from the ground and so clearly suspended that I could not feel satisfied until I had concealed myself in a bush, and seen the Sedge-Warbler come and feed the young. A week or so later, when these young birds had flown, and all hopes were at an end that the Marsh-Warbler would lay in the double nest, I took photographs of both nests and also brought them away.

So far as I could determine there were no more than the one pair of Marsh-Warblers in this copse, and I do not think any young were brought off, unless while I was keeping the double nest under observation they were keeping house in another nest.

I have, perhaps, given this account at greater length than its importance deserves, but my very natural desire to obtain photographs of the Marsh-Warbler led to my spending a considerable time in the willow-copse, and incidentally learning much that was new to me of the nesting-habits of all three species of *Acrocephalus*, e.g., the suspended nest of *A. phragmitis*, and a small colony of *A. streperus* nesting a hundred yards from the river in the branches of small pollarded willows and in ten feet high osiers.

So far as *A. palustris* is concerned, the interesting points are :—The locality is in the district where Bond lived and, no doubt, found the nest recorded in Howard Saunders' *Manual*; the first nest, found in June, 1909, contained a Cuckoo's egg; a second nest was begun four days later and an egg laid in it a week after; and the curious fact of the double nest. The fate of the first nest, from which the Cuckoo's egg was taken, and why the birds left it remain a mystery. Their building another nest so soon after and so near the same spot is, according to other observers, a normal habit, as I have seen it stated, and quote from memory, "If a nest is robbed or destroyed the birds at once build again close to the same spot."

NOTES

NOTES ON THE BREEDING OF THE BLACKBIRD.

ON March 26th, 1910, I found a pair of Blackbirds (*Turdus merula*) building in a pile of sticks in a position which enabled one to approach within a few feet without being seen by the birds. Building proceeded in a leisurely manner, and it was



MALE BLACKBIRD REMOVING *feces* OF YOUNG.

(Photographed by C. K. Siddall.)

not till March 31st that the nest was completed. Both birds took part in building. On April 1st the first egg was laid and on April 5th the female commenced to sit on a clutch of four eggs. During incubation I did not see the cock sitting, nor did I see him carrying food to the hen. On April 17th four young were hatched out. When the young birds were two days old I found the male bird covering them. On April 20th I examined the nestlings and found down on the skull, on the dorsal tract and pen feathers showing on the wings. I was

interested on April 22nd to see the female bring a "snake millipede" to the nest and feed the young with it. As far as I could judge, however, fully 50 per cent. of the food taken to the young consisted of earthworms.

I noted the male and female eating the *feces* of the young, at almost every visit to the nest, and the accompanying photograph shows the cock in the act of lifting the *feces* in his bill.

C. KINGSLEY SIDDALL.

INCREASE OF LESSER WHITETHROATS IN CREUDDYN, NORTH WALES.

INASMUCH as there are no recorded instances of the Lesser Whitethroat (*Sylvia curruca*) having been seen or heard on the Great Orme's Head, I think it is worth recording that on May 13th and 16th, 1910, I saw and heard an individual of this species in some tall hawthorn bushes bordering on a kitchen-garden in the small and narrow valley at the eastern corner of the headland. Apparently the bird did not secure a mate and settle down to nest there, as it was neither seen nor heard afterwards. In the Hundred of Creuddyn (of which the Great Orme forms a part) the bird has always been considered local and uncommon, keeping mainly to the neighbourhood of the mouth of the River Conway, and one rarely sees or hears more than two in a long walk, but on May 16th, 1910, Mr. T. A. Coward and I counted five individuals in a walk in and close to that southernmost part of the Hundred—an unusual number, which gives colour to the presumption that the species is increasing gradually around the mouth of the river, for on the Conway side there are and have been of late perceptible signs of an augmentation in their numbers.

R. W. JONES.

TWO LESSER WHITETHROATS LAYING IN THE SAME NEST.

ON May 22nd, 1910, I discovered on Hayling Island, Hampshire, in some bramble bushes, a nest of the Lesser Whitethroat (*Sylvia curruca*), containing two eggs. On again visiting the nest on May 27th a clutch of ten eggs was discovered. The short time (five days) in which these eggs were laid points to the fact that the clutch was the produce of two hens—all the eggs were fresh.

C. E. CORTIS STANFORD.

UNUSUAL NESTING-SITES FOR GOLDCREST.

THE nest shown in the accompanying photograph was found in a wood by Bomere Pool, Shrewsbury, on April 17th. At first sight I supposed it to be a Chaffinch's, though there were

no bits of lichen outside, but on closer inspection and examination of the eggs it proved to be a Goldcrest's (*Regulus cristatus*). There were two eggs on the 17th, but the bird laid another each day up to the 21st, when I photographed the nest. Some explanation of the position is requisite. The straight piece of timber crossing the picture obliquely is the upper



NEST OF GOLDEN-CRESTED WREN IN HONEYSUCKLE.

(Photographed by H. E. Forrest.)

part of a dead larch tree that has cracked across the middle and turned over with its point resting on the ground. The whole is swathed in a mass of old honeysuckle-stems, and it is to these that the nest is fastened in such a position that the larch-pole forms a sloping roof over it. There are scarcely any leaves to conceal the nest, and it is only about five feet

from the ground, so that it is most conspicuous. What induced the Goldcrest to build in such an unusual position I cannot imagine, for there are plenty of larch, spruce, yew and other suitable trees in the same wood.

H. E. FORREST.

A PAIR of Goldcrests (*Regulus cristatus*) have this year built their nest amongst the matted stems of a rambler-rose trained against an upright post in a flower-bed in the garden at Huntbourne, High Halden, Kent. The nest is about four feet and a half from the ground and well hidden by the foliage of the bush. On June 12th the young were a few days old. The birds first of all built in a juniper in the same garden, but owing to too frequent inspection abandoned this site before laying, and although there are several similar, and one would think more suitable, nesting-sites, they have preferred the present anomalous one.

N. F. TICEHURST.

LATE STAY OF BRAMBLING.

WITH reference to the notes on this subject published in the June issue (page 20), it may be worth while to record that on April 17th, 1910, I observed a party of eight Bramblings at Titsey, in Surrey. Beech-nuts were unusually plentiful in that locality last winter, and were still to be found in considerable numbers at the time I noticed the Bramblings, and this possibly may have had some relation to the delayed departure of the birds.

HOWARD BENTHAM.

WITH reference to Mr. Medlicott's note (*supra*, p. 20), I may say that on April 9th, 1909, I saw a few Bramblings in a wood near Aldeburgh, Suffolk. Their numbers were increased during the next few days, and on April 15th there were twenty or thirty in a flock. The next day they had disappeared. I noticed that they had not yet acquired the blue bill of the summer-plumage.

J. K. STANFORD.

CROSSBILLS NESTING IN ENGLAND.

IN SUSSEX.

I HAVE noticed that Crossbills are to be found in flocks at all seasons, even during the nesting-time—a fact equally noticeable amongst Twites and Red Linnets, which seem to resort together at the feeding hours, even though they may separate at other periods of the day to attend to their domestic duties.

The Crossbills near my house at Horsham, Sussex, seem to have regular fighting times along particular lines of trees.

Throughout April and May I have seen flocks passing always over the same ground covered with old Scotch firs, the direction being north and south. Early in May I saw numerous single birds travelling the line and assumed that they were males whose wives were engaged with family duties.

As an example of the gregarious nature of Crossbills I may mention that a friend who had come from a distance especially to see the birds was at first disappointed though we searched all day to find them. Late in the evening we took our stand close to the fighting-line and presently heard a male burst into song on an oak tree only ten yards distant. We watched and listened to him for some time, when he suddenly ceased his lilting music and began to call loudly in the usual clinking fashion. Some three other Crossbills passed over at a considerable height and one, a female, made a swooping descent and lighted in the oak tree close to the vocalist, the others passing on. The male then commenced to "show." Flying in circles and hopping actively from branch to branch with lowered wings, he sang loudly in a voice both high-pitched and apparently full of excitement. At each circle through the branches he approached closer and closer to the female, which sat in a crouching position waiting for the male and uttering a low peevish note, her attitude being similar to the female Greenfinch when the pair are engaged in making love. During these amorous advances another flock of Crossbills (eight in number) circled round and alighted on a tall Scotch fir, where, after a stay of a few minutes, the whole party left together, rising high in the air.

I have not found a single nest, although I have seen a bird with building materials in its mouth ; an attempt to follow it resulted in failure.

Early in May a local naturalist offered to show me a nest full of young Crossbills which he desired to sell. I have no doubt he had found the nest but I did not take advantage of his offer. On May 18th I followed a female Crossbill with four young ones which I observed for some time at a short distance, and have no doubt that several pairs have bred in this neighbourhood.

J. G. MILLAIS.

SOME of the Crossbills nesting in Sussex this year have proved to be *genuinely* double-brooded, while I have some grounds for believing that some pairs are now rearing their *third* family. All the books tell you that the species is single-brooded. Yet, even in the bird's *normal* nesting-haunts in Scotland and Ireland, I believe that this would be found not

to be the case ; and it affords a good instance of one of many such blunders to be met with in ornithological works.

On May 3rd, while working much the same ground as on April 9th (*cf.* Vol. III., p. 406) I found not sixty yards removed from the tree where she had four young practically fledged on April 15th, a female Crossbill sitting on four eggs. This was in a road-side clump of Scotch firs ; her first attempt was in a hedgerow tree. This nest was about fifteen feet from the ground, and was difficult to reach, being, as it was, near the extremity of a projecting and somewhat dependent bough ; it was poorly and loosely composed, first of a few conifer-twigs, then of moss and coarse and fine dried grass, lined with fine shredded grass, with a small feather or so round the rim. The eggs—as I had remarked with the clutch of five found chipping on April 15th, and have noticed with another set of five found since—although not unlike Greenfinch's in coloration, were decidedly larger and bulkier than that species, as indeed one would expect to be the case ; moreover, the grain of the shell is much coarser with the Crossbill. The spots in this particular set were, in the main, evenly, albeit sparingly, distributed over the entire shell-surface ; and some of the markings were very dark. The male sang once or twice in the vicinity of the nest, but he did not appear as I was examining it.

On this day I saw flocks of Crossbills no longer ; merely small parties of adults—from three to ten—and one or two lots of fledged young ; I also found a nest of young just ready to fly. This was in a fresh locality.

On May 4th, visiting an area where I had found two lots of young on April 15th, I met with both pairs of adults, one with their progeny in an orchard, though the cock seemed to do most of the “mothering.” These young were ridiculously tame ; indeed, although they could fly strongly, I all but succeeded in catching one as it sat in an apple tree. One of the adult pairs (whose young I could see no traces of in or out of the nest) were very amorous, yet I could find no fresh nest.

On May 11th, in much the same locality, I met with but one lot of three adults ; otherwise pairs or single birds, and beyond a nest—hitherto unfound—from which young had obviously flown, I found nothing fresh. This nest was largely felted with dried grass and many white feathers.

On the 18th I saw but one pair of Crossbills, and an empty nest in a typical position, which might have belonged to them. But on the 25th I discovered a Crossbill's nest containing two eggs (this afterwards held five), which belonged, I believe,

to a pair which had young fledged between April 22nd to 25th, though I should imagine that they had had an intermediate attempt destroyed, as the interval was curious. And the same day I found another nest—clearly the work of a pair which had young on April 15th, seeing that it was not twenty yards distant from the old structure. This held four young, not more than three days old.

I now believe that the nests found with young during April were *genuine second broods*, not only because the Crossbill is well-known to breed in February and March—even far up north—but also because a close search revealed, in three cases, obvious Crossbills' nests from which young had just as obviously flown; and these were close to the tenanted April nests. A friend of mine, to whom I gave some young Crossbills, has kindly kept the record of when their beaks crossed. These birds were approximately fledged on April 15th, *i.e.*, thirteen or fourteen days old. Granting this, another fifteen days elapsed (it was April 30th) before the bills began to turn, and the cross was complete by May 7th. In three of them the upper mandible crosses to the right; in the fourth to the left. One of them—a male, of course—has already begun to sing (latter half of May).

JOHN WALPOLE-BOND.

[We do not know to what authors Mr. Walpole-Bond alludes in his statement that "all the books tell you that this species is single-brooded." Newton in *Yarrell* (Ed. IV., Vol. II., p. 197) says: "Second broods are apparently not uncommonly produced, or, if not, certain individuals must delay their breeding-season for some months." Jourdain (*Eggs of European Birds*, p. 76) writing of the Scotch form says, "A second brood is sometimes reared in June," and of English birds adds, "Second broods have been recorded from various parts of England in June and July." Dresser (*Eggs of Birds of Europe*, p. 358) says, "I am uncertain whether two broods are raised in the year, but it appears probable that this is the case." Seebohm (*Brit. Birds*, 1884, Vol. II., p. 32) thinks these late nests are not second broods but are the result of first nests having been destroyed.

Other authors we have consulted do not commit themselves to a definite statement. As is well-known, the Crossbill has been observed to breed in almost every month of the year, and this fact must be taken into consideration in any observation of apparent second broods. We do not consider Mr. Walpole-Bond's evidence is satisfactory. Even if new nests found near others from which young had been reared were regarded as sufficient evidence, the time which elapsed

between the fledging of the first brood and the building of the second nest seems to be in two cases at all events inadequate. In the first case it appears to have been less than a fortnight; in the second case (in which no details are given as to positions of the two nests) about four weeks, and in the third case about a fortnight. Either we must presume that the old birds continued to feed the young after the second nest was built, for which there is no evidence, or else that young Crossbills can look after themselves in a fortnight after fledging, which we believe to be hardly possible.—Eds.]

IN KENT.

Mr. W. Naunton Rushen records in the *Field* (May 28th, 1910, p. 949) that he had seen an adult pair of Crossbills on Hayes Common repeatedly since March 26th, 1910, but he could not discover that they were breeding. On May 20th, however, he watched for some hours an undoubted family-party of "about half-a-dozen" on Keston Common, quite close to Hayes Common.

IRRUPTION OF CROSSBILLS.

ON behalf of the Migration Committee of the British Ornithologists' Club I am sending the following additional notes on the irruption of the Crossbill into England. We have received a number of these notes, but the majority have already appeared in BRITISH BIRDS; my Committee consider it a pity that the records of the irruption should not be made as full as possible in BRITISH BIRDS by the inclusion of these, which might otherwise remain unpublished until our next report is ready, which cannot be for some months.

BERKSHIRE.—February 27th, 1910, eight seen among tall conifers at Bulmershe; not apparently paired, but occasionally uttering a love-note differing from the usual call (*H. M. Wallis*). At least twenty of both sexes seen during the week, April 3rd to 10th, near Ascot by *D. W. Collings*, who reports that they did not appear to be nesting.

HANTS.—A small flock seen at Buckholt, Dean, on July 14th, 1909, and another small flock in a wood containing a good many larch trees near the same place on November 9th (*R. G. Townsend*). Three seen by *H. L. Curtis* on April 5th, and a single bird on the 13th by *J. F. Butterworth*, near Bournemouth.

LEICESTER.—A small flock seen at Loughborough on April 3rd by *G. Frisby*.

NORTHAMPTONSHIRE.—A pair is reported from Kettering by *Mrs. C. E. Wright* on March 28th ; these were seen almost daily up to April 3rd, when four were seen. "Many" were also reported by her at Harlestone Firs, near Northampton, on April 2nd. All had disappeared before April 20th, except a single pair, and though no nest was located, a single male only was seen after this date (*cf.* Vol. III., p. 260).

SUFFOLK.—From the Ipswich district *Mr. H. H. A. Miller* reports as follows :—"A flock of forty to fifty, consisting of both sexes, on December 2nd, 1909, and eight on December 4th ; a few on March 29th, 1910." Between April 11th and 14th the numbers appear to have increased, and a nest was found on the 3rd and others in two different localities between the 11th and 14th. "Flocks" seen at Sutton on September 26th, 1909 (*G. D. Hope*). The birds referred to (Vol. III., p. 403) by *Miss J. M. Wilkinson* as being in the Brandon district appear from her reports to have decreased somewhat after April 10th, but were seen in numbers of from three or four up to a dozen as late as May 3rd. Four seen and others heard at Fritton on April 7th by *Major-General Upcher*.

SUSSEX.—During the last week of July, 1909, a flock of from twenty to thirty Crossbills appeared near Barcombe and attacked the spruce trees which were affected by some kind of disease ; they nipped off large quantities of the young shoots. October 1st, two parties of eight and five seen. October 23rd, five or six visited the garden for a few minutes ; they never stayed very long, and were very erratic in their movements and appearance (*Miss A. Shenstone*). August 25th, 1909, one seen at Eastbourne (*Miss F. Maude*).

WORCESTER.—*Mr. T. J. Beeston* records a pair in the Cookley district on March 30th. These were seen at intervals during April and on the 6th and 8th of May, when it was suspected that they were nesting, but the finding of a nest is not recorded. A pair is recorded at Earls Croome by *N. G. Hadden* as late as May 1st.

With regard to *Miss Shenstone's* note on the Crossbills attacking the spruce trees which were affected by some kind of disease, she kindly sent a specimen of one of the young shoots bitten off by the birds. It is apparent from this that

the Crossbills were feeding on the swollen stems of the shoots and the insect-contents of the breeding-cavities in them occupied by an aphid (*Chermes abietis*), numerous specimens of which have since hatched out from the sample sent. This habit of the Crossbills has recently been remarked upon and described by Herr R. H. Stamm in the *Dansk Ornithologisk Forening Tidsskrift* (An. IV., pt. II., pp. 45-49).

N. F. TICEHURST, Hon. Secretary.

[It was also noted in our last volume (Vol. III., p. 193), that Crossbills had been proved to be feeding upon *Chermes abietis*. Some specimens were sent to me at the time by Commander H. Lynes, and the gizzards of the birds were found to contain immature examples of this aphid. Commander Lynes also sent some of the galls which he had observed the Crossbills attacking.—H. F. W.]

KENT.—On April 29th a flock of fifteen or sixteen near Tenterden, newly arrived, had been there a day or two, no signs of nesting and no young seen. Passed on in a day or two. May 1st to 14th, none seen; but on the 15th some recently plucked cones found; on the 18th one female; on the 20th, one male; on the 30th, five or six—no young seen; on May 31st a flock of fifteen to twenty, some of them being fully-grown young which had the upper and lower beak just crossing at the tip. June 1st, still there; June 2nd to 7th, none seen; but on the 7th recently plucked cones found (*Claud B. Ticehurst*).

SURREY.—One on April 24th at Lingfield and one on May 22nd at Oxted (*H. Bentham*).

PEREGRINE FALCONS AT BEMPTON.

THE Peregrine Falcons have again nested at Bempton, on the ground climbed by John Hodgson, and near the place where they bred last year. When climbing commenced, on May 9th, 1910, three young ones were found in the eyrie; these are now strong on the wing, and to-day (June 15th) I disturbed one, on the grass at the cliff-top, feeding on a homing-Pigeon.

T. H. NELSON.

UNUSUAL NESTING-SITE FOR THE COMMON SNIPE.

AT Norton, Suffolk, on May 26th, 1910, some men hoeing wheat showed me a nest of the Common Snipe (*Gallinago caelestis*) in the middle of the field, in exactly the place where one might expect to see the nest of a Skylark or Corn-Bunting. The eggs seemed to be hard-set, and the bird probably resorted

to this unusual site on account of the many acres of low-lying meadows, in which several Snipes always breed, having been more or less under water from recent heavy rains.

JULIAN G. TUCK.

[Although it is very unusual to find Snipe breeding in such an open situation as a wheat-field, yet it is worth noting that other *Limicolæ*, whose usual breeding-places are equally different in character, will occasionally nest in such a site. Thus Mr. Oxley Grabham (*Field*, June 7th, 1902) has recorded the Ringed Plover (*Agialitis hiaticola*) as nesting in corn-fields; and on two occasions I have met with the Common Sandpiper (*Totanus hypoleucus*) breeding in wheat-fields, probably for the reason suggested by Mr. Tuck.—F. C. R. J.]

THE SUPPOSED EGGS OF THE WOOD-SANDPIPER TAKEN IN ELGINSHIRE IN 1853.

UNDER this title Mr. W. Evans publishes in *The Annals of Scottish Natural History* (1910, pp. 74-76) some interesting correspondence between the late Professor Newton and himself concerning the supposed eggs of the Wood-Sandpiper (*Totanus glareola*) taken in Elginshire on May 23rd, 1853. Professor Newton gives extracts from letters written to him by his brother Edward concerning these eggs, which he had seen, and whose history he had heard from Charles Thurnall, who found them. This correspondence shows that neither Newton nor his brother believed that the eggs were anything more than those of the Common Sandpiper, and that Thurnall never identified the bird properly. Bond, who had a wonderful knowledge of eggs, appeared to accept them as genuine, but with the evidence of Edward Newton, who interviewed Thurnall a few months after the taking of the eggs, now before us, we do not hesitate to say that the record is most unsatisfactory and should no longer be accepted. Mr. Evans' correspondence with Professor Newton on the subject took place in 1901, and although he had leave to publish the letters, he hoped that Newton himself would do so. (*cf.* also *Ann. S.N.H.*, 1899, p. 14; *Yarrell*, 4th ed., Vol. III., p. 465; *Saunders' Manual*, 2nd ed., p. 607).

H. F. W.

LITTLE TERNS NESTING AT TEES MOUTH, YORKS.

DURING the last twenty years certain parts of the Tees Mouth have slightly altered, partly through natural and partly through artificial causes. The shingle-beds have accreted considerably, and it is probably mainly due to this fact

that I am able to record the addition of the Little Tern (*Sterna minuta*) to the breeding-birds of Cleveland. Since 1900 the shore which now is the breeding-site has been quite suitable for the nesting of the Little Tern, but not until the present summer have eggs of the species been found. Formerly Little Terns annually visited the spot on migration, though no signs have been apparent until recently of their staying to nest. Last year a few birds were noted throughout the summer by the local fishermen, but no eggs were found. As these birds were often to be seen at the same time as three Sandwich Terns (the latter being well known not to be breeding), it was generally surmised that they were either late migrants or non-breeders. This year, after having under observation four pairs of Little Terns for several days, I discovered, on June 2nd, three nests—two containing two eggs and the other three, but, alas, as the birds had nested rather low on the shore, a high tide occurring on June 6th swept every egg away. Despite this, on June 9th, the birds were still frequenting the ground and seemed like making preparations for laying again. It is hoped they will, if a second attempt is made, rear young. The situation lends every natural protection, the breeding-ground being very extensive for the size of the colony. So far as I can learn, Little Terns have not previously nested at the Tees Mouth within the memory of living man.

In the *Birds of Yorkshire* it is stated that the only Yorkshire colony of Terns is at Spurn, and that J. Hogg in the *Zoologist* (1845, p. 1187) refers to the Lesser Tern inhabiting in summer the sandy beach near the Tees Mouth, but no note of nesting is mentioned.

STANLEY DUNCAN.

LITTLE GULL IN KENT.

ON May 16th, 1910, when Mr. A. W. Seaby and I were on the shore between Littlestone and Dungeness we saw a Little Gull (*Larus minutus*) sitting by some Common Terns. As we had neither of us seen this species before, it may be well for me to describe it. Its head was mainly slaty-black, but the forehead was quite white and the parts about the eye grey; the mantle was very pale, almost white, with some dark flecks; the primaries were mostly black. In flight it showed a black patch on the front edge of the wing; its tail-feathers were tipped with black, except the two middle ones, which were white throughout; the tail was distinctly graduated. Its feet were bright red and its beak was dark, either dark red or dark brown.

When first roused it settled on the sea, but when we put it up a second time it flew away along the shore northwards and was soon lost to sight in the fog blowing off the sea.

C. J. ALEXANDER.

[In his *History of the Birds of Kent* (p. 510) N. F. Ticehurst remarks that the visits of the Little Gull to Kent in spring and summer are rare. He gives details of two occurrences in April, four in May, and two in June, the latter being apparently in much the same stage of plumage as the bird above described.—EDS.]

DEATH OF A FLAMBOROUGH CLIFF-CLIMBER.

A MOST regrettable accident has happened to the Flamborough party of cliff-climbers, by which Joseph Major, fisherman, lost his life. Major and his brothers went out on the morning of June 6th, 1910, to the cliffs near Danes' Dyke on the north of Flamborough, where the egg-climbing operations are carried on, and shortly after Joseph had made his second descent, his companions became anxious on noticing the signal-rope was slack and not working; one of their number went to a projecting point of rock, where he saw the climber lying motionless on a grassy slope below. Assistance was procured from the Bempton climbers, one of whom, Moore, being lowered down to him, discovered he was unconscious, and had sustained a serious injury to his head, apparently caused by a piece of rock falling upon him. The Flamborough Rocket-Brigade also gave valuable assistance, whilst medical aid was summoned from Bridlington. Dr. Wetwan and the other climbers descended to the injured man, who had meanwhile been lowered to the beach, and after very great difficulty and several hours' work, he was brought up, in the breeches-buoy of the rocket-apparatus, to the cliff-top near the "Dor," thence being conveyed in the doctor's motor-car to the Bridlington Hospital, where, unfortunately, he succumbed to his injuries two days afterwards, without having regained consciousness. Although the climbers have several times been injured by stones becoming loosened and falling upon them, this is the first fatal accident whilst in the actual pursuit of "egg-climbing" known in the Flamborough district, and visitors to the celebrated Yorkshire cliffs, who knew young "Joss," as he was familiarly called, will deeply deplore the untimely, and painfully sad, end of an obliging, intrepid and skilful fisherman and egg-climber.

It is somewhat strange that since the publication of *The Birds of Yorkshire* three of the climbers therein referred to

have been placed *hors-de-combat*. William Wilkinson had a serious accident last season, Henry Marr died during the past winter, and now young Major has been killed.

T. H. NELSON.

“A LOST BRITISH BIRD.”

UNDER the above title there appeared in a recent issue of the *Zoologist* (1910, pp. 150-156) an article by Mr. Frederick J. Stubbs, a few short comments on which may be of interest to our readers.

The article commences by stating that: “During the Middle Ages England was the home of a White Heron or Egret, of which no useful description appears to have been handed down,” and towards its close the writer informs us: “I do not hesitate in thinking that the bird was *Ardea garzetta*, and not *A. alba*.” So much being clear, we will briefly examine the writer’s arguments in support of this statement. These he divides into three classes, firstly, references to the works of “Certain old ornithologists”; secondly, quotations from early MSS. and printed books bearing on the subject, and thirdly to extracts from two Acts of Parliament. We will deal with the above in their order.

We are firstly informed that William Turner (1500-1568), in his *Avium Præcipuarum*, etc. (A. H. Evans’ edition), after noticing the Common Heron, goes on to say that there was another, the “Alba, which was fair in colour . . . and brings forth young well.” Turner, of course, said nothing of the kind, the words are Aristotle’s, on whose *History of Animals* Turner is here commenting; what the latter did say is next somewhat incorrectly quoted. Evans’ translation is: “Of this kind [the Common Heron] I have seen some white, though they are rare, which differed from the aforesaid *neither in their size nor shape of body, but in colour only*. Furthermore, the white has been observed in England to nest with the blue and to bear offspring. Wherefore it is clear that they are of one species.” In Mr. Stubbs’ quotation the words we have printed in italics are omitted, a not unimportant fact if, as seems more than likely from the above quotation, Turner was merely referring to albino specimens of the Common Heron. Merrett, Muffett, and Tunstall are then cited as mentioning a White Heron. Neither of these three authors gives us any information about the bird, though Tunstall says “*Grus & Garzetta olim in paludibus Angliæ, teste Raio & aliis, notissimæ aves, his vero temporibus inter rarissimas & alienigenas habentur.*” In quoting Tunstall in another passage the

writer is again somewhat at fault, stating that that author included in his Appendix of rare visitors to Britain "the Crossbill, and even Brambling," instead of the Crossbill and "Greater Brambling or Snowbird, *Emberiza nivalis*," as it is in the original. Mr. Stubbs now quotes from Willughby's *Ornithology*, edited by Ray (1678, p. 279), as follows: "The Great White Heron, *Ardea alba major*. This differs from the Common Heron: (1) In magnitude, as being lesser than that; (2) in the length of its tail; (3) in that it wants a crest. A certain Englishman (saith Aldrovand) affirmed that he had seen white Herons, though rarely, which neither in bigness of body nor shape differed *at all* from the Common Heron, but only in colour. I suspect this Relator, whoever he was, was mistaken, accounting the bird in this article described by us not to differ from the common Heronshaw, but only in colour. For Mr. Johnson, who hath seen the White Heron in England, puts it down for a distinct kind in his Method of Birds communicated to us." Mr. Stubbs remarks: "This correspondent of Aldrovand was, as we now know, William Turner." It would be interesting to learn on what authority Turner is termed a correspondent of Aldrovand. A friend and constant correspondent of Conrad Gesner (1516-1561), Turner certainly was, and in Gesner's *Historia Animalium*, 1555, the remarks of Turner as to White Herons are quoted verbatim, preceded by "Inquit Turnerus." Aldrovand, who plagiarised freely from Gesner, whom he quoted as "Ornithologus," has here followed his usual method, and, taking the reference from Gesner, to which Willughby refers, ascribes it to "Quidam Anglus." As we have seen, so far the sole authority for the existence of a white Heron in England, other than an albino of the common species, rests on the communication of Mr. Johnson to Ray. It is somewhat curious that this Egret, if it existed, should have been unknown to Ray and Willughby, and Mr. Stubbs proceeds to point out, therefore, "that this is a matter of little importance for he [Willughby] can only speak of the Crane from hearsay: yet the abundance of this species in England in former times is beyond question." Willughby, far from speaking of the Crane only from hearsay, tells us (p. 25 of the *Ornithology*), that this bird "was common in the Fens of Lincolnshire, and in Cambridgeshire," and on p. 274 of the same work: "They come often to us in England: and in the Fen-countries in Lincolnshire and Cambridgeshire there are great flocks of them." and goes on to say, "but whether or no they breed in England I cannot certainly determine either of my own knowledge, or from the relation of any credible person."

We next, following Mr. Stubbs, come to Pennant, who in his *British Zoology* (p. 345, 2nd ed., Vol. II.) refers to the Great White Heron, as mentioned by Turner and Willughby, and "the small species of Crested White Heron mentioned by Leland, under the name of Egritte." At p. 495 Pennant prints the full bill of fare of the famous feast given at the "enthronisation of George Nevell Archbishop of York," 1374, which in the long list of birds and beasts, commencing with "Wylde Bulles, 6" and ending with "Porposes and seals, 12,"* contains, among the numerous Cranes, Bitterns, and Herons mentioned, the item "Egrites 1,000." John Fleming, in his *History of Animals*, 1828, p. 96, referring to *Ardea garzetta*, says: "This is supposed to be the species, a thousand individuals of which were served up under the name of Egrettes. . . . It is possible, however, that the Lapwing may have been there referred to, as the most common bird with a crest." And later authors agreeing with what Mr. Stubbs terms Fleming's unlucky comment, have held the same opinion. It will be seen therefore that there is practically nothing in the works of the "professed ornithologists" to show that *A. garzetta* was ever a British bird.

In the next part of his paper, and by far the most interesting one, Mr. Stubbs adduces evidence, which goes to prove that there was a bird, apparently with a long beak, served at feasts in England in early times and known by the various names of Egrett, Egret, Egrette, Egryt, and Egreate, and in the plural as Egretez. Mr. Stubbs is of opinion that this bird was

* The full bill of fare as given by Pennant is as follows:—

In wheate, 300 quarters.	Pigeons, 4000.
In ale, 300 tunne.	Conyes, 4000
Wyne, 100 tunne.	In bittors, 204.
Of ypocrasse, 1 pype.	Heronshawes, 400.
In oxen, 104.	Fessautes, 200.
Wylde Bulles, 6.	Partridges, 500.
Muttons, 1000.	Woodcookes, 400.
Veals, 304.	Curlewes, 100.
Porkes, 304.	Egrites, 1000.
Swannes, 400.	Stagges, bucks and roes, 500 and mo.
Geese, 2000.	Pasties of venison colde, 4000.
Capons, 1000.	Parted dyshes of gellies, 1000.
Pygges, 2000.	Colde tartes baked, 4000.
Plovers, 400.	Colde custardes baked, 3000.
Quayles, 100 dozen.	Hot pasties of venison, 1500.
Of the foules called rees, 200 dozen.	Hot custardes, 2000.
In peacockes, 104.	Pykes and breames, 608.
Mallardes and teales, 4000.	Porposes and seals, 12.
In Cranes, 204.	Spices, sugared delicates, and wafers plentie.
In kyddes, 204.	
In chyckens, 2000.	

Ardea garzetta, but apart from the fact that its geographical distribution hardly warrants the assumption that it could ever have been a common bird in England, we are surprised that in his researches the writer has found no evidence to put before us of instances of the use in dress of the plumes of the Egret in this country. The use of the "Egret" was well known to early writers. Willughby mentions "their use in caps and head pieces for ornament, and which are sold very dear in the cities subject to the Turk," and Aldrovand, Gesner and Belon write to the same effect. The following passage from Belon's *L'Histoire de la Nature des Oyseaux*, 1555, p. 195, is perhaps worth quoting, and if his derivation of the word was in any way warranted, the application of the name Egret to several birds other than *A. garzetta* is at once apparent. "L'Aigrette doit estre mise entre les especes des Herons. . . . Les François l'ont ainsi appellee, à cause de l'aigreur de sa voix." . . . "Sa chair est delicate and tendre."

The Acts of Parliament (19 Hen. VII., and 25 Hen. VIII.) which are cited at the conclusion of the article, do not mention the Egret, and only point to the rapid extinction of many species of wild-fowl in England; perhaps even a more pregnant quotation of the destruction that was then commencing is that which occurs in the *Norfolk Household Book* of the L'Estranges of Hunstanton, 1533, "the xxxvijth weke, Tewysdaye, Itm. a Cranne kylld wt. the gun."

A CORRESPONDENT.

GREAT SPOTTED WOODPECKER IN SCOTLAND.—With reference to the spread of *D. major* in Scotland the following notes are of interest:—One seen on December 23rd, 1909, near Penpont, Dumfriesshire, by Mr. H. S. Gladstone; and the following recorded by Mr. Harvie-Brown—one got near Dunipace, Larbert, Stirlingshire, about March 12th, 1909; one seen in Carron Glen on July 18th, 1909; one seen near Aberdeen in 1908 and 1909 (*Ann. S.N.H.*, 1910, p. 118).

STOCK-DOVE IN DEE.—Mr. Harvie-Brown records (*Ann. S.N.H.*, 1910, p. 119) that *Columbaenas*, which is spreading in Scotland, has nested for two years (1908 and 1909) in the parish of Banchory Ternan.

BLACKCOCK AND CAPERCAILLIE HYBRIDS.—Mr. H. S. Gladstone in recording (*Ann. S.N.H.*, 1910, p. 119) a brood of these hybrids reared in 1906 near Fasque, Laurencekirk, Kincardineshire, remarks that Mr. Millais has stated that female examples of this hybrid are extremely rare. The brood recorded is said to have consisted of four cocks and three hens. The four males have been shot and examined, and two of the females have been shot, but only one retrieved, and this unfortunately was not preserved.



REVIEWS

The Vertebrate Fauna of Cheshire and Liverpool Bay. Vol. I., pp. 91-459. *The Birds of Cheshire.* By T. A. Coward and C. Oldham. Illustrated. (Witherby & Co.) 1910. 26s. net.

THESE two handsome volumes not only contain an account of the vertebrate zoology of the district, but Mr. J. A. Dockray has also contributed a chapter on the Dee as a wildfowl resort by way of introduction to the second volume, and there is also a very complete bibliography and a useful map. As a whole, there is no doubt that such an account of the vertebrate fauna has long been wanted, but our present concern is with the ornithological section of the work alone, and as the same authors published a book on the birds of Cheshire so recently as 1900, it is only natural to enquire whether the writers have justified by their work the appearance of the present publication. It is pleasant to be able to say at once, without reference to the other sections, that they have done so, and the present book shows a distinct advance on their former work. Of course, there is naturally a good deal that is common to both books, but the original work was far more than a mere county-catalogue, and contained many interesting field-notes and observations, and we are glad to notice that the present work is not behindhand in this respect. The avifauna of Cheshire is, of course, not to be compared in richness with that of some of our eastern and southern counties, which meet the full tide of migration, but it is redeemed from the commonplace by the great range of variation in the character of the country; and the wild moorlands of Longdendale in the east, the mud-flats and sand-hills of the Dee and Mersey estuaries, and the meres and mosses of the central plain, all have their characteristic fauna and flora. Any estimate as to the number of species recorded must be somewhat unsatisfactory in default of an official check-list, such as that published by the American Ornithologists' Union, as so much division of opinion exists as to the *status* of many forms, but, roughly speaking, about 228 species are recognised by the authors, in addition to several cases, such as the Wagtails, Redpolls, Wheatear, etc., where more than one race has occurred in the county. This shows a gain of some nine species since 1900. Perhaps the most interesting of these are the occurrence of Schlegel's Petrel, *Estrelata neglecta*

(Schlegel), for the first and only time in Europe, at Tarpoley in 1908, and that of the American Blue-winged Teal, *Querquedula discors* (L.), about fifty years ago, a time when it is extremely improbable that this bird was kept in confinement in this country. As might have been expected from its distribution in Wales, the Cirl Bunting has now been definitely recorded from within the county, but we notice that no mention is made of the Willow-Tit. Messrs. Coward and Oldham regard the Pied Flycatcher as a bird of double passage only, and are probably correct in their view, but the *Field* of October 7th, 1871, contains a statement by W. Purnell that this species bred on one occasion near Crewe. The site mentioned is improbable, but the circumstance is worth investigation. The Teal (p. 331) not only breeds on the hills east of Macclesfield, but also on the Longendale moors. On the whole *errata* and misprints are conspicuous by their absence, but we must demur to the name "Northern" European Nutteracker applied to *N. caryocatactes caryocatactes* (p. 236). All the European resident birds belong to the thick-billed form, which, by the way, breeds in numbers as far south as Bosnia and is found in the Balkans, and is really a Western form.

The nomenclature adopted is distinctly in advance of that of most of our county faunas, and where necessary the trinomial system has been adopted to distinguish local races. We think, however, that it might with advantage have been extended to the British Yellow Wagtail and the Red Grouse. In conclusion, we may say that the work is capitally illustrated; the views of local scenery are good and clear and give an excellent idea of the country.

F. C. R. J.

The British Warblers—A History with Problems of their Lives.

By H. Eliot Howard, F.Z.S., M.B.O.U. Part IV.
Coloured and Photogravure Plates (R. H. Porter). 21s.
net. per part.

ANOTHER part of Mr. Howard's interesting work on the habits of the warblers he has studied so intimately is very welcome.* This part concerns chiefly the Common and Lesser White-throat and is illustrated as before by Mr. Grönvold's beautiful drawings reproduced in colour and photogravure. *Phylloscopus viridanus* and *P. tristis* are also included in this part, but are treated in the usual perfunctory style adopted in

* For notices of previous parts, see Vol. II., pp. 67-8. Vol. III., pp. 62-4.

previous parts for the rare species; indeed, in the case of the Greenish Willow-Warbler the author has not even taken the trouble to discover that the bird recorded from Suleskerry has been proved to be an example of *P. borealis* (cf. *B.B.*, Vol. II., p. 408; Vol. III., p. 297). A mistake once made is certainly difficult to eradicate, but we had not expected a perpetuation of this error in a work of so special a character.

It is, however, the original information concerning the habits of our common warblers that makes Mr. Howard's work so valuable. Although there are many points of similarity in the "courting" habits of the birds the author has so far dealt with, there are also many slight but important differences. In the case of the Common Whitethroat we find, as in other warblers, the male arriving in advance of the female and occupying a definite territory, and battles ensuing when one invades the territory of another; further than this, Mr. Howard has watched the females fighting together when two have appeared in the same territory, and this he has not observed in any species other than the Whitethroat. This bird is indeed particularly excitable, as must have been noticed by everyone, and the author mentions an extraordinary case when a male in his "frenzied excitement" actually built a nest before the arrival of the female, and curiously enough this nest was ultimately used for rearing the offspring; in another case a male, during the course of his sexual excitement (the female being present this time) built two incomplete nests and part of a third, which the female eventually completed. Like the Blackcap (and other birds) the Whitethroat removes the *feces* of the nestlings and frequently swallows them; by a chance experiment Mr. Howard has found that if a leaf be placed in the nest the bird will attempt to swallow it—an interesting fact and one which should be noted especially by those who are wont to claim too much intelligence for the "lower" animals. An incident is also related which goes far to prove that parental instinct disappears in the absence of a proper response from the young.

In his life-history of the Lesser Whitethroat the author enters into an interesting discussion on the origin and meaning of a bird assuming an attitude of feigned injury when its young are threatened. Mr. Howard having already come to the conclusion that what are commonly called "courting" displays, are but expressions of emotional states, is now inclined to believe that "feigning injury" may be explained in the same way, and this because he finds that the attitudes assumed by the female Lesser Whitethroat when its young

are handled are the same as those of the male during periods of sexual excitement. What the enemies are which could be misled by the " feigning injury " performance the author finds it difficult to imagine. But we cannot agree that these actions are not of use to some birds at all events. Let Mr. Howard watch, for example, a Pheasant with a brood suddenly approached (before they can hide) by a terrier, and he will find that the dog is misled and chases the old bird, which leads him away and eventually flies off ; even if the dog does return to the spot where he started, the chicks will by then have become scattered and so well-hidden that he will be very unlikely to find them. It would be interesting to collect proofs of actual benefit to the brood by these manœuvres in various birds.

Mr. Howard's book is certainly not only informative but also stimulating.

H. F. W.



MALLARD DUCK BETRAYING ANXIETY.

(Photographed by Miss E. L. Turner.)

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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ON A MALLARD DUCK REMOVING HER EGGS.

BY

EMMA L. TURNER.

I FIRST attempted to photograph this Mallard duck (*Anas boscas*) on May 30th, 1910, but waited for her in vain about four hours. Her own eggs had been removed and a clutch of addled ones substituted, as the duck-tribe is exceedingly shy, and when disturbed will often not return to the nest for many hours.

The next day I tried again, and after three hours' delay, thought I had secured a photograph of the duck brooding, but there was nothing on the plate! Having other and more interesting work, which occupied me till June 28th, I forgot all about this troublesome duck; but, finding she was still persistently brooding and I had a spare day or two, it seemed worth while making another attempt, besides which I was very tired, and the prospect of four hours of sitting still with intervals for sleep was not without its attractions for once. But I paid heavily for not being wide awake and attending strictly to business. The Duck only kept me waiting an hour and a half. I awoke to find her creeping slowly up to the nest; when close to it, she carefully surveyed the situation, and evidently took exception to something, what I cannot tell; the inner workings of a bird's—and especially a duck's—mind are as complex, and sometimes as irresponsible, as a woman's. My shelter had stood opposite her for a month and apparently presented the same front; but to the wary bird there *was* a difference, for suddenly she made up her mind, and, thrusting her bill into the nest, raked up four eggs all together—*shovelled* them up, perhaps, I should say—till they rested against her breast, then gently assisted them out of the nest. I, alas, not being fully awake, thought she was merely making a space inside the nest in which to plant her great splay feet before arranging herself upon the eggs, and thus lost my best chance of a curious photograph. Having done this she seemed in two minds and unable to come to any decision. After

some moments of intent gazing in my direction she ventured on to the nest, but as every movement still betrayed her anxiety, I dropped the shutter and secured a portrait in this attitude (Plate 2). With infinite care and caution I managed to change my plate almost noiselessly, during which process, however, she slipped off and crouched at a distance, but soon returned and commenced pulling down and material out of the nest and arranging it under the eggs that were removed. She then settled down to brood over these four eggs, eyeing those in the nest all the while and frequently pulling out more down. More cautiously even than before I removed the plate, focussed afresh, and photographed her (Fig. 1). She then took fright and went away.

As a gale of wind was blowing all the time, I had to come out and remove bits of loose reed which had blown across my path ; I also replaced the four eggs and down inside the nest, returned to my shelter, and waited. It was just two hours before the duck came back ; meanwhile some reeds had blown down, but these I dared not remove, as the bird was always near at hand. She then began taking out the eggs one at a time by pushing them under her chin (Fig. 2), guiding them with her bill down the soft slope of her breast, and so " easing " them to the ground. It was all so quickly done ; four more were removed in as many seconds, and these she then pushed one by one along the narrow trackway that most marsh-birds make to and from their nests, till about eighteen inches away, and well within the shady rushes. There she brooded over them with her tail towards me. I waited some time, but nothing happened, neither did she worry about the six neglected eggs in her nest ; birds have curious limitations, which vary with individuals.

As the situation was now dull and uninteresting I went home to lunch, first replacing the eggs. On my return at 2.30 she had again removed four to the same spot, which I as persistently put back into the nest, and waited till 5.30, but she would not show herself, so, partially covering up the eggs, I left her.

On June 29th all the eggs were as usual in the nest and warm, and the duck close at hand, but though I waited four hours on that and two successive days, she did not once venture near, though eventually returning to the nest after I left. She was sitting closely till to-day, July 8th, when either her patience is exhausted or the almost unparalleled rise of water for the time of year has flooded her out.



FIG. 1. MALLARD DUCK BROODING BEHIND ITS NEST.

(Photographed by Miss E. L. Turner.)

These instances, frequently recorded, of birds removing eggs or young, while simply pointing to the fact that, like human beings, they are subject to attacks of "nerves," nevertheless have an added interest, because they prove that there is almost as great an individuality amongst birds, even of the same species, as amongst men. Snipe, for instance, will usually fly

straight from the nest at the faintest sound made by the photographer; yet, on May 12th and 16th, I sat most of the day three feet from a Snipe, waiting for her to hatch off. Nothing I could do short of actually emerging from my shelter and putting her up, would induce that bird to stir. I wrote letters, ate my lunch, took photographs of her and changed plates with more or less noise, struck matches



FIG. 2. MALLARD DUCK REMOVING AN EGG.

(*Photographed by Miss E. L. Turner.*)

and barked like a dog, but she bore it all with the utmost serenity. No two birds will ever behave exactly alike under the same circumstances. Heredity and tradition hold them in a tight grip, yet each individual has a certain amount of "play," and one can never lay down hard and fast rules for birds—of all nature's children the most erratic.

ON THE DOWN-PLUMAGE AND MOUTH-COLORATION OF NESTLING BIRDS.*

I.

BY

C. B. TICEHURST, M.A., M.R.C.S., M.B.O.U.

ROBIN.†

Correction.—Outer supra-orbital tract is present as well as inner supra-orbital.

NIGHTINGALE. *Daulias luscinia* (L.).

DOWN. *Colour.*—Greyish-black.

Character.—Long and plentiful on the head; long on the spinal and scanty on the humeral tracts.

Distribution.—Inner supra-orbital, occipital, humeral, and spinal, the latter a few tufts in centre only.

COLORATION OF MOUTH. Inside, orange-yellow; no tongue-spots; externally, flanges very pale yellow.

BLACKCAP. *Sylvia atricapilla* (L.).

DOWN.‡ Absent.

COLORATION OF MOUTH. Inside, bright pink; two long, oval, symmetrical brownish spots at base of tongue; externally, flanges whitish.

BRITISH GOLDEN-CRESTED WREN. *Regulus regulus anglorum*, Hartert.

DOWN. *Colour.*—Dark grey.

Character.—Short and scanty.

Distribution.—Inner supra-orbital, occipital.

COLORATION OF MOUTH. Inside, yellow; no tongue-spots; externally, flanges whitish.

* For previous papers and notes on this subject, see Index Vol. III., under "Nestlings."

† Cf. Vol. II., p. 189.

‡ Cf. Vol. III., p. 153.

BRITISH DIPPER. *Cinclus cinclus britannicus*, Tschusi.

DOWN. *Colour*.—Smoky-grey.

Character.—Very long and plentiful on all the tracts.

Distribution.—Inner supra-orbital, occipital, humeral and spinal.

COLORATION OF MOUTH. Inside, pinkish-flesh coloured; no tongue-spots; externally, flanges fairly large and pale yellow.

BRITISH TREE-CREEPER. *Certhia familiaris britannica*, Ridgway.

DOWN. *Colour*.—Blackish-grey.

Character.—Long and plentiful.

Distribution.—Inner supra-orbital and occipital.

COLORATION OF MOUTH.* Inside, yellow; no tongue-spots; externally, flanges whitish.

HOUSE-MARTIN. *Chelidon urbica*.

DOWN. *Colour*.—White.

Character.—Rather scanty on all the tracts.

Distribution.—Inner supra-orbital, occipital, humeral, spinal and femoral.

COLORATION OF MOUTH. Inside orange-yellow, no tongue-spots; externally, flanges pale yellow.

LINNET. *Linota cannabina* (L.).†

DOWN. *Colour*.—Grey.

Character.—Fairly long and plentiful, except on the ventral, femoral and crural tracts.

Distribution.—Inner supra-orbital, occipital, humeral, spinal, ulnar, femoral, ventral and crural.

COLORATION OF MOUTH. Inside, reddish; no tongue-spots; externally, flanges whitish, red at the angles.

CROSSBILL. *Loxia curvirostra curvirostra*, L.

DOWN. *Colour*.—Very dark grey.

Character.—Fairly long and plentiful, except on the outer supra-orbital, ventral and crural tracts.

Distribution. Inner and outer supra-orbital, occipital, humeral, spinal, ulnar, femoral, ventral and crural.

COLORATION OF MOUTH. Inside, partly violet-pink, partly yellow; no tongue-spots; externally, flanges pale yellow.

BILL.—Short, thick; bright yellow.

* Cf. Vol. II., p. 195.

† Cf. Vol. III., p. 154.

CORN-BUNTING. *Emberiza miliaria*, L.

DOWN. *Colour*.—Dirty greyish-buff.

Character.—Moderate length, tracts well marked.

Distribution.—Inner supra-orbital, occipital, humeral, spinal, ulnar, femoral, filaments on the greater wing-coverts. Crural and ventral tracts apparently absent.

COLORATION OF MOUTH. Inside, flesh-coloured; no tongue-spots; externally, gape pale yellow.

YELLOW BUNTING. *Emberiza citrinella*, L.*

DOWN. *Colour*.—Grey.

Character.—Long and plentiful, except on the ventral and crural tracts.

Distribution.—Inner supra-orbital, occipital, humeral, spinal, ulnar, femoral, ventral and crural.

COLORATION OF MOUTH. Inside, pale yellow; no tongue-spots; externally, flanges pale yellow.

BRITISH JAY. *Garrulus glandarius rufitergum*, Hartert.

DOWN. Absent.

COLORATION OF MOUTH. Inside, pink; no tongue-spots; externally, flanges pinkish.

MAGPIE. *Pica pica* (L.).

DOWN. Absent.

WRYNECK. *Iynx torquilla*, L.

DOWN. Absent.

COLORATION OF MOUTH. Inside, pink; tongue long, "telescopic," serrated subterminally and dark at tip; externally, flanges pale.

KINGFISHER. *Alcedo ispida*, L.

DOWN. Absent.†

COLORATION OF MOUTH. Inside, pinkish; no tongue-spots; externally, the flanges are practically non-existent in this species.

I am indebted to Messrs. H. S. Gladstone, J. Walpole-Bond and H. F. Witherby for some of the specimens.

* Cf. Vol. III., pp. 154, 417; Vol. IV., p. 23.

† Cf. Vol. II., p. 194.

II.

By A. G. LEIGH.

IN connection with Mr. Dewar's note on the change of the mouth-coloration of the nestling Yellow Bunting (Vol. IV., p. 23) it is interesting to note that a similar change takes place in the Tree-Pipit (*Anthus trivialis*); in a previous note (Vol. III., p. 154) I stated that the mouth-coloration was lemon-yellow, changing in four days' time to deep carmine; this year I have examined nestlings from the day they hatched, and the change was as follows:—Newly hatched, deep orange; two days old, pale orange; four days old, turning crimson; six days old, crimson; seven days old, full carmine. There was no sign of spots at any age, but at four days old the tongue-spurs were noticeably lighter. (*N.B.*—The nestlings examined last year were probably about two days old).

SEDGE-WARBLER. *Acrocephalus phragmitis* (Bechst.).

DOWN. Absent.

COLORATION OF MOUTH. Pale orange, black spots on tongue-spurs.

ROOK. *Corvus fugilegus*, L.

DOWN. *Colour.*—Dusky grey; skin of body black.

Distribution.—Humeral, spinal, ulnar and femoral.

COLORATION OF MOUTH. Bright crimson; tongue-spurs pale orange.

NOTES



MARKING BIRDS.

PROGRESS OF THE "BRITISH BIRDS" SCHEME.

I AM glad to be able to report that so far as the number of birds marked is concerned, the results to date are extremely satisfactory. The demands for rings largely exceeded my expectations, and I regret that it was not always possible to supply them immediately in the quantities required. Between ten and eleven thousand rings have been sent out this year, and schedules recording the marking of between five and six thousand birds have already been returned.

When all the schedules have been sent in, I hope to give further details of the number of birds marked; meanwhile I take the opportunity of sincerely thanking those who have spent so much time and labour in marking.

It is to be hoped that those into whose hands ringed birds fall will record their finds. It would greatly assist the enquiry if every reader of *BRITISH BIRDS* would advertise as widely as possible the fact that these birds have been ringed, and would point out that it is essential that we should be informed of (1) the number on the ring; (2) the place where found, and (3) the date when found of *every* marked bird recovered.

H. F. WITHERBY.

SONG-THRUSH BUILDING IN A HEAP OF BRICKS.

THE nest shown in the accompanying photograph is that of a Song-Thrush (*Turdus musicus*), and was built in a heap of bricks at Skelmersdale, Lancashire, on the road-side. The nest was found in April, 1910, but the young were not hatched.

F. C. HILL.



NEST OF A SONG-THRUSH IN A HEAP OF BRICKS AT
SKELMERSDALE, LANCS.

BLACKBIRDS AND SONG-THRUSHES NESTING ON THE GROUND.

EVERY now and then instances of Blackbirds (*Turdus merula*) and Song-Thrushes (*T. musicus*) nesting on the ground are recorded as though this habit were something very unusual. In the Wealden district of Kent and Sussex this habit is not at all unusual and I have long been familiar with nests on the ground in such situations as the sides of hedgerow-banks and in the sides of ditches. Indeed, in this district such nests are quite common. Another situation, which is also quite common, is on the "stubs" in the coppice-woods, which abound all over the Weald, and on which the nests are seldom raised more than an inch or two from the ground-level and are often at ground-level. Rather more favourable opportunities this

year for making observations enable me to offer some explanation for this "low-nesting" habit. The early nests of these species are often built before the leaf is out, and are almost always three or four feet from the ground in coppice, hedgerow or on a "stake and binder" fence, and it is a matter of experience that very few of the eggs laid in them escape the notice of the Jays (and perhaps other predatory birds or mammals) that abound throughout the woodlands. As a



BLACKBIRD'S NEST IN A CLUMP OF GRASS.

(Photographed by N. F. Ticehurst.)

general rule the low-built nests are the later ones, built towards the middle of May, they often contain no more than three eggs, and are evidently second or even third attempts at breeding. It is very suggestive, therefore, that the birds are becoming aware that greater concealment is necessary, if they are to nest successfully, and thus this low-building habit is gradually being acquired, and may in time become general.

The accompanying photograph is of a Blackbird's nest in a tuft of grass in the middle of an open orchard, and was taken in the district above referred to.

N. F. TICEHURST.

LATE RING-OUZEL IN KENT.

It may be of interest to record that on June 7th, 1910, I saw a single male Ring-Ouzel (*Turdus torquatus*) at Edenbridge, Kent. There was no sign of a pair of birds, but in any case this would appear to be an unusually late date for this species on migration.

H. H. FARWIG.

REDSTART AND BLUE TIT LAYING IN THE SAME NEST.

ON May 19th, 1910, I was surprised to find a nest at Eastwell, Kent, containing eggs of both the Redstart (*Ruticilla phœnicurus*) and the Blue Tit (*Parus cœruleus*). There were six eggs of each species. After watching the tree for about five minutes I saw a pair of Blue Tits fly into the branches, and almost at the same time the female Redstart went into the hole and stayed there. The Blue Tits afterwards flew away. The nest was evidently built by the Redstart, judging from the materials used in its construction. Both the eggs of the Redstart and those of the Blue Tit seemed perfectly fresh. Unfortunately I was unable to visit the spot again, but thought the note might perhaps interest your readers.

H. R. TUTT.

[A good many instances are on record in which Redstarts' eggs have been found together with those of other species. Among these may be mentioned the Great Tit (*Parus major*), Blue Tit (*Parus cœruleus*), Penduline Tit (*Ægithalus pendulinus*), Robin (*Erithacus rubecula*) and Pied Flycatcher (*Muscicapa atricapilla*). As a rule the Redstart is ejected by its fellow lodger, and it would have been interesting to know by which species the young were finally reared.—F.C.R.J.]

TWO BROODS REARED IN THE SAME HEDGE-SPARROW'S NEST.

NEAR the end of May I found at Worcester Park, Surrey, a nest of a Hedge-Sparrow (*Accentor modularis*) with three young and one egg. A couple of days later the young flew. About a fortnight later, on examining the nest again, I found a Hedge-Sparrow sitting upon three freshly-laid eggs and the old addled one which had been left in the nest. I have no proof that this bird is the same individual which reared the first brood in this same nest, but it seems likely that this is the case.

T. R. WARD.

THREE LONG-TAILED TITS FEEDING YOUNG IN
ONE NEST.

THIS spring (1910) I had a nest of a Long-tailed Tit (*Acredula caudata*) pointed out to me ; the nest was situated in a gorse-bush about three feet from the ground. On April 30th the young were hatched out ; the day was rather dull for photography, so I decided to visit the nest again. Just as I was



ONE OF THREE ADULT LONG-TAILED TITS FEEDING YOUNG
AT THE SAME NEST.

(*Photographed by Smith Whiting.*)

leaving my photographing tent, however, I noticed two birds in the gorse-bush, and I distinctly heard a "cheep cheep" on my left close to the tent ! This aroused my curiosity.

On May 4th I again put up the tent, and I then was able to confirm my suspicions about three birds feeding at the same

nest. I am not certain about the sexes, but one bird with an extra long tail (photograph enclosed) I took to be a cock, and two others, which also fed assiduously, I thought were hens.

On coming out of the tent I laid up close to the nest and distinctly saw all the three birds near the nest at the same time with food.

SMITH WHITING.

[Cases of four adult Long-tailed Tits at one nest were referred to in Vol. I., pp. 32 and 62. Instances of three birds in attendance on the young in one nest have come under my notice, both in the case of the Long-tailed Tit, and the Swallow (*Hirundo rustica*). In both cases the number of young was normal.—F.C.R.J.]

GOLDEN ORIOLES IN DERBYSHIRE, WESTMORLAND AND FIFESHIRE.

ON May 20th, 1910, I received a letter from Mr. C. H. Wells, in which he informed me that a pair of Golden Orioles (*Oriolus galbula* L.) had been seen at Cratcliff Tor, near Bakewell, and that the male bird had unfortunately been killed. Subsequent inquiry showed that the two birds were seen on May 14th; the male was killed by a small boy, but had been battered about the head by Jackdaws which were pursuing it. The other bird disappeared and has not been seen since. On examining the cock bird I found that it was not in fully adult plumage, but retained the median stripes on the breast-feathers, and had the back washed with dusky-olive instead of bright golden-yellow.

F. C. R. JOURDAIN.

[An immature male was picked up dead at Brathay, near Windermere, on May 16th, 1909 (D. L. Thorpe and L. E. Hope, *Zool.*, 1910, p. 184). This appears to be the first recorded occurrence of this bird in Westmorland. It will be remembered that a Golden Oriole was got in Dumfriesshire on April 30th, 1909 (*cf.* Vol. III., p. 379). An adult was found dead on May 16th, 1910, in the policies of Dhuloch House, Inverkeithing, Fifeshire (W. Eagle Clarke, *Ann. Scot. Nat. Hist.*, 1910, p. 182).—H.F.W.]

A RED-BACKED SHRIKE'S "LARDER."

ON June 19th, 1910, I went with a gamekeeper into a wood at Castle Rising, Norfolk, to see a nest which he had found of a Red-backed Shrike (*Lanius collurio*). The nest was in an elder bush and was about five feet from the ground, and contained five eggs, which had been incubated for about a week. The keeper had not found the "larder," but after a few minutes' search we found it in a hawthorn tree about twenty-

five yards from the nest. The "larder" consisted of a young, almost fully-fledged, Blue Tit, two young Pheasants, which had not been touched, and two more young Pheasants which were half eaten, and the remains of several other young birds which were too far gone to be identified, only a few feathers remaining sticking to the thorns; in every case the birds were impaled by the thorns running through their throats. Although I looked carefully I could not see any beetles, or anything else but young birds. The birds were not grouped together, but were scattered about nearly all round the tree. On July 5th I visited the nest again, and found that in the meantime the eggs had been taken; on going to look at the "larder," I found that all the young birds had disappeared, with the exception of one of the young Pheasants, which had been untouched at my first visit, and of which now only a leg and a few feathers remained. I saw the keeper again before I left, and he told me that he had seen the Shrikes several times in the hawthorn tree since we first discovered the "larder."

N. TRACY.

RED-BACKED SHRIKE IN NORTH STAFFORDSHIRE.

ON June 20th, when on an expedition with my friend Mr. Masfield near Whiston (a village in North Staffs.), we came across the nest of a Red-backed Shrike (*Lanius collurio*), containing four young birds almost ready to leave the nest, and also an addled egg. The nest was in a very exposed position, characteristic of this species, and we had very little difficulty in ringing and photographing the occupants. These birds rarely visit the northern part of the county, and are very irregular in their appearance in the more hilly districts, so that this occurrence is quite worth noting.

T. SMITH.

[Formerly a pair bred annually about seven miles north-north-east of Whiston, just across the Staffordshire boundary, in the parish of Thorpe, but I regret to say that owing to persecution the birds have abandoned the locality of late years. A pair is also recorded as breeding near Cheadle in 1908 (*N. Staffs. F. Club Rep.*, Vol. XLIV., p. 71).—F.C.R.J.]

GREENFINCH SWALLOWING *FÆCES* OF YOUNG.

WHILST photographing a Greenfinch (*Ligurinus chloris*) feeding young, I saw the hen deliberately swallow the *fæces* of the young.

There was no doubt about this, for on one occasion there

were two to be disposed of, and after swallowing them the hen bird stayed some time at the nest.

H. W. FORD-LINDSAY.

[The habit of swallowing the *fæces* of the young is, of course, common in many species, and has often been recorded, but it is interesting to have definite records of this habit in various species. Whether the bird sometimes swallows and sometimes carries away the *fæces* or regularly does either should be noted.—EDS.]

LATE STAY OF A BRAMBLING IN IRELAND.

ON June 13th, 1910, near the sea coast at Ballywalter, co. Down, I observed and watched at close quarters a male Brambling (*Fringilla montifringilla*). It was feeding amongst Chaffinches on manure by the roadside. It was very tame, but was perfect in plumage, and had not been in confinement, at any rate recently, I should say.

I several times heard what I took to be another bird answering the harsh, characteristic call of the bird seen. This second bird was, however, some little distance away, and as I could not get a view of it, I am unable to say with certainty that it was another Brambling, although I am fairly confident that it was one.

This appears to be a very late date for this bird.

J. BEDDALL SMITH.

[Mr. R. J. Ussher (*Birds of Ireland*, p. 63) has no record for a Brambling later than April in Ireland.—EDS.]

CROSSBILLS NESTING.

IN ESSEX.

I HAVE already reported (Vol. III., p. 409) that two pairs of Crossbills thought to be breeding were seen at Bardfield (*not Bradfield*) at the end of March, 1910. I am now able to confirm the nesting, as two nests were found during April. From one of these the young had flown. The other nest, although completed, was never tenanted.

J. BEDDALL SMITH.

IN GLOUCESTERSHIRE.

I THINK it will be of interest to put on record that Crossbills bred in the neighbourhood of Cheltenham this year (1910). I have heard of several nests and obtained one with eggs in April. It was built in a Scotch fir. Two young birds were being fed by their parents in the same tree in which was the nest with eggs.

E. T. CLARKE.

IN KENT.

ON May 20th, 1910, in company with Mr. C. Stedman, of Ashford, Kent, I investigated a spot where we thought Crossbills might possibly be breeding. A narrow wood borders a marsh beneath the North Downs, not far from Ashford, and the wood is margined on either side with a belt of Scotch pines. Cones, newly worked by Crossbills, were beneath several trees, and soon we located five or six birds in one tree, all busy working at the cones. In the tree next this we found a typical Crossbill's nest, placed at the end of a branch from fifteen to twenty feet in length, and about seven feet from ground-level, but overhanging a ditch with banks four feet deep. There were no eggs, but the nest appeared to be just finished. On May 22nd there were two eggs. Mr. Stedman visited the nest on the 25th, as I was unable to go, and reported that there were five eggs.

H. R. TUTT.

IN NORFOLK.

THE Crossbills (reported *antea*, p. 22) still seem to be fairly plentiful in the Castle Rising district. On June 19th I paid a visit to the wood where the Crossbill's nest was found, and had a chat with the keeper who found it. He told me that about six weeks ago he saw a good many family parties of young Crossbills in the wood, and on several occasions he watched them being fed by the parent birds. So there evidently must have been several other nests besides the one I recorded. While I was in the wood I heard some Crossbills. Later on in the morning I met another keeper, and he told me that they seemed to be forming into flocks again, and that he had seen flocks of sixteen or seventeen for the last three mornings. Both of these keepers are most reliable men, and are both quite familiar with the Crossbill—in fact, they were the first to notice their presence at Castle Rising. The Crossbills have now been in this locality for quite a year.

N. TRACY.

IN SUSSEX.

ON April 24th, 1910, in the neighbourhood of East Grinstead I discovered two young Crossbills about six or eight days out of the nest, the call-note being very similar to that of the adult. They appeared to be of a dull brown plumage, the breast being streaked and spotted with a darker tint. Although I remained some little time in the vicinity nothing was to be seen of the parent birds.

H. H. FARWIG.

IRRUPTION OF CROSSBILLS.

KENT.—On June 26th, 1910, I saw three lots of Crossbills in the same locality near Tenterden, as those referred to by Dr. C. B. Ticehurst (*antea*, p. 53). Two of the lots were small, containing seven and four birds respectively; while the third was a flock of some twenty birds. They were all wild and restless, feeding for a few minutes only at one spot, and then flying off for some distance; their habits in this respect differing markedly from those watched early in the year, and suggesting that the birds were on the move and their visit merely that of passing migrants (*N. F. Ticehurst*).

NORFOLK.—On May 30th, 1910, I saw twenty-six Crossbills near Potter Heigham (*E. L. Turner*). They appear to have left the Swaffham district, the last being seen on June 15th (*Rev. E. T. Daubeney*).

ST. KILDA.—Immediately on my arrival at St. Kilda on July 7th, 1910, I saw a child playing with a small bird. On examination this proved to be a Crossbill in a starved condition. The child told me that he had found it on the shore a few minutes before I landed. It was so weak from want of food that it was not able to fly. One of the natives told me that there were plenty of the same kind of birds on the island, but I found that he thought it was a Sparrow with a deformed beak! I think this is the first record for the Crossbill on St. Kilda (*O. G. Pike*).

SURREY.—A party of four on the North Downs near Woldingham on June 26th, 1910, and two at Limpsfield on July 17th (*Howard Bentham*).

WARWICKSHIRE.—A flock of fifteen in the Earlswood district (no date). A flock on December 18th, 1909, at Stratford-on-Avon (*F. Coburn, North Staffs. F. Club Rep., Vol. XLIV., p. 113*).

WORCESTERSHIRE.—Plentiful at Stourport (no date) (*F. Coburn, North Staffs. F. Club Rep., Vol. XLIV., p. 113*).

WESTMORLAND.—A pair on April 30th, 1910, one on May 2nd and a flock of fifteen to twenty about May 10th at Rayrigg Wood, Windermere (*D. G. Garnett*).

LARGE CLUTCH OF EGGS OF THE WRYNECK.

THE large number of fourteen eggs was laid by a Wryneck (*Iynx torquilla*) this season at Pett, Sussex, all of which were duly hatched out, but, unfortunately, the hole in the tree being very small, the young were nearly all suffocated, only five being eventually reared.

H. W. FORD-LINDSAY.

A GREAT SPOTTED WOODPECKER'S NESTING-HOLE.

IN the early part of June, 1910, I had an opportunity of observing in Kent a Great Spotted Woodpecker (*Dendrocopus major*) preparing its nesting-hole. The site chosen was the bole of a beech-tree. The cavity was hewn by the bird in dead wood, which, however, was not decayed, and which was so hard that little or no impression could be made upon it by the finger-nail. Notwithstanding the hardness of the wood, the excavation was completed, from start to finish, in about eight days. The mass of white wood-chips resulting from the bird's operations presented a remarkable appearance, and closely resembled a snow-drift, extending a couple of yards from the base of the tree. Unfortunately, the Woodpecker was evicted by a Starling as soon as the nesting-site had been completed, but before she left the locality the Woodpecker laid one egg a short distance from the nesting-tree.

EDWARD EARLE.

TAWNY OWL NESTING IN A RABBIT-BURROW.

A TAWNY Owl (*Syrnium aluco*) nested in a rabbit-hole this year at Sheringham, Norfolk, and brought off four young ones. The hole had a large mouth and the nest was about three feet down.

H. M. UPCHER.

THE PRESENT STATUS OF THE BRITISH KITE.

A FEW years ago the continued existence of the Kite (*Milvus iclinus*) as a British species seemed doomed. The bird (except for a rare straggler at long intervals) was, and indeed still is, confined to Wales, and in 1905 the total number surviving was believed to be only five. Those who had up to that time done their best to keep the Kites alive were fain to admit that their doom seemed sealed, and some even suggested that eggs should be imported from the Continent and placed in the nests of Buzzards! Had this been done, and had the experiment been successful, it need hardly be pointed out that the Kite as an indigenous species would have immediately been lost, and been replaced by an introduced bird. Fortunately, in 1905, Mr. E. G. B. Meade-Waldo took up the duty of protecting the Kites on behalf of the British Ornithologists' Club, and the result of five years of unremitting care, and the expenditure of much money, has been that the British Kite, if not now safe, is at all events so far increased in numbers that its extinction is unlikely. A little while ago Mr. Meade-

Waldo reported progress to the members of the British Ornithologists' Club (*cf. Bull. B.O.C.*, XXV., pp. 82-3). In 1905 four young were reared, raising the total to nine. In 1906 three young were known to be reared, raising the total to twelve. In 1907 the Kites appear to have increased by four; while in 1908 six nests were known, yet no young seem to have been reared owing to mishaps. In 1909 seven pairs were known, but only one young one appears to have fledged. Thus in 1909 fifteen birds in any case were known to exist, and there may very well have been more in the wild country they frequent. This year Mr. Meade-Waldo tells me the good news that out of four nests watched six young ones are safe, and we may hope that the other pairs have been equally fortunate. Thus in five years the number of Kites has been raised from five to well over twenty.

It is painful to have to admit that this result has only been achieved by force. That is to say, the nests have been watched night and day to prevent their being robbed by the collector of rare British eggs or his agent. The extinction of any creature in any area is a deplorable loss to science, yet many of those who would not hesitate to jeopardise the existence of any rare British breeding-bird by taking its eggs have the audacity to call themselves scientific, and it has become necessary for those who take a more correct view to spend their time and money in protecting ornithology from "ornithologists"!

The collecting of "British taken" eggs is a mania, and it can be called nothing else, which is an undoubted and dangerous menace to the science of ornithology.

H. F. WITHERBY.

ON THE FOOD OF THE COMMON HERON.

ON June 6th, 1910, I visited a well-known heronry and found that the nests contained young in all stages of growth and some eggs not yet hatched. On leaving the trees some of the old birds vomited up half-digested food, and two specimens which I examined consisted of eels and moles. The stomach of a bird about a week old contained two eels, each six inches long, the remains of what appeared to be water-beetles, and several shrimps; the latter had been turned quite pink by the digestive process. There were also in the stomach several long pieces of grass and some macerated wood-fibre, as well as two dead, but freshly-swallowed, oak-twigs, the larger

being about 50 by 3 mm., the other much smaller. Whether these twigs were swallowed accidentally or whether they aid digestion, as do stones and grit in graminivorous birds, it is hard to say.

CLAUD B. TICEHURST.

INLAND NESTING OF THE SHELD-DUCK IN CHESHIRE.

ALTHOUGH the Sheld-Duck (*Tadorna cornuta*) has been known to nest at a distance from salt-water, and in some parts of its range is said to do so regularly, it is usually spoken of as entirely maritime in its breeding-habits. In Cheshire the bird has greatly increased in numbers during the last few years, and pairs now nest regularly at some distance from the coast. For four years pairs have nested on the sandy banks of Oakmere, a water in Delamere Forest, eight miles distant from the Mersey Estuary, the nearest salt-water. In or about the year 1900 a pair first selected this site; the eggs were dug out of the rabbit-burrow and put under a hen, but only two young birds were reared, and they were subsequently killed by foxes. In the springs of 1907, 1908 and 1909, I saw Sheld-Ducks on several occasions on Oakmere, but it was not until this year that I learnt that birds had nested in each of these three seasons. Each year the eggs were either taken for sitting or were robbed by collectors; in no case were young brought off.

Early in April, 1910, one, and sometimes two, pair of birds frequented the mere; I frequently saw them during April, May and early June, but I never felt sure that two ducks were sitting. On June 18th I saw a duck fly in from the north, as if she had come from the sea, and almost at once enter her burrow. Five young were seen outside the hole on the 23rd, and four were captured by the gamekeeper; when I saw them on the 25th they were feeding well and looked healthy, but two died on the 26th and a third on the 27th; the fourth was doing well when I last saw it—on July 16th. The gamekeeper saw a pair of old birds with seven young on the water on June 27th, but within two or three days both young and old had vanished; he concluded that these were the brood of the second pair, but it is possible that he did not see all the young on the 23rd. I cannot say what became of the birds; it is possible that the parents started to walk them to the sea, an almost impossible feat attempted by a pair which nested on the banks of the Weaver, four miles inland, in 1907; but it is more likely that foxes, which abound in the neighbourhood, destroyed all the young. T. A. COWARD.

AMERICAN WIGEON IN ANGLESEY.

ON June 21st, 1910, and again on June 23rd I spent several hours with Mr. J. Steele Elliott and the Rev. D. Edmondson Owen watching an American Wigeon (*Mareca americana*) on the lake at Presaddfed, near Holyhead. The bird usually consorted with a bunch of Teal, and, whether in the company of the other ducks or alone, was full of nervous activity, constantly on the alert, and rose on the wing at the least alarm. It was indeed only by careful stalking that we were able to approach it, and everything in its appearance and behaviour negatived the idea that it had escaped from captivity. Strong as it was on the wing, it had some difficulty in keeping up with the Teal when the birds were in full flight, and generally lagged, the last bird in the bunch. Aided by binoculars and a telescope we were able on each day to get near enough to the Wigeon to study its plumage in detail and to identify it with certainty. An adult drake, it seemed to be in full breeding-dress, and its intense black under tail-coverts as yet showed no sign of the white feathering that marks the assumption of the eclipse-plumage. The crown was very pale grey—in some lights almost white, though not the pure white of the patch in front of the black under tail-coverts, a patch which was seen to extend from the belly right over the rump when the bird raised its wings. The sides of the head and the neck were hoary, and a broad ill-defined green streak extended from the eye backwards and then downwards. The bill was greyish-blue with a black tip. The lower neck, breast, back and sides were vinaceous; the belly white; the primaries and rectrices very dark grey, appearing at a distance to be quite black. The pale shoulders and the white on the wing-coverts, which formed a conspicuous broad bar across the wing when the bird was in flight, were concealed by the vinaceous feathers of the flanks when it was at rest on the water.

CHAS. OLDHAM.

WOOD-SANDPIPER AND RUFFS IN KENT IN JUNE.

As it is unusual, perhaps, for Wood-Sandpipers (*Totanus glareola*) and Ruffs (*Machetes pugnax*) to be present in the south of England in June, it may be worth noting that when watching birds in company with other ornithologists in west Kent on June 11th, 1910, we saw in two places a Wood-Sandpiper (it may possibly have been only one bird) and three Ruffs and one Reeve. Two of the Ruffs were in full summer-plumage and the third had an incomplete "frill." We also saw a flock of five other birds which we thought were Ruffs, but they were too wild to enable us to identify them with any certainty.

H. F. WITHERBY.

CURLEW NESTING IN NORFOLK.

A NEST of the Curlew (*Numenius arquata*) was found on May 15th, 1910, on a fen in west Norfolk. The nest contained four eggs, which had been incubated for about a week, and although I did not see the nest myself, I know the gentleman who found it, and can vouch for its authenticity. I am also familiar with the locality, and have seen the pair of Curlew there several times since the nest was found.

N. TRACY.

BLACK TERN IN BEDFORDSHIRE.

WHEN at Woburn on May 17th, 1910, with Mr. H. Boyd Watt, I saw a Black Tern (*Hydrochelidon nigra*) at one of the ponds there.

JOHN PATERSON.

MARKED SANDWICH TERN APPARENTLY
NESTING IN ITS FIRST YEAR.

THE watcher over the Sandwich Terns (*Sterna cantiaca*) at Ravenglass, Cumberland, informs me that early in June, 1910, he watched, through his glasses, a Sandwich Tern upon its nest, containing two eggs, and distinctly saw a metal ring upon its leg as it approached its nest. Mr. Smalley and I marked forty-two Sandwich Terns as nestlings at this colony last summer, and as the keeper is quite certain that no Sandwich Terns were marked there in any previous year, it seems almost equally certain that this is one of those which we marked there as a nestling last year, and, if so, is interesting in showing that the birds are apparently in adult plumage and breed in their first year and also that the young return to their birth-place to nest.

H. W. ROBINSON.

FOOD OF THE NESTING LESSER BLACK-
BACKED GULL.

DURING two visits paid to a nesting-colony of Lesser Black-backed Gulls (*Larus fuscus*) in Westmorland I made an examination of the nature of the food of these birds and found it to be of a most miscellaneous character. Garbage, entrails and other slaughter-house refuse comprised the greater part of the food found on the nesting-site, but the remains of small crabs were also found in large numbers, as well as the small pink shells of the tellen (*Macoma balthica* = *Tellina solidula*), either deposited in heaps in a complete condition,

as if disgorged from the crop, or found ground up in the *excreta*. No other shells were seen, which is interesting in view of the fact that the species is said to be very destructive to cockles, which it is said to obtain by treading the sand until they come to the surface. In view of this statement I searched diligently for such shells, without any success whatsoever.

The fish remains were not too numerous, although a fair number of eels' skeletons were in evidence, and some of small flounders, and also the remains of three small sea-trout of about a pound to two pounds in weight. Garbage picked off the shore was found in the form of a few dead rats, kittens, Guillemots, etc., and upon our first visit we were very much struck by the number of heads of domestic poultry, as many as seven being found together on one small feeding "table," and the birds must have discovered some place where a large number of poultry had been killed for the market. We saw also the remains of a few young rabbits, and although such miscellaneous articles as tallow-candles do not seem to be despised as an article of food, these Gulls do not seem to prey upon the toads and vipers which appear to flourish among them. It is interesting to note that a brood of Pheasants was found almost in the midst of the colony, and that the keeper rears Pheasants on its borders without any trouble from the Gulls, although I know for a fact that they can be very destructive to young Pheasants when other food is scarce. Some heaps of very large dead earthworms were also found. There are recognised feeding "tables" throughout the colony, where the grass and heather are trodden flat, and to which paths lead from all directions through the thick heather and undergrowth. On our first visit to the colony, on June 24th, the young were in all stages of development, a few being already on the wing and a few eggs yet unhatched; but on July 8th, when I visited them again, all the eggs had hatched and all the young seen were fully feathered, with the exception of three or four, whose heads were still in the down although the birds were almost full grown. The mortality among the young is very small, only four young ones and one adult being found dead, the latter being found on the occasion of my last visit.

We only managed to ring one hundred and five of the young, because our first visit was unfortunately made on a pouring wet day, when many of the young looked more dead than alive, and were not marked for that reason.

H. W. ROBINSON.

ON THE FOOD AND FEEDING-HABITS OF THE RAZORBILL.

ON June 30th, 1909, I visited one of the loftiest stack of rocks of the Scilly group for the purpose of watching the various sea-birds which breed there. Upon reaching the summit, some 140 feet high, I found myself in the midst of a colony of Razorbills (*Alca torda*). Many of these birds sat in rows on the great rugged boulders piled up one above the other, which formed innumerable suitable recesses for nesting ;



RAZORBILL CARRYING SAND-EELS TO YOUNG.

(Drawn by F. W. Frohawk.)

in these I found many young birds in down, of various sizes, but none more than half grown. The old birds appeared fearless of my presence ; they sat quite still in rows only a few feet away, simply staring at me. A large number were continually arriving and leaving the rocks, and several brought in fish for their young ; now and again these fortunately settled close to me, when they gave me excellent opportunities for observation. I counted as many as twelve small fish in

the bill of one bird at a time, all arranged in a regular row at right angles to the bill, in the manner shown in the accompanying drawing, from a sketch I made soon after watching the birds.

In every instance I noted the only fish carried to the young were sand-eels or launce (*Ammodytes lanceolatus*).

It is stated by Howard Saunders in his *Manual*, that the food of the Razorbill "consists of small fish, which are carried diagonally in the bill—not at right-angles, as in the Puffin." And Dr. Patten, in his *Aquatic Birds of Great Britain and Ireland*, also remarks that sprats, carried diagonally in the beak, form the principal diet.

The sand-eel forms the chief food of the Razorbill and Puffin at the Scilly Islands, and it may be that only this particular kind of fish is held by the Razorbill in the way shown in the drawing, which is the only position I have seen it held by both the Puffin and Razorbill. It would be very interesting to learn how the Razorbill contrives to fill its bill with so many fish at once. Does it catch and kill or disable one before catching another? If they are held alive how does it manage to catch one after the other without loosing the hold of those already in the bill? Considering that sand-eels are remarkably rapid in their movements, it must require even greater rapidity and skill on the part of the Razorbill to catch them in the way it does.

Unlike the Cormorant, Shag, and many other aquatic birds, the Razorbill uses its wings under water; in fact, while fishing it flies under the surface, and this is a great aid in securing its prey. The disproportionately small size of the wings of the Razorbill, Guillemot, and Puffin renders them especially well adapted for use under water. Although the wings of these birds are so small in proportion to the bulk and weight of their bodies, it is remarkable how rapidly they fly when once well on the wing, but in rising from the surface of the water they spread out their feet laterally. The following weights and measurements of these three species I took directly after shooting them:—

Razorbill.—Expanse of wing varying from 25 inches to $27\frac{1}{2}$ inches; wing from carpal joint to tip of longest primary from $7\frac{1}{2}$ inches to 8 inches; total length from 16 inches to $16\frac{1}{2}$ inches; weight from 1 lb. $3\frac{1}{4}$ ozs. to 1 lb. 6 ozs.

Guillemot.—Expanse of wing varying from $24\frac{3}{4}$ inches to $27\frac{1}{4}$ inches; wing from $7\frac{1}{2}$ inches to $7\frac{5}{8}$ inches; total length from 16 inches to $17\frac{1}{2}$ inches; weight from 1 lb. 11 ozs. to 1 lb. 13 ozs.

Puffin.—Expense of wing varying from $21\frac{1}{4}$ inches to $21\frac{7}{8}$ inches; wing from $6\frac{1}{8}$ inches to $6\frac{1}{2}$ inches; total length from $11\frac{1}{2}$ inches to $12\frac{1}{8}$ inches; weight from $11\frac{1}{2}$ ozs. to $14\frac{1}{2}$ ozs.

The Common Tern has an expanse of wing of 31 inches, and weighs 4 ozs. Yet with this comparatively great extent of wing its flight is much less rapid in a direct line than that of the species mentioned above. F. W. FROHAWK.

LATE FIELDFARE IN KENT.—Mr. Collingwood Ingram saw a single *Turdus pilaris* flying over Thanet on May 17th, 1910 (*Zool.*, 1910, p. 227).

NESTING-HABITS OF THE WREN.—Captain R. B. Campbell writes to the (*Field*, June 25th, 1910, p. 1112) giving details of a case in which a “cock’s nest” of a Wren (*Troglodytes parvulus*) built while incubation was proceeding, was left unlined for quite six weeks and then lined and eggs deposited in it. In the issue for July 2nd (p. 52) Mr. H. S. Davenport remarks that he has always found that some “cock’s nests” are lined and used for breeding purposes after a period of a month or six weeks, while others are merely used for roosting purposes and remain unlined. The object of the well-known “cock’s nests” has always been a debateable point but there is no doubt that they are frequently occupied for roosting purposes in autumn and winter. Mr. J. Whitaker (*Notes on the Birds of Notts*, p. 55) mentions a case where a nest was left untouched for seven weeks after completion before eggs were laid, and that this nest was used again in the following season!

BLUE-HEADED WAGTAIL BREEDING IN WILTSHIRE.—In Vol. I., p. 89, we published an interesting observation by Mr. G. Dent on *Motacilla flava flava* breeding near Marlborough in 1907. It is satisfactory to learn from the *Report of the Marlborough College Natural History Society* for 1909 that a pair of these birds was again discovered in 1909 in the same meadows by Mr. Dent, and that although he failed to locate the nest, he subsequently saw the young after they were fledged.

PROBABLE BLACK-HEADED WAGTAIL IN NORFOLK.—Mr. J. Rudge Harding has sent us an account (which he has already communicated to the *Field*, 2, vii., 1910, p. 52) of a Yellow Wagtail which he saw on June 17th, 1910, and again on June 19th in north Norfolk. Mr. Harding describes the bird as apparently like the Yellow Wagtail (*M. raii*),

but with a jet-black head. In subsequent correspondence Mr. Harding gives the following observations:—"The bird flew for a moment to a wire-fence and I had just time to get my glasses on it, before it flew again. All I could see was the striking black head, which extended quite to the nape . . . I was so amazed at this unexpected sight that details as to chin or eye-stripe escaped me. The bird otherwise seemed to be practically a Yellow Wagtail, of which there were many in the marshes where this one appeared. Two days later I walked across the same stretch of marsh accompanied by a friend. Suddenly the black-headed Wagtail flew past us, within three hundred yards of where I had seen it before, and we exclaimed simultaneously, 'There he is—a jet-black head!'" We think there is little doubt that the bird seen by Mr. Rudge Harding was an example of *Motacilla flava melanocephala*.

WRYNECK IN CUMBERLAND.—An example of *Iynx torquilla* was killed against telegraph-wires near Drumburgh on June 27th, 1909 (D. L. Thorpe and L. E. Hope, *Zool.*, 1910, p. 184). During the time Dr. Heysham lived in Carlisle (1778–1834), and up to about 1865, the bird was a regular summer-visitor to Lakeland; from then until 1892 it became a rare straggler (cf. H. A. Macpherson, *Fauna of Lakeland*, p. 167). The authors above quoted say that it has only been recorded twice in Cumberland during the last fifty years.

SHORT-EARED OWL NESTING IN ESSEX.—In 1896 Mr. E. A. Fitch recorded the nesting of the Short-eared Owl (*Asio accipitrinus*) in Essex (cf. Vol. I., p. 314). The same observer now records (*Zool.*, 1910, p. 270) the nesting of a pair in 1910 in a marsh near Northey. Unfortunately eight out of the brood of nine were killed by a mowing machine which cut into the nest.

SUPPOSED OCCURRENCE OF THE SWALLOW-TAILED KITE IN SURREY.—Mr. T. Parkin has discovered a specimen of *Elanoides furcatus* at Guildford, which is said to have been shot some years ago at Chiddingfold (*Zool.*, 1910, p. 270), but the history of the specimen is incomplete and unsatisfactory.

GARGANEY ON THE SOLWAY.—A male example of *Querquedula circia* in eclipse-plumage is reported as shot "on Solway," presumably on the Cumberland side, on August 14th, 1909 (D. L. Thorpe and L. E. Hope, *Zool.*, 1910, p. 190). The Garganey is a very rare bird on the Solway, and we believe that Sir Richard Graham has during the last few years been breeding this species at Netherby. It is possible therefore that the specimen referred to was an escape.

FOOD OF THE WOOD-PIGEON.—The crops of two Wood-Pigeons (*Columba palumbus*) sent to the Editor of the *Field* by Colonel C. B. Reynardson, were found to be full of the caterpillars of two species of moths, the dotted border (*Hybernia progemmaria*) and the mottled umber (*H. defoliaria*). Both species are said by the Editor to be destructive to forest-trees, and Colonel Reynardson remarks that he has often found Wood-Pigeons to be full of these pests in May and June (*Field*, 18,vi.,1910, p. 1098).

STONE-CURLEWS IN BEDFORDSHIRE AND CUMBERLAND.—Mr. J. Steele Elliott saw a single *Ædicnemus scolopax* on May 15th, 1910, at Sandy. The bird used to breed in Bedfordshire, but since 1890 it appears not to have done so, and indeed only to have visited the county twice (*Zool.*, 1910, p. 227). One is also recorded as seen on March 27th, 1909, by Mr. D. Losh Thorpe near Carlisle (*t.c.*, 1909, p. 197, and 1910, p. 187).

BLACK TERNS IN YORKSHIRE.—On May 20th, 1910, Mr. Oxley Grabham saw six *Hydrochelidon nigra* near York, in a locality which is visited every year by this species (*Nat.*, 1910, p. 278).



REVIEWS

The British Bird Book. Edited by F. B. Kirkman, B.A.
Illustrated in colour and monochrome. 4to. Vol. I.,
pp. xx + 156. (T. C. & E. C. Jack.) 10s. 6d. net.

THE principal object of this work, which is to be issued in twelve "sections," is to "bring together from every source, foreign and native, all the available information of any importance concerning the habits of British birds." Various writers are employed in this task, and each is solely responsible for the work under his signature—consequently we have varied styles of treatment and, more important, a varying quality of discrimination.

The plan of the work is to give for each species what are here termed "Preliminary classified notes," which provide a brief description of the bird and short accounts of its distribution, migration, nest and eggs, food and song-period. A family having been dealt with thus in brief, a full account is given in one chapter of the habits of all its members. Great advantages are claimed for this plan, but although we approve of the idea of the "classified notes," which are much in the style of the volumes in *Allen's Naturalists' Library*, the discussion of the habits of a number of species together is a plan which must surely fail. However good the promised index may be, it will always be necessary to read through many pages in order to learn what are the habits of any one species. In this section, for example, seventy-three pages are devoted in one long chapter without a break to the "Finches," and we note, as an example, that the Crossbill is referred to in the first page and in the last, as well as in many in between.

The "classified" notes, for which Messrs. Kirkman, W. P. Pycraft, A. L. Thomson and the Rev. F. C. R. Jourdain are responsible, seem to be well and carefully done so far as they go, but the information is not so detailed as, for instance, in so compressed a work as Saunders' *Manual*. The descriptions seem to us too meagre and general to enable anyone who did not know the bird to identify it satisfactorily, while the accounts of distribution are often inadequate, as, for example, in the Twite, whose distribution is local and requires detailed treatment, but is here described in too general a way; and, incidentally, the bird is said to be absent from the east of England. The descriptions of the nests and eggs are, however, much more thoroughly done.

As to nomenclature, the Editor does not seem to have grasped the significance of the use of trinomials. It is stated that "the use of trinomials has been avoided except in the rare cases where two races of the same species occur in this country." Yet the Jay and the Goldfinch are given only two names in the headings, although it is *stated* that immigrants from the Continent occur; the distinct Scottish Crossbill is recognised in the text but is treated with the Common Crossbill under the name of *Loxia curvirostra*, L.; in the case of the Bullfinch, although the typical form has fairly frequently occurred and the British race is recognised in the text, the bird is named in the heading *Pyrrhula pyrrhula* (L.), while, on the other hand, the Redpolls are treated trinomially. This is inconsistent as well as inaccurate, for if the local races are recognised, then why put them under names which belong to the typical races? It should now be obvious that it is of the utmost importance to recognise the differences between some of our breeding-birds and those of the same species which breed on the Continent, and if we are to advance, it behoves the authors of works dealing with the birds of these islands to emphasize this point and to treat of these races separately under trinomials.

Turning again to the main feature of the book—the accounts of the habits—we have first some pleasing essays on the Crow family by the Editor, who has had the wisdom to depart somewhat from his own plan and to treat of the Raven and the Chough separately and the other species in pairs! The bulk of this "section" is, however, devoted to the "Finches" by Mr. Edmund Selous, whose seventy-three pages are more in the style of a diffuse and extravagantly worded magazine-article than a serious work, and further criticism of them is, we think, unneedful.

The illustrations in black are mostly from useful photographs showing the structure and position of nests. The coloured illustrations by various artists are for the most part pleasing and fairly accurate.

H. F. W.

BRITISH BIRDS

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

ASSISTED BY

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SEQUENCE OF PLUMAGES IN BRITISH BIRDS.

VI.—THE BRITISH LONG-TAILED, GREAT, COAL, MARSH
AND BLUE TITMICE.

BY

H. F. WITHERBY.

THE BRITISH LONG-TAILED TITMOUSE.

Acredula caudata rosea (Blyth).

MALE AND FEMALE.

DOWN-PLUMAGE. Not examined.

JUVENILE PLUMAGE. Acquired while in the nest, the Down-Plumage being completely moulted.

Feathers of the *crown* white, some being lightly tipped with brown, especially on the *forehead*; *lores*, *superciliary stripe*, *ear-coverts*, *hind-neck*, *mantle*, *back*, *rump* and *upper tail-coverts* dark chocolate-brown; *scapulars* the same, but tipped with white; *under-side* white, except some of the *flank-feathers*, which have a buff tinge, and the *vent* and *under tail-coverts*, which are pink; *axillaries* white; *tail-feathers* black, the outer pair with a white outer web, the next pair the same, except at the base, where the outer web is black, the next pair with faint white markings on the outer web near the tip; *wing-feathers* blackish-brown, the inner secondaries being emarginated with white; *primary-coverts* blackish-brown; all the *wing-coverts* dark brown, the inner *greater coverts* being emarginated with white like the inner secondaries.

FIRST WINTER-PLUMAGE. Acquired by a complete moult.

Forehead, *lores*, centre of *crown* and *hind-neck* dull white, marked here and there with black; *superciliary stripe* extending from a little in front of the eye to the *mantle*, black; *ear-coverts* grey, streaked with brown; *mantle* black; *back* black, with more or less pink; *scapulars* and *rump* pink, with the tips of some of the feathers white and some black; *upper tail-coverts* black; *chin* and *throat* white; an indistinct band on the *upper-breast* formed by small brown tips to some of the feathers; centre of *breast* and *belly* white, the *sides*, *flanks* and *under tail-coverts* pink, the feathers being tipped with white; *tail-feathers* black, the outer two pairs having white outer webs, with the white extending across the inner web in a slanting line towards the tip of the feathers, the next pair the same, but with the outer web at the base black and only fringed with white, the next pair with a little white on the outer web towards the tip; *axillaries* and *under wing-coverts* white; *wing-feathers* blackish-brown, the four innermost *secondaries* paler brown and margined with white or buffish-white, the next two with narrow white edgings to the outer webs; *wing-coverts* black, except the innermost *greater coverts*, which are brown, tipped with white, and margined with pink and white.

FIRST SUMMER-PLUMAGE. Acquired by abrasion. The plumage is like that of the First Winter, except that it is abraded, the tail especially becoming very ragged.

ADULT WINTER-PLUMAGE. Acquired by a complete moult. The plumage is like that of the First Winter.

N.B.—I can detect no difference between males and females in any plumage, except that the males average rather larger: *wing-measurement* (average), male 61 mm.; female 59 mm.

BRITISH GREAT TITMOUSE.

Parus major newtoni, Prazák.

DOWN-PLUMAGE. Whitish-grey. *Distribution*—Inner supra-orbital, occipital, humeral and spinal (*vide* C. B. Ticehurst, Vol. II., p. 190).

JUVENILE PLUMAGE. Acquired while in the nest, the Down-Plumage being completely moulted.

MALE. *Forehead, lores, crown and nape* dull greyish-black; *nuchal spot* yellowish-white; *mantle, scapulars, and back* olive-green; *rump and upper tail-coverts* smoke-grey; *ear-coverts, cheeks and sides of neck* yellowish-white; *chin and throat*, greyish-black and a narrowing line of the same colour down the middle of the *breast and belly*; rest of *breast, belly and flanks* pale yellow; *under tail-coverts* white; *tail-feathers* (except the central pair, which are dull blue-grey with black shaft-streaks) brownish-black, the outer pair having the outer webs white and a varying portion of the inner webs from the tip in a wedge-shape white, the next two pairs having blue-grey outer webs and small white tips on the outer webs, the rest with blue-grey outer webs; *under wing-coverts* white; *axillaries* pale yellow; *primaries* brownish-black, with narrow blue-grey edges to the outer, and narrow white edges to the inner, webs; *secondaries* brownish-black, with broad yellowish-green edges to the outer, and white edges to the inner, webs, the two innermost *secondaries* with broader yellowish edges; *primary-coverts* like the primaries, but with the edges duller; *greater-coverts* smoke-grey, with greenish edges and pale yellow tips; *median and lesser-coverts* smoke-grey, with faint greenish edges.

FEMALE. Like the male, but with the *head and chin* browner black, and the *primary-coverts* browner and with greenish, not such blue-grey, edgings.

FIRST WINTER-PLUMAGE. Acquired by a complete moult, with the exception of the remiges (two and occasionally three of the innermost secondaries are moulted), primary-coverts, and rectrices, except the central pair which are moulted.

MALE. *Forehead, lores, crown and nape* glossy blue-black; *nuchal spot* white; *upper mantle* greenish-yellow; rest of *mantle, scapulars and back* yellowish-green; *rump and upper tail-coverts* blue-grey; *ear-coverts and cheeks* white; *sides of neck* blue-black (some of the feathers with green tips), extending backwards and forwards and joining the blue-black *nape and throat and upper breast*, which are also blue-black; *chin* black; *centre of breast and belly* black, becoming more extended on the belly; *sides of breast and flanks* deep yellow; *vent and under tail-coverts* black in centre, white at sides; *tail-feathers* as in the Juvenile, but the central pair a brighter blue-grey; *under wing-coverts* black and white; *axillaries* pale yellow; *primaries and secondaries* as

in the Juvenile, but the moulted inner secondaries black, not brownish-black; *primary-coverts* as in the Juvenile; *greater-coverts* black, with blue edges to the outer webs and white tips (the three or four innermost with yellowish tips); *median* and *lesser-coverts* blue.

FEMALE. Like the male, but duller, the black of the head being less glossy and less blue; the *throat* and *upper breast* brownish-black, not blue-black; the black on the *breast* and *belly* browner and lesser extensive; the *primary-coverts* browner; the *greater-coverts* tinged with green; central *tail-feathers* not so bright.

FIRST SUMMER-PLUMAGE. Acquired by abrasion and fading.

There is no marked difference between this plumage and that of the First Winter. The *head* and *throat* are not so glossy; the blue-black on the *sides of the neck* is wider, through the wearing off of some of the green tips to the lower feathers; the tips of the *greater coverts* are smaller and whiter; the *remiges* and *primary-coverts* are browner and their edgings narrower.

ADULT WINTER-PLUMAGE. Acquired by a complete moult.

MALE. Like that of the First Winter, but the *remiges* are blacker, with brighter blue edgings to the *primaries* and *primary-coverts*, and blue, not green, edges to the *secondaries*, except the innermost, which are like those in the First Winter.

FEMALE. Like that of the First Winter, but the same changes as in the male.

ADULT SUMMER-PLUMAGE. Acquired in the same manner as the First Summer-Plumage and differs from the adult Winter-Plumage in the same way.

THE BRITISH COAL-TITMOUSE.

Parus ater britannicus, Sharpe and Dresser.

MALE AND FEMALE.

DOWN-PLUMAGE. Greyish. *Distribution* — Inner supra-orbital, occipital, humeral and spinal (*vide* C. B. Ticehurst, Vol. II., p. 190).

JUVENILE PLUMAGE. Acquired while in the nest, the Down-Plumage being completely moulted.

Forehead, lores, crown and *sides of hind-neck* sooty-black; *middle of hind-neck*, extending on to the mantle, yellowish-white; *mantle, scapulars, back, rump* and *upper tail-coverts* dull olive-green; *ear-coverts, cheeks* and *sides of neck* yellow; *chin* and *upper-throat* sooty-black; *breast* and *belly* pale yellow; *flanks* and *under tail-coverts* yellowish-buff; *tail-feathers* brownish-black, with olive-green edges to the outer webs; *under wing-coverts* and *axillaries* white; *primaries* and *secondaries* brownish-black, with olive-green edges to the outer webs and white edges to the inner webs, the two innermost *secondaries* with the inner webs pale and with broad pale tips, the next three with narrow pale tips; *primary-coverts* like the primaries; *greater* and *median coverts* brownish-black, with broad olive-green edges and yellowish-white tips; *lesser-coverts* brownish-black, tinged with olive-green.

FIRST WINTER-PLUMAGE. Acquired by a complete moult, with the exception of the remiges, primary-coverts and rectrices.

Forehead, lores and crown glossy blue-black; *sides of hind-neck*, extending on to the *mantle*, jet-black; *middle of hind-neck*, extending on to the *mantle*, white; *scapulars and back* grey, washed with olive-buff; *rump and upper tail-coverts* olive-buff; *ear-coverts, cheeks and sides of neck* white; *chin, throat and upper-breast* black, with white tips to a few of the feathers; *breast and centre of belly* white; *sides of belly, flanks and under tail-coverts* buff; *under wing-coverts and axillaries* white tinged with buff; *tail-feathers, primaries and secondaries and primary-coverts* as in the Juvenile; *greater and median coverts* brownish-black, with narrow blue-grey edges and white tips; *lesser coverts* brownish-black, with long blue-grey fringes and occasionally tipped with buff.

N.B.—The tips to the innermost *median wing-coverts* are often buff or tinged with buff, and the intensity of the buff colour on the back and flanks varies individually.

FIRST SUMMER-PLUMAGE. Acquired by abrasion and fading.

The black of the *head* becomes duller and less glossy; the *back* becomes blue-grey and the *rump* more greenish; the *throat and upper-breast* become blacker through the abrasion of the white tips; the *flanks* become paler; the white tips of the *secondaries* become worn off and those of the *wing-coverts* become much reduced in size.

N.B.—The differences between this plumage and the First Winter-Plumage are most marked in much-worn specimens, which often closely resemble *Parus ater ater* in the colour of the back.

ADULT WINTER-PLUMAGE. Acquired by a complete moult, and cannot be distinguished from the First Winter-Plumage.

ADULT SUMMER-PLUMAGE. Acquired in the same manner as the First Summer-Plumage, and cannot be distinguished from it.

N.B.—Females differ from males in all plumages by the black on the throat being narrower and not extending so far down the upper-breast. Wings of females average 58·3 mm.; of males 60·3 mm.

THE BRITISH MARSH-TITMOUSE.

Parus palustris dresseri, Stejneger.

MALE AND FEMALE.

DOWN-PLUMAGE. Grey. *Distribution*—Inner supra-orbital, occipital, humeral and spinal (*vide* C. B. Ticehurst, Vol. II., p. 190).

JUVENILE PLUMAGE. Acquired while in the nest, the Down-Plumage being completely moulted.

Forehead, lores, crown and nape dull, sooty-black, extending on to the *mantle*; *mantle, scapulars, back, rump and upper tail-coverts* greyish-brown; *ear-coverts, cheeks and sides of neck* white; *chin and throat* brownish-black, the feathers of the throat being tipped with white;

breast and *belly* yellowish-white; *flanks* and *under tail-coverts* pale buff; *tail-feathers* dark brown, with olive-brown edges to the outer webs; *under wing-coverts* white; *axillaries* pale buff; *primaries* and *secondaries* dark brown, edged on the outer webs with olive-brown, and on the inner webs with white, the innermost secondaries pale brown; *primary-coverts* dark brown, edged with olive-brown; all the *wing-coverts* olive-brown.

FIRST WINTER-PLUMAGE. Acquired by a complete moult, with the exception of the remiges, primary-coverts and rectrices.

Much like that of the Juvenile, but the whole of the top of the *head* and *nape* glossy black; the rest of the upper-parts darker brown; *chin* and *throat* black; *flanks* deeper buff.

FIRST SUMMER-PLUMAGE. Acquired by abrasion.

The black on the *throat* is a little more intense through the wearing off of some of the white tips to the feathers, but otherwise no difference can be detected between Summer- and Winter-Plumage.

ADULT WINTER-PLUMAGE. Acquired by a complete moult, and cannot be distinguished from the First Winter-Plumage.

ADULT SUMMER-PLUMAGE. Acquired in the same manner as the First Summer-Plumage, and cannot be distinguished from it.

N.B.—I can detect no difference between male and female in any plumage, nor is there any appreciable difference in wing-measurement.

BRITISH BLUE TITMOUSE.

Parus cæruleus obscurus, Prazák.

DOWN-PLUMAGE. White. *Distribution* — Inner supra-orbital, occipital, and humeral (*vide* C. B. Ticehurst, Vol. II., p. 190).

JUVENILE PLUMAGE. Acquired while in the nest, the Down-Plumage being completely moulted.

MALE. *Forehead* yellow; *crown* dull greenish-brown, a black line running from the base of the bill to and behind the eye; *superciliary stripe* white over the eye, extending backwards in a yellow stripe, which continues round the *nape*; *hind-neck* like the crown; *nuchal spot* pale yellow; *mantle*, *scapulars*, *back*, *rump* and *upper tail-coverts* dull olive-green; *ear-coverts*, *cheeks* (a small patch immediately below the eye is white), *sides of throat*, *breast*, *belly*, *flanks* and *under tail-coverts* yellow; a narrow line of dull greenish-brown in the centre of the *throat* passes backwards below the ear-coverts and joins the hind-neck (this line is ill-defined on the throat); *tail-feathers* blue, tinged with greenish, the outer pair with a narrow white edge to the outer webs; *under wing-coverts* yellowish-white; *axillaries* yellow; *primaries* and *secondaries* brown, with blue-green edges to the outer webs, the innermost four *secondaries* greyish-brown, with green fringes to the outer webs and dull white tips, larger on the two innermost; *primary-coverts* bluish-green,

with brownish-black shaft-stripes; *greater-coverts* grey, with yellowish-white tips and narrow blue-green edgings to the outer ones; *median* and *lesser coverts* French grey.

FEMALE. Similar to the male, but with the *tail-feathers* more dull coloured; the outer webs of the *primaries* and *secondaries* greener and duller, not so blue, and the *primary-coverts* browner.

FIRST WINTER-PLUMAGE. Acquired by a complete moult, with the exception of the *remiges* (two, and occasionally three, of the innermost *secondaries* are moulted), *primary-coverts* and *rectrices*.

MALE. *Forehead* white; *crown* bright blue, a black line running from the base of the bill to and behind the eye; *superciliary stripe* white and continued round the *nape* in a narrow white band; *hind-neck* and *sides of neck* dark blue; *nuchal spot* greyish-white; *mantle*, *scapulars* and *back* yellowish-green; *rump* yellower green; *upper tail-coverts* blue; *ear-coverts*, *cheeks* and *sides of throat* white; a black line in the centre of the *throat* (the feathers tipped with white), widening at the base of the throat and passing backwards under the *ear-coverts* and joining the blue of the *sides of the neck*; *breast*, *flanks* and *under tail-coverts* yellow; middle of *lower-breast* and *belly* white, with a patch of blackish-blue in the centre; *tail-feathers* as in the Juvenile; *under wing-coverts* white; *axillaries* pale yellow; *primaries* and *secondaries* as in the Juvenile, but the innermost *secondaries* tinged with blue and with larger white tips; *primary-coverts* as in the Juvenile; *greater-coverts* blue, tipped with white; *median* and *lesser-coverts* blue.

FEMALE. Considerably duller in coloration, especially in the blue of the *head*, *tail*, *primaries* and *wing-coverts*, the *secondaries* greener on the outer webs, the *primary-coverts* browner.

FIRST SUMMER-PLUMAGE. Acquired by abrasion.

MALE. The blue of the *crown* becomes brighter and the black of the *throat* wider and more intense; the *tail-feathers*, *primaries*, *secondaries* and *wing-coverts* become bluer owing to the wearing off of the narrow green fringes; the white tips to the *greater coverts* become smaller.

FEMALE. The blue of the *crown* and *tail* becomes brighter and the black of the *throat* wider and more intense; *wing-feathers* and *primary-coverts* become browner; the white tips to the *greater coverts* become smaller.

ADULT WINTER-PLUMAGE. Acquired by a complete moult.

MALE. Like that of the First Winter, but brighter, especially in the blue of the *crown*, *tail* and *wings*; the *primary-coverts* are bright blue, and the outer webs of *primaries* and *secondaries* are much bluer, the innermost *secondaries* are of a brighter blue.

FEMALE. Brighter and bluer than the First Winter, but not so bright as the adult male, and the *primary-coverts* and outer webs of the *secondaries* more greenish-blue than the adult male.

ADULT SUMMER-PLUMAGE. Acquired by abrasion.

MALE AND FEMALE. The blue of the *crown*, *wings* and *tail* becomes brighter and the black of the *throat* wider.

RECENT RECORDS FROM STAFFORDSHIRE,
WARWICKSHIRE AND WORCESTER.

BY

REV. F. C. R. JOURDAIN and H. F. WITHERBY.

THE study of Staffordshire ornithology presents especial difficulties, as the only recent works on the birds of the county are somewhat inaccessible. Dr. Macaldowie's treatise was published in the *Report and Transactions of the North Staffordshire Field Club* for 1893, but only a few copies were separately printed; while Mr. J. R. B. Masefield's paper on the birds of the county in the *Victoria County History*, though published in 1908, was written some years previously, with only a brief appendix, in which some of the more important later records were inserted; this work is also practically unobtainable separately, and must be read in conjunction with the *Reports of the N.S.F.C.* from 1905 onwards. Unfortunately, these zoological reports do not deal with the species referred to in any scientific order, so that records of each species must be searched for throughout the whole series of reports. A re-arrangement of the notes in scientific order would render these reports much more accessible for reference and increase their value enormously.*

The *Annual Report and Transactions of the N.S.F.C.* for 1909-10 (Vol. XLIV.), which has lately been sent to us, contains, in addition to Mr. Masefield's "Annual Report" (Aves, pp. 67-71), and Mr. W. Wells Bladen's "Bird Notes from Stone" (pp. 74-83), a long illustrated paper by Mr. F. Coburn (pp. 85-128) "On the Rarer Birds of Staffordshire and their Migration across the County, with Notes from adjoining Counties" (*i.e.*, Worcester and Warwick). Most of these records are from Norton Pool, Chasetown,

* For Warwickshire the latest authority is the late R. F. Tomes' article in the *Vict. Hist. of Warwickshire*, Vol. I. (1904), and for Worcester the same writer's list in the *Vict. Hist. of Worcester* (1901).

Staffordshire, a fruitful, but previously unworked, locality, except through the exertions of Mr. G. H. Clarke, to whom most of these records are primarily due. Brief notes on some of these occurrences appeared in Mr. Masefield's report for 1908-09, but these may be treated together, as they were, we believe, derived from Mr. Coburn, to whom we must be thankful for rescuing some of these records from probable oblivion.

Although we cannot agree with many of Mr. Coburn's conclusions with regard to migration, the facts he narrates, taken in conjunction with other records, such as those of Mr. Ward at Gailey Pools, show in a remarkable way that there is a far larger and more regular stream of migrants between the Trent and the Severn than was previously supposed, and open a most interesting field of observation to local ornithologists, of which we trust they will take advantage.

Before dealing with the records *seriatim*, we should like to call attention to a "very extraordinary migration" which took place in the middle of May, 1891, during a heavy snowfall followed by hard frost. Mr. Coburn says that on May 17th "the whole district was teeming" with Stonechats. They differed from others seen earlier in the season, being "paler in colour, more slender in build and their actions different." No specimens were shot, and next day all had disappeared. From later investigations he is "quite satisfied that these were Siberian Stonechats, *Pratincola maura*"! We quote this as an instance of very remarkable optimism before proceeding to deal with the more important records in detail.

All localities referred to are in Staffordshire unless otherwise stated, and the order of Saunders' *Manual* has been followed.

[BEARDED TIT (*Panurus biarmicus*).—Two said to have been shot at Chasetown in the winter of 1896 by Mr. G. H. Clarke. Previous evidence of its occurrence in Staffordshire is far from satisfactory. The nest in a gorse-bush, referred to in the *Vict. Hist. of Stafford* (Vol. I., p. 144), was more probably that of a Long-tailed Tit!]

GOLDEN ORIOLE (*Oriolus galbula*).—One shot near Great Barr in April, 1908, in the possession of Mr. R. W. Chase. The third occurrence in the county.

ROSE-COLOURED STARLING (*Pastor roseus*).—One immature female shot on November 10th, 1890, at the Streetly end of Sutton Park on the border of Warwick and Stafford. Only one previous record for Stafford and two for Warwick.

ROLLER (*Coracias garrulus*).—One shot by a keeper in June, 1908, at Patshull (Hon. G. Legge). The first authentic record, though an example is said to have been seen at Berkeley.

CORMORANT (*Phalacrocorax carbo*).—A frequent visitor to Norton Pool, and also recorded from Warwickshire.

SHAG (*P. graculus*).—One captured on August 28th, 1908, at Saltley, Warwickshire.

GANNET (*Sula bassana*).—Two caught in Worcestershire (no dates given).

[FLAMINGO (*Phoenicopterus roseus*).—One shot during a fog on December 22nd, 1909, at the Smethwick end of Warley, close to the Worcestershire boundary. Mr. Coburn devotes a couple of pages to trying to prove that this bird was a genuine migrant. One of his arguments is, that the Duchess of Bedford informed him that in her opinion, if the bird had escaped from Woburn (whence none had been lost for some months), its fate would have been sealed much nearer home than Staffordshire. With this Mr. Coburn agrees, and thinks that the birds from the London Zoological Gardens (which *had* escaped recently) would also have been shot. He proceeds to argue that the escaped birds, whose death has not been reported, must have got safely out of the country, and that if they can find their way out, they can also find their way in! Mr. Seth-Smith writes to us: "I have no doubt that the Flamingo shot on December 22nd, 1909, in Staffordshire was one of those which escaped from here [London Zoological Gardens] about that time. They were in first-rate plumage and condition, and I doubt if anyone could have told for certain that they were not wild birds." We quite agree with Mr. Coburn that such birds kept in captivity should be marked; we suggest with rings. While on this subject we should like to remark that we are of opinion that the previous Staffordshire record of a bird captured alive in September, 1881, although accepted by the late Howard Saunders, is open to similar objection.]

GREY LAG-GOOSE (*Anser cinereus*).—One at Patshull, January 26th, 1904 (Hon. G. Legge).

WHITE-FRONTED GOOSE (*A. albifrons*).—One shot by

Mr. P. Baker at Earlswood, Warwickshire, and others reported. No dates given. Mr. R. F. Tomes in the *Vict. Hist. of Warwick*, I., p. 201, described this bird as "formerly an occasional visitor, but now unknown."

[LESSER WHITE-FRONTED GOOSE (*A. erythropus*).—One shot near Chasetown, October 11th, 1906, and cooked, but identified by Mr. Coburn from one foot and a number of feathers subsequently recovered. This species is not on the Staffordshire list.]

PINK-FOOTED GOOSE (*A. brachyrhynchus*).—An immature bird shot by Mr. G. H. Clarke on Norton Pool, now in the collection of Mr. Wilson, of Norton Canes. No date given.

BRENT GOOSE (*Bernicla brenta*).—A bird believed to be of this species seen on Norton Pool in January, 1908, by the Rev. C. R. Brain; five seen by Mr. G. H. Clarke at the same place on February 4th, 1910. Two previous records only.

BLACK BRENT GOOSE (*Bernicla brenta nigricans*).—Mr. J. H. Gurney has already recorded the occurrence of this bird on Mr. Coburn's authority in Norfolk (*cf. antea*, p. 27), and Mr. Coburn here gives further details. He says that since he has studied this bird in America, he has been able to identify one in the collection of Mr. W. L. Ward, shot on Gailey Pool on November 23rd, 1895, and the following in his own collection:—One shot at Earlswood (Warwickshire) on November 5th, 1897, one at King's Lynn (Norfolk) on February 14th, 1902, another on January 15th, 1907, and those already referred to on page 27.

Mr. Coburn says that he has collected very full material in America, and on this he bases the distinctions already pointed out (*antea*, p. 27). He does not agree with Mr. Alphéraky that the white on the neck *always* meets in front, while he adds that it very rarely meets at the back, of the neck. Mr. Coburn states that the white-bellied form (*B. b. glaucogaster*) is only the female of *B. b. brenta*; but this cannot be so unless a number of birds have been wrongly sexed. Measurements are given of a number of *B. b. nigricans*, showing that six adult males measured—Wing, 330–337 mm.; average, 330 (= 13 inches). Tarsus, 52–58 mm.; average, 55–56 (= 2·2 inches). Culmen, 35–39 mm.; average, 36 (= 1·4 inch). From which it would appear that there is not much difference in size between this and the typical form.

COMMON SHELD-DUCK (*Tadorna cornuta*).—A regular visitor to Norton Pool; twenty-five occurrences in the season of 1908–09 (F. Coburn).

GADWALL (*Anas strepera*).—One at Patshull, September 7th, 1905; another from October to December, 1908 (Hon. G. Legge). Only one previous record.

SHOVELER (*Spatula clypeata*).—In addition to the localities already given for the breeding of this species in Staffordshire (cf. Vol. II., p. 95 ; III., p. 58), Mr. Coburn states that it bred near Green Pit and at Plant Swag, Chasetown, in 1909 ; while the Hon. G. Legge records it as nesting regularly at Patshull.

PINTAIL (*Dafila acuta*).—Additional records are given by Messrs. Coburn and Wells Bladen.

POCHARD (*Fuligula ferina*).—Common winter visitor to Norton Pool (F. Coburn) ; also recorded from Patshull (Hon. G. Legge) and Birmingham district (Warwickshire).

TUFTED DUCK (*F. cristata*).—Breeds regularly at Patshull (Hon. G. Legge), Hilton Park (W. Wells Bladen), and probably Gailey Pool " this season " (F. Coburn).

SCAUP-DUCK (*F. marila*).—One at Patshull, October 26th, 1906 (Hon. G. Legge) ; fairly frequent visitor to Norton Pool (F. Coburn). Two records from Warwickshire (F. Coburn).

GOLDENEYE (*Clangula glaucion*).—Recorded from Patshull (Hon. G. Legge) ; frequent visitor to Norton Pool, etc. (F. Coburn).

LONG-TAILED DUCK (*Harelda glacialis*).—An immature female shot by G. H. Clarke on Norton Pool, November 18th, 1907. Another shot, but not preserved. Only one previous record.

COMMON SCOTER (*Ædemia nigra*).—Frequent visitor to Norton Pool (F. Coburn) ; recorded from Patshull, October 15th, 1905, and November, 1906 (Hon. G. Legge).

VELVET-SCOTER (*Æ. fusca*).—One seen on Norton Pool on April 10th, 1910, by Mr. Wilson ; one shot on Rotton Park Reservoir (Warwick), apparently the only record ; and one near Craven Arms (Salop) on December 12th, 1890 (F. Coburn).

RED-BREASTED MERGANSER (*Mergus serrator*).—Two shot on Norton Pool, March 2nd, 1904, by G. H. Clarke and two in Mr. Wilson's collection at Norton Canes, besides another shot and several seen ; also noted at Patshull. Only one previous definite record for Staffordshire. One seen and another shot in Warwickshire, where it is very scarce (F. Coburn).

SMEW (*M. albellus*).—Four additional records from Gailey and Norton Pools (F. Coburn).

[PALLAS'S SAND-GROUSE (*Syrrhaptus paradoxus*).—One believed to have been seen by the Rev. J. O. Coussmaker at Hamstall Ridware on December 18th, 1908.]

SPOTTED CRAKE (*Porzana maruetta*).—One shot on Cannock

Chase about five years ago (G. H. Clarke). Also said to have occurred in Warwick and Worcester.

RINGED PLOVER (*Ægialitis hiaticola*).—Regular and common visitor to Cannock Chase; also to the Birmingham district and Earlswood (Warwick) and Barnt Green, Worcestershire (F. Coburn).

GREY PLOVER (*Squatarola helvetica*).—Regular and fairly common visitor to the Cannock Chase district, and definitely recorded in 1908 and 1909 (G. H. Clarke). No previous authentic record.

TURNSTONE (*Streptilas interpres*).—Frequent autumn visitor to Norton Pool; many obtained by G. H. Clarke in August, 1904, August, 1907, and August 17th, 1908, etc. Only one previous indefinite record.

OYSTER-CATCHER (*Hæmatopus ostralegus*).—Common visitor to Norton Pool in August and September (F. Coburn); also recorded from Patshull (Hon. G. Legge).

DUNLIN (*Tringa alpina*).—Regular and sometimes abundant visitor to the Cannock Chase and Birmingham districts (Warwick) and Barnt Green, Worcestershire (F. Coburn).

LITTLE STINT (*T. minuta*).—"Almost a regular visitor, sometimes in considerable flocks, on the autumn and spring migrations, to Norton Pool." Many specimens secured by G. H. Clarke; one shot at Norton Pool, August 10th, 1904. Although a note appeared in the "Zoological Report" of the *North Staffordshire Field Club Report* for 1904-05 (p. 64) that three Little Stints were shot near Stafford, we are now informed that this was an error, and that the birds in question proved to be Dunlins (J. R. B. Masefield *in litt.*). This is therefore the first Staffordshire record; while the occurrence of one at Earlswood Lake seen by Mr. Coburn, appears to be the earliest notice from Warwickshire.

TEMMINCK'S STINT (*T. temmincki*).—One shot by G. H. Clarke several years ago and lost sight of, but re-discovered in a farmhouse at Wyrley: presumably shot at Norton Pool. This is the first Staffordshire record.

SANDERLING (*Calidris arenaria*).—Regular and fairly common visitor to Norton Pool in small flocks in autumn and spring. Three specimens in Mr. Coburn's possession, and several seen, mostly in May, of which details are given. Only three previously recorded.

RUFF (*Machetes pugnax*).—One at Norton Pool, July 10th, 1897 (G. H. Clarke). A Reeve also shot about forty years ago at Streetly. Only two previously recorded.

[GREATER YELLOWSHANK (*Totanus melanoleucus*).—On November 22nd, 1907, the keeper at Sutton Park (Warwick-

shire) noticed three strange birds which were very noisy and not particularly shy. One of these he shot and forwarded to the office of the *Birmingham Daily Mail* for Mr. Coburn to name. Subsequently the bird was purchased by Mr. Coburn, who was much surprised to find that "such an extraordinary rarity had been shot within about ten miles of the city of Birmingham." Mr. Coburn further states that he purposely delayed publishing his notes on the bird until a sufficient time had elapsed for the survivors to get safely out of the country! A doubtfully humane and certainly not scientific reason. Mr. Coburn thinks that the birds made a sort of grand tour, coming to England *via* Greenland and Iceland, looking in at Birmingham *en route*, and then, after making their way to the Land's End, taking passage across the Atlantic home again! Mr. Coburn points out also that he had in 1904 studied this species in central British Columbia, where he procured many specimens. Here we may perhaps be allowed to protest against this method of recording the presence of rare birds. Surely it would have been possible for Mr. Coburn to have submitted the specimen in the flesh to some qualified and disinterested ornithologist, who would be able to confirm his identification, even if he were unwilling to exhibit the specimen at one of the B.O.C. meetings, a usual procedure in the case of the capture of a rare species.]

GREEN SANDPIPER (*T. ochropus*).—A frequent visitor to Norton Pool (G. H. Clarke) and other parts of the district (F. Coburn).

[SPOTTED REDSHANK (*T. fuscus*).—Seen once in Warwickshire and once in Worcestershire, but no dates given (F. Coburn). This species is not recorded by R. F. Tomes.]

GREENSHANK (*T. canescens*).—A very frequent visitor, especially to Norton Pool; also recorded from Bloxwich and Stafford. Only once seen at Earlswood (Warwick).

CURLEW (*Numenius arquata*).—Common and regular visitor to Norton Pool; also to Barnt Green (Worcester), and less so to Earlswood (Warwick).

WHIMBREL (*N. phæopus*).—Common on migration at Norton Pool (G. H. Clarke); also frequent at Barnt Green (Worcester) and Earlswood (Warwick). Not recorded by R. F. Tomes for Warwick.

BLACK TERN (*Hydrochelidon nigra*).—One of the commonest of the Terns at Norton Pool, sometimes in great numbers; and also common at Earlswood (Warwick) and Barnt Green (Worcester). Most of the spring visitors are adult, while the

bulk of the autumn birds are immature. Also three seen at Stretton on May 6th (F. A. Monckton).

SANDWICH TERN (*Sterna cantiaca*).—[Three are said to have been seen in September, 1909, by Mr. G. H. Clarke on Norton Pool, but we do not consider the identification satisfactory.] Mr. Coburn states that he has seen it several times at Earlswood (Warwick) and that one was shot there (no date).

COMMON and ARCTIC TERNS (*S. fluviatilis* and *S. macrura*). Described as common and regular visitors to the pools and reservoirs in the district, including all three counties.

LESSER TERN (*S. minuta*).—Less common than the preceding species, but still frequent at Norton Pool.

COMMON GULL (*Larus canus*), HERRING-GULL (*L. argentatus*), LESSER BLACK-BACKED GULL (*L. fuscus*), GREAT BLACK-BACKED GULL (*L. marinus*) and KITTIWAKE (*Rissa tridactyla*) are all regarded as more or less frequent visitors to Norton Pool and other sheets of water in the district.

GREAT SKUA (*Megalestris catarrhactes*).—One shot by Messrs. Powell and Clarke on Norton Pool in September or October, 1896. The specimen was lost sight of, but recovered in a much-damaged condition. A most interesting piece of confirmatory evidence is furnished by Mr. L. Ward, who contributed some notes from a diary on the birds of Gailey Pool to the *Report of the N.S.F.C.* for 1905-06, p. 51. On September 7th, 1896, he noted a "large brown Gull," in all probability this same bird, at Gailey Pool. This species is new to the Staffordshire list. Another specimen was killed at Fillongley, near Coventry, Warwick, and brought to Mr. Coburn on September 7th, 1909. This species is not included in Mr. Tomes' list.

RICHARDSON'S SKUA (*Stercorarius crepidatus*). — One captured at Aldridge on September 2nd or 3rd, 1909, and another picked up at Ladywood, Birmingham, on October, 1891. The third Staffordshire and second Warwickshire records.

BUFFON'S SKUA (*S. parasiticus*).—One shot in Shenley Fields, Northfield, Worcester, on October 17th, 1886. Not mentioned in Mr. Tomes' list.

RAZORBILL (*Alca torda*).—One found dead at Harborne, July 25th, 1890. This locality is strictly in Warwickshire, where the bird has already been recorded, so that it cannot be regarded as an addition to the Staffordshire list.

GREAT NORTHERN DIVER (*Colymbus glacialis*).—Fairly common winter visitor to Norton Pool and the Birmingham district.

BLACK-THROATED DIVER (*C. arcticus*).—One shot on Norton Pool, December 7th, 1902, by Mr. G. H. Clarke; the second record for the county. Also one on March 5th, 1881, at Breedon Cross, and one shot on Lifford Reservoir (no date), both in Worcestershire. Not recorded for the latter county by Mr. Tomes.

SLAVONIAN GREBE (*Podiceps auritus*).—Two shot "about eight years ago" on Norton Pool by Mr. G. H. Clarke. Said to be a regular visitor on migration to Earlswood and Barnt Green (Warwick and Worcester); only one recent record for Staffordshire.

BLACK-NECKED GREBE (*P. nigricollis*).—An immature bird shot on September 20th, 1907, by Mr. G. H. Clarke at Norton Pool; two seen and one shot, September 28th, 1908; the latter was striped with white on the upper parts. Another shot at the same place on September 30th, 1909, and a fifth seen on October 21st, 1909. This species is new to the Staffordshire list. Mr. Coburn also states that he saw two birds at Earlswood (Warwick) on September 26th, 1908, evidently the same as those recorded above.

MANX SHEARWATER (*Puffinus anglorum*) and FORK-TAILED PETREL (*Oceanodroma leucorhoa*) are said to occur frequently at Norton Pool and also in Warwickshire, and the STORM-PETREL (*Procellaria pelagica*) has often been obtained near Birmingham (Warwick).

In conclusion, we note that Mr. Masefield regards ten species as new to the Staffordshire ornithology; but the evidence with regard to the Lesser White-fronted Goose and the Sandwich Tern we should regard as necessitating square brackets. The Spotted Redshank was *seen* by Mr. Coburn in Worcester and Warwick, but not in Staffordshire at all, and the locality given for the Razorbill is also in Warwickshire. The natural boundaries of our faunal areas are, of course, water-partings, and the limits of our counties are purely artificial, but to prevent duplication of records it is desirable that these limits should be respected, and if records from outside are admitted to a county-fauna the fact that the bird has been observed or obtained beyond the border cannot be too clearly pointed out. The only exception is perhaps in the case of a river-boundary, where the record can be claimed with equal right by both counties.



NOTES

RECOVERY OF MARKED BIRDS.

BLACKBIRDS (*Turdus merula*).—B.B., No. 6204, marked by Mr. R. Oswald Blyth at Skelmorlie, Ayrshire, on August 8th, 1909. Recovered at the same place on July 19th, 1910. The bird was caught in the same fruit-nets where it was captured and marked as an adult a year before.

B.B., No. 2049, marked by Mr. R. Oswald Blyth at Skelmorlie, Ayrshire, on June 6th, 1909. Recovered at the same place on August 8th, 1910. The bird was caught in the same fruit-nets where it was captured and marked as an adult a year before.

SONG-THRUSH (*Turdus musicus*).—B.B., No. 4998, marked by Mr. J. Steele Elliott at Dowles, Salop, on May 26th, 1910. Recovered at Bewdley, Worcestershire, on the 25th June, 1910. The bird was shot in a fruit-field, and was reported by Mr. R. Crump.

CUCKOO (*Cuculus canorus*).—B.B., No. 7152, marked by Mr. R. Oswald Blyth at Goathland, Yorkshire, on June 29th, 1910, as a nestling, in a Meadow-Pipit's nest. Recovered at Southend-on-Sea on August 2nd, 1910. The bird was caught in a cricket net, and kept by Mr. G. Larman, who reported the occurrence to me, until August 3rd, when the ring was replaced and the bird released.

WOODCOCK (*Scolopax rusticula*).—B.B., No. 334, marked by Mr. E. G. B. Meade-Waldo at Hever, Kent, on June 1st, 1909, as a nestling. Recovered in the same wood on January 6th, 1910. The bird was shot, and was kindly reported by Mr. Meade-Waldo.

GREAT BLACK-BACKED GULL (*Larus marinus*).—B.B., No. 518, marked by Lord William Percy at Monreith, Wigtownshire, on June 2nd, 1909, as a nestling. Recovered at Glenluce, Wigtownshire, on May 5th, 1910. The bird was shot, and was reported by Mr. D. J. Matthews-Frederick.

BLACK-HEADED GULLS (*Larus ridibundus*).—B.B., No. 8820, marked by Mr. J. S. T. Walton at Denton Fell, Cumber-

land, on May 22nd, 1910, as a nestling. Recovered at Carsethorn, Solway Firth, on July 18th, 1910. The bird was found by Mr. John Kirkpatrick caught in a fish-net, and drowned by the following tide.

B.B., No. 9591, marked by Major H. A. F. Magrath on Loch Spynie, near Elgin, on June 4th, 1910, as a nestling. Recovered at Cossiemouth on July 20th, 1910. The bird was reported by Mr. Brown.

B.B., No. 30732, marked by Messrs. Robinson & Smalley at Ravenglass, Cumberland, on June 13th, 1910, as a nestling. Recovered on the River Wyre, Lancashire, on July 18th, 1910. The bird was found disabled or diseased by Captain R. F. Rodger.

B.B., No. 30411, marked by Messrs. Robinson & Smalley at Ravenglass, Cumberland, on June 11th, 1910, as a nestling. Recovered at Maryport, Cumberland, on July 20th, 1910. The bird was killed by flying against the gate of a goods-yard. The recovery was reported to me by the Rev. C. T. Phillips.

B.B., No. 30843, marked by Messrs. Robinson & Smalley at Ravenglass, Cumberland, on June 13th, 1910, as a nestling. Recovered at Maryport, Cumberland, on July 30th, 1910. The bird was apparently unwell, and was caught by a dog. The recovery was reported by Mr. Joseph Henderson.

B.B., No. 31126, marked by Messrs. Robinson & Smalley at Ravenglass, Cumberland, on June 26th, 1910, as a nestling. Recovered at Thornton Hough, Chester, on July 21st, 1910. The bird was found dead on a lake, and reported by Mr. H. Whittle.

B.B., No. 31034, marked by Messrs. Robinson & Smalley at Ravenglass, Cumberland, on June 25th, 1910, as a nestling. Recovered at Bispham, near Blackpool, on August 8th, 1910. The bird was shot, and was reported by Mr. William Riding.

B.B., No. 30713, marked by Messrs. Robinson & Smalley at Ravenglass, Cumberland, on June 13th, 1910, as a nestling. Recovered (shot) on the River Usk at Newport, Mon., on August 15th, 1910. The recovery was reported by Mr. Rogers.

B.B., No. 9473, marked by Mr. J. Murray, near Durisdeer, Dumfriesshire, on June 29th, 1910. Recovered at Paisley (Glasgow), on August 1st, 1910. The bird was shot, and was reported by Mr. Hector Buchanan.

UNEQUAL WING-STROKES IN FLIGHT.

THE photographs here reproduced show that, when a Pigeon flies the two wings are not always in corresponding positions, but that they sometimes, for steering or balancing purposes, give unequal or different strokes.



FIG. 1.—PIGEON IN HURRIED FLIGHT SHOWING ONE WING RAISED AND THE OTHER LOWERED.

In Figure 1 the Pigeon is in very hurried flight. The right wing is raised and the left wing is lowered.

In Figure 2 the lower bird on the right is just starting to fly from the window-ledge.

Figure 3 Pigeon alighting; the left wing is higher than the right.

F. W. HEADLEY.



FIG. 2.—THE LOWER PIGEON ON THE RIGHT IS STARTING TO FLY AND SHOWS UNEQUAL POSITION OF THE WINGS.



FIG. 3.—PIGEON ALIGHTING. THE LEFT WING IS HIGHER THAN THE RIGHT.

BLACKBIRDS AND SONG-THRUSHES NESTING ON THE GROUND.

WITH regard to the notes on this subject (*antea*, pp. 74, 75), it is by no means unusual to come across instances of both Blackbirds and Song-Thrushes nesting on the bare ground among the moorlands of north Staffordshire. On the rough common they generally select a favourable site amidst the numerous heaps of quarry-stone, or beneath an overhanging ledge or rock, like the Ring-Ouzel.

More rarely, but not by any means unusually, they will be seen nesting far out on the open moor, sometimes at the base of a small fir tree. Where rushes abound, however, one finds many nests—some on the ground, others among the stems very low down—from early April onwards; they are mostly those of Blackbirds, and, being well hidden, are in many cases undisturbed. During the past spring alone, I saw five, all within fifty yards, in a very small rushy valley near my home at Whiston.

T. SMITH.

RING-OUZEL AND BLACKBIRD INTERBREEDING IN KENT.

ON page 77 of the last issue Mr. Farwig notes the occurrence of a Ring-Ouzel (*Turdus torquatus*) in Kent on June 7th, so

it may interest your readers to know that in *Cage Birds* of July 14th, 1910, Dr. A. G. Butler records a case of hybridism between this species and a Blackbird (*T. merula*) at Beckenham in Kent. On writing to Dr. Butler for further particulars he tells me that the Ring-Ouzel was the hen. The first nest was built some seven or eight feet from the ground, and five young (two cocks and three hens apparently) were reared. A second nest was built in a Dorothy Perkins rambler in June, 1910, and by the 6th July two young birds had left the nest. At this date the young of the first brood were still about the garden, and Dr. Butler describes their plumage as follows:—
 “One male bird had three white spots on each side of the lower throat, the chin and throat otherwise buff, and the breast still more or less spotted; the mantle showed strong indications of ashy edging to the feathers, giving a laced character to the plumage. The second male had no decided white on the lower throat, but a narrow crescent paler than the chin and upper throat. In the females the chin and throat were pale buff. Of course, as with all young Thrushes, the breast was more or less spotted.” It is most unfortunate that Dr. Butler did not procure one of these most interesting birds.

The Ring-Ouzel, according to Dr. Ticehurst, has only been known to nest in the county on three occasions, although it occurs regularly on migration, and has once been recorded as staying so late as June 21st. It may be noted that wild hybrids are most likely to occur when one of the species is on the edge of its breeding-range, and is therefore unable to find a mate of its own kind. Paget's Pochard, the hybrid between the White-eyed Duck and Pochard, has generally been taken under such conditions. J. LEWIS BONHOTE.

ROCK-THRUSH IN ORKNEY.

MR. W. EAGLE CLARKE records in the *Annals of Scottish Natural History* (1910, pp. 148-9) the occurrence of an adult male of the Rock-Thrush (*Monticola saxatilis*) at the Pentland Skerries lighthouse on May 17th, 1910. There is only one previous authentic record of this species in the British Isles, namely, the one shot on May 19th, 1843, in Hertfordshire. Probably both these occurrences were due to the birds getting out of their course during their spring-migration.

H. F. W.

UNUSUAL NESTING-SITES FOR THE GOLDCREST.

THE photograph on p. 46 of the current volume of *BRITISH BIRDS* suggests nothing unusual to me, though I have no doubt that in other parts of the country the site chosen may

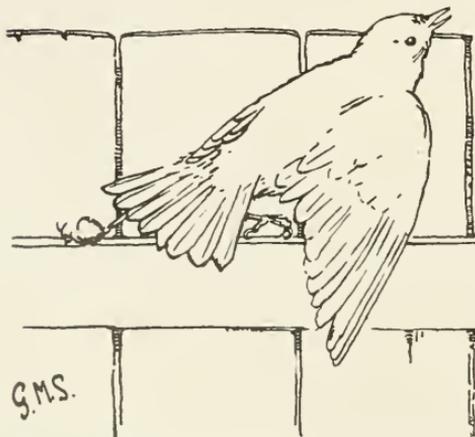
be unusual. Though I have found dozens of nests of the Goldencrest in Cornwall I have never yet seen one in the situations mentioned as usual in many bird-books, *e.g.*, in firs, pines and yews, though there are a good many of the two former in this neighbourhood (Penzance). I have, however, frequently found the nest in hawthorns, either in the bush itself or in honeysuckle growing over it. I can recollect at least six nests in such situations. Another common site is the side of an elm tree covered with ivy or honeysuckle, where I have found seven nests at least. I have also found the nest in an ash tree and several times in furze bushes. I was looking recently at three nests taken in this district—two were from furze bushes and had long prickles still attached to the outside of the nests, and the other was from a hawthorn.

A. W. H. HARVEY.

SOME years ago I saw a nest of the Golden-crested Wren in a very similar position to that photographed by your correspondent, Mr. H. E. Forrest. It was hidden in a long streamer of ivy which hung down from a crab tree over a pool of water in the middle of a covert. The nest was about five feet above the surface of the water, and the position was all the more remarkable as the covert was mostly composed of ash trees, with only a few spruce trees.

F. A. MONCKTON.

WILLOW-WREN FEIGNING INJURY.



DIAGRAMMATIC SKETCH OF THE ATTITUDE OF THE WILLOW-WREN FEIGNING INJURY.

On July 14th I came unexpectedly upon a Willow-Wren (*Phylloscopus trochilus*) with young, which were scarcely able to fly. The bird was evidently quite unprepared and much startled. To hold my attention while the young escaped, she flew on to some wooden palings and most realistically feigned injury. Standing on her right leg, she trailed the left

behind her. The right wing was allowed to hang open, as if the humerus were broken, and the tail-feathers were spread out. The feathers at the throat and rump were puffed out, the head thrown on one side and the bill slightly opened. The bird gave several curious squeaky little calls, which were quite unlike the Willow-Wren's plaintive notes of alarm. She allowed me to watch her movements from a distance of a few feet, and did not assume an ordinary attitude until the young birds had taken cover in a dense potato-patch. As soon as she judged the danger to be past, she flew off into a small fruit-tree near by, and called to them in the usual way.

C. KINGSLEY SIDDALL.

GRASSHOPPER-WARBLER IN CORNWALL.

As there seems to be some doubt as to the occurrence of the Grasshopper-Warbler (*Locustella naevia*) in west Cornwall, I write to say that it is a regular summer migrant to the Penzance district, being plentiful in suitable localities every year.

I have seen eggs taken in the district and found a nest containing five eggs near Marazion on June 30th, 1907. I have also obtained the bird.

A. W. H. HARVEY.

GOLDEN ORIOLE IN SUSSEX.

On May 14th, 1910, an example of the Golden Oriole (*Oriolus galbula*) was seen at Pett, and from the direction of the wind, and condition of bird (which had not the usual shy habits of the species), we concluded it had only just arrived. Keeping in the locality, it was observed on several dates until June 19th, when it was most unfortunately shot at Udimore, a village about five miles from Pett.

Mr. Bristow, of St. Leonards, had the bird for preservation, and it proved to be a male in fine condition.

H. W. FORD-LINDSAY.

GREAT TIT LAYING IN A HAWFINCH'S DESERTED NEST.

ABOUT May 10th, 1910, I found a newly-built nest of the Hawfinch (*Coccothraustes vulgaris*) in a plane tree about thirty feet from the ground, near Maidenhead, Berkshire.

The nest was lined and appeared ready for eggs. A week later (May 17th) the Hawfinches were *not* at the nest (the weather had been wet and stormy). On that day I found another Hawfinch's nest with five fresh eggs two hundred yards away, built in a similar tree, very well hidden at the end of a lateral branch (the usual situation here). I believe this nest was made by the same birds.

On May 21st I was passing the old nest when my attention was drawn to a pair of Great Tits (*Parus major*) hovering round the nest, which was close to a well-frequented path. I climbed up and found that the Tits had added a good thick lining of moss, fine grass and felted rabbits' fur and a little horse-hair to the nest, and laid therein eight perfectly fresh eggs. There are very few hollow trees or holes suitable for tits in this particular locality, and the Great Tit is quite abundant.

I have found the Crested Tit building in old Kites' nests in the pine-forests of south Spain. I have also found Great Tits' eggs in Robins' nests, and once found an odd egg of a tit of some kind in a Thrush's open nest, but this is the first time I have found the Great Tit building in a perfectly open nest high up from the ground, and had I not watched the birds I should never have suspected such a thing.

The Hawfinches round this district seem frequently to build one or more nests and not use them; perhaps others have noticed this.

F. W. PROCTOR.

[In default of suitable nest-holes, it is not uncommon to find both Great and Blue Tits nesting inside open nests of other birds. I find notes of nests of the former species built inside nests of Song-Thrush, Blackbird and Hedge-Sparrow, while the Blue Tit has been found building inside nests of Song-Thrush, Blackbird, Hedge-Sparrow and Greenfinch. Both species also breed not infrequently in the foundations of large nests, such as those of the Rook, Magpie, Sparrow-Hawk and squirrel. I am not aware that there is any previous notice of a Great Tit breeding in a Hawfinch's nest. A good photograph of a Great Tit's nest inside that of a Song-Thrush will be found in Nelson's *Birds of Yorkshire*, I., p. 110.—F.C.R.J.]

SPOTTED FLYCATCHER BUILDING IN OLD NESTS.

INSTANCES have already been recorded of the Spotted Flycatcher (*Muscicapa grisola*) using old nests of the Greenfinch and Swallow for nesting-purposes (*Field*, 1897, pp. 222 and 307); but in both these cases no building-material was added.

It may therefore be worth recording that on July 14th, 1910, while examining some Swallows' nests on the horizontal beams of an old barn I was surprised to find three young Spotted Flycatchers occupying one of the old nests; on July 17th, the young having flown, I examined this carefully, and found quite a large quantity of fresh moss had been added, together with a little hay and wool and some feathers as lining.

On the same date I found, in some ivy covering a railway-bridge, a second nest which had as its foundation an old Song-Thrush's nest, the cup of which was filled up with a large stone; in this case the Flycatcher's nest was quite complete and of the ordinary type and materials, simply resting on the Thrush's nest.

A. G. LEIGH.

[Instances of the Spotted Flycatcher utilising old nests of other species for nesting-purposes are very numerous, but in most cases some building-material is added. Among those species whose nests have been utilised we may mention: Song-Thrush, Blackbird, Mistle-Thrush, Greenfinch, Goldfinch, Hawfinch (on at least two occasions), Chaffinch and Swallow. Even in ordinary nests the amount of material used varies greatly, and one nest in a hollow behind the hinge of a stable-door consisted merely of a few tiny fragments of moss round the edge.—F.C.R.J.]

CROSSBILLS NESTING.

PROBABLE NESTING IN LINCOLNSHIRE.

THE Crossbills reported as seen by me in the Hartsholme Woods, near Lincoln (Vol. III., p. 410), appear to have remained in the district throughout June, 1910, though none seem to have been noticed during July. I have been hoping to get proof of the species having nested, as I know of no records of the finding of a nest in the county. A keeper to whom I pointed out the birds, and who has been observing them since last April, tells me that in May he watched a Crossbill gathering dry grass from the roadside and flying with it into the thick fir woods. It is, therefore, practically certain that the species has nested in these woods this year, though further proof is perhaps desirable.

F. L. BLATHWAYT.

IN SOMERSET.

A NEST and four eggs are reported by Mr. W. J. Kempe (*Field*, 4. vi. 10, p. 994) to have been found in a larch plantation in the village of Long Ashton, near Bristol, Somerset, on April 28th, 1910.

CROSSBILL IRRUPTION.

SCOTLAND.—In March and April, 1910, there was a marked increase of Crossbills in the neighbourhood of Meikleour (Perthshire), although Crossbills [probably of the Scottish race] are generally present there (Duchess of Bedford, *Ann. S.N.H.*, 1910, p. 181). A party of seven seen on December 15th, 1909, in the Sinclair Hills (north-east coast) (W. Stewart-Menzies, *t.c.*, p. 182).

INCREASE OF THE STARLING IN CORNWALL.

THE Starling (*Sturnus vulgaris*) has been increasing in the Penzance district for many years, though, contrary to what I have seen stated, it bred here at least fifteen years ago, and has done so in increasing numbers ever since.

This year there have been many nests in the town itself, and its habit of blocking up water-pipes will doubtless soon make it what Carew terms "an over-familiar harm."

A. W. H. HARVEY.

ROUGH-LEGGED BUZZARDS IN SUSSEX AND BERKSHIRE.

ON March 20th, 1910, while walking on the downs between Falmer and Lewes with my two daughters and my friend Captain Copp, I saw a Rough-legged Buzzard (*Buteo lagopus*) circling round; after observing it for some time it settled in some high thorn bushes about two or three hundred yards from where we were standing. On getting up again it was joined by a second bird, which, after circling round with the original bird for a very short time, flew away in the direction of Stanmer Park. The first, after flying round again, settled on a small tree farther away than its first resting-place. I was particularly struck by the first bird's extremely white head; it was, I think, a female, as the second bird seemed slightly smaller. This bird was observed by several people during a long stay—some weeks, I believe, but I cannot find anyone who saw the two, except my own party. I went over the same ground five or six times within a short time, but saw nothing of the birds. Curiously enough, on going down to examine the ground over which the birds had been flying I found a breast-feather, and exactly a month later, about a couple of miles from the original place, I picked up a second feather, apparently recently dropped. I did not report the appearance of these birds at the time, as I thought there might be a very remote chance of their staying to breed. It seems curious

that the bird should have continued to remain in one place, as it undoubtedly did, for some weeks during its breeding-season, and on one occasion at least had a mate with it. I may add that it was seen both before and after I saw it.

HERBERT LANGTON.

ON August 1st, 1910, I had a very clear view of a Rough-legged Buzzard at Beenham near Reading. Judging by its light colour I should presume it was an old bird. This seems an unusually early date for the appearance of this species. I have seen the Rough-legged Buzzard before in Berkshire: at Bradfield on October 19th, 1898, and a Buzzard, probably of this species, on July 27th, 1908.

NORMAN H. JOY.

[The birds reported by Mr. Langton do not appear to have been present during their breeding-season, which begins in the second half of May and early June.—EDS.]

KESTREL NESTING NEAR LONDON.

IT may be of interest to put on record that at "The Cedars," Lee, S.E., an estate only five miles from London Bridge, a pair of Kestrels (*Falco tinnunculus*) and a pair of Carrion-Crows (*Corvus corone*), this year (1910), nested and successfully brought off their young. Kestrels and Carrion-Crows are to be seen at "The Cedars" every year, but I never located their nests before.

JOS. F. GREEN.

INCREASE OF THE TUFTED DUCK IN CHESHIRE.

THE Tufted Duck (*Fuligula cristata*) is annually extending its breeding-range in Cheshire. Three or four pairs have frequented Radnor all spring, and though the best efforts of Mr. F. S. Graves and myself to find a nest have been unsuccessful, a brood of eight are on the mere at the present time (July, 1910), in charge of an exceedingly watchful mother. It is very interesting to observe the restless activity of the youngsters; they are constantly diving and splashing.

M. V. WENNER.

GREEN SANDPIPERS IN BERKSHIRE AND DERBYSHIRE.

ON July 24th, 1910, I flushed a Green Sandpiper (*Totanus ochropus*) from a ditch by the River Pang at Bradfield. The chief interest in this record is the unusually early date. One or two Green Sandpipers have haunted this part of the Pang throughout the last few winters.

NORMAN H. JOY.

A SINGLE Green Sandpiper was put up by me from the banks of the River Dove between Rocester and Norbury, Derbyshire, on July 12th, 1910. This is not, however, the earliest date on which I have seen this species in the district, for on July 10th, 1908, I flushed another from the side of one of the ponds at Osmaston Manor. There seems to be little doubt that, as in the case of many other waders, these stragglers are non-breeding birds.

F. C. R. JOURDAIN.

A NEW NESTING-COLONY OF BLACK-HEADED GULLS IN MONTGOMERYSHIRE.

WHEN my *Vertebrate Fauna of North Wales* was issued, no breeding-place of *Larus ridibundus* was known to exist in the county of Montgomery. I have just learnt, however, from my friend Mr. Vincent P. Lort, that quite recently a breeding-colony has come into existence by the lakes at Llanllugan—a remote spot amongst the hills. Up to this time the Black-headed Gull had only been known there as a casual visitor in stormy weather. If unmolested, this new colony will doubtless rapidly increase.

H. E. FORREST.

ON THE FOOD OF THE HERRING-GULL.

ON July 23rd and 25th, 1910, I crossed a patch of marsh where a large stand of Herring-Gulls (*Larus argentatus*) had been resting and found that their *excreta* and disgorgements consisted entirely of the shells of immature mussels, although I do not think for a moment that this food is their usual diet for the greater part of the year, but that it varies with the season, as I hope to show later when I have more fully investigated the subject.

H. W. ROBINSON.

UNUSUAL SITUATION FOR A LITTLE GREBE'S NEST.

THE photograph here reproduced of the nest of a Little Grebe (*Podiceps fluviatilis*) is interesting on account of the unusual situation of the nest. The photograph was taken on May 8th, 1910, at Radnor Mere, Cheshire, and shows the nest moored to some sticks rising from the bottom of the lake just inside the entrance to a little-used boathouse. Curiously enough, the only other Dabchick's nest containing eggs on the mere at the same time was in a similar situation—inside another boathouse. The former nest was subsequently destroyed owing to the boat being taken out, but no such misfortune overtook the latter, and the eggs were safely hatched.

M. V. WENNER.



NEST OF A LITTLE GREBE IN A BOAT-HOUSE ON RADNOR MERE.

RED-SPOTTED BLUETHROAT IN THE CLYDE AREA.—On May 14th, 1910, Mr. G. Stout saw a specimen of *Cyanecula succica* near Carmyle in the Clyde valley (*Ann. S.N.H.*, 1910, p. 182). Mr. Stout is perfectly familiar with the bird through his work on Fair Isle. This is said to be an addition to the birds of the Clyde area and the second spring record for the Scottish mainland.

LESSER WHITETHROAT IN THE CLYDE AREA.—On May 20th, 1910, Mr. G. Stout saw an example of *Sylvia curruca* near Rouken Glen (*Ann. S.N.H.*, 1910, p. 183).

A PEEBLESSHIRE CHOUGH.—Mr. W. Evans writes to the *Annals of Scottish Natural History* (1910, p. 181) that he has a specimen of *Pyrrhocorax graculus*, said to have been shot near West Linton about 1872.

GREAT SPOTTED WOODPECKERS IN SCOTLAND.—The following occurrences of *Dendrocopus major*, of which form is not stated, are recorded in the *Annals of Scottish Natural History*, 1910:—One December 15th, 1909, Sinclair Hills (north-east coast) (p. 182); an adult male on June 25th, 1910, in the Dunkeld district (Perthshire) (p. 183); one, from the middle of March to May at Brora (Sutherland) (p. 183).

SUPPOSED BEE-EATER IN NORFOLK.—In the *Field* (28.v.1910, p. 949) there was a note from Captain S. E. Hollond concerning a bird which he and some friends had watched on May 13th, 1910, at Mundesley, Norfolk (*cf. Field*, 18.vi.1910, p. 1098). An editorial appended to the note pronounced that it was “evident” from Captain Hollond’s description and a sketch which he had provided, that the bird was “a Bee-eater, *M. apiaster*.” As the only description of the bird given in the note was to the effect that it “had no yellow at all and no red,” I did not feel satisfied with the identification, and wrote to Captain Hollond for further particulars. These he has most kindly supplied as fully as he is able, and has also sent me his original sketch, from which it is at once evident that the bird was *not* an example of *Merops apiaster*, since the whole of the upper parts of the bird are marked as being green, with the exception of the crown, which is marked “dark blue.” From the sketch and Captain Hollond’s description of the bird’s habits—“The flight was hawk-like; the wings were narrow. The bird took short flights, generally returning to the same tree”—it appears to have been a Bee-eater of some kind, and the colouring noted on the sketch fits that of *Merops persicus* very nearly, while the fact that “under the wings in flight could be seen rich chestnut,” also points to the possibility that this was the species. I have sent skins of *Merops apiaster* and *M. persicus* to Captain Hollond, who writes me that “the bird was certainly *not Merops apiaster*,” and that it was much like *M. persicus*, but appeared to differ in several details. It is impossible to say what the bird really was, and I have discussed the subject in detail only to show that this cannot be accepted as a record of the occurrence of *Merops apiaster* in Norfolk.—H.F.W.

AMERICAN YELLOW-BILLED CUCKOO IN ARGYLLSHIRE.—Mr. H. S. Gladstone records (*Ann. S.N.H.*, 1910, p. 184) that a specimen of *Coccyzus americanus* was found near the centre of the island of Colonsay on November 6th, 1904, and is now in the British Museum (Nat. Hist.).

LITTLE BITTERN IN CORNWALL.—Mr. H. J. Welch records in the *Field* (23.vii.1910, p. 200) that he has a male adult specimen of *Ardeetta minuta* which was caught by a dog near Land’s End in April, 1910.

EIDER DUCKS IN THE CLYDE AREA.—Mr. J. A. Harvie-Brown notes (*Ann. S.N.H.*, 1910, p. 183) the extension of *Somateria mollissima* to Loch Fyne, where several were observed in the winter of 1909 and spring of 1910, and remarks on the southward extension of this species.



LETTERS



To the Editors of BRITISH BIRDS.

THE BRITISH BIRD BOOK.

SIRS,—I ask you to permit me to point out that one of the comments in the review on the above work, published in the last number of BRITISH BIRDS, is worded in such a way as to mislead your readers as to the actual facts. It is with the facts, and not with your reviewer's opinions, that I beg leave here to deal.

I refer to the statement that the information given in the "Classified Notes" that appear at the head of the chapters in the *British Bird Book* "is not so detailed as, for instance, in so compressed a work as Saunders' *Manual*." Anyone who examines the "Classified Notes" will, in the first place, find that, though as much, if not more compressed, than the chapters in the *Manual*, they give more information, especially in respect to migration and nesting habits. It is true that less detailed information is given about distribution; but your reviewer omits to mention that in the preface I state that "a detailed account of the geographical distribution of our birds lies outside the scope of the work, which professes to deal comprehensively only with their habits." The reviewer says, further, that the descriptions of the species "seem" too meagre, but again he omits to mention that these descriptions, unlike those of Howard Saunders, are supplemented by coloured plates, and makes no comment upon the method adopted in the *British Bird Book*, but not by H. Saunders, of giving prominence to the most characteristic external features of each species. Some of the descriptions are and will be more detailed than those in the *Manual*. Again, mention of the migration notes is entirely omitted. I content myself with inviting your readers to compare these with what is said on the same subject by H. Saunders. The reviewer again omits to point out that the notes on nests and eggs contain in a systematic form information which is not given in the *Manual*, and which no one has ever attempted to collate in this systematic way before.

Turning to the only other point I have space to deal with, I wish to state that the nomenclature was in the very efficient hands of Mr. F. C. R. Jourdain, who, it is fair to add, has not been able to go as far as he could have wished. Whether it would have been wiser to go further is a question about which the highest authorities in this country would differ. In answer to the reviewer's detailed comments I beg to point out that in every case where the British form differs in the least from the typical race, the name of our local sub-species is given in the Classified

Notes, usually under the head of distribution. The amount of emphasis to be given to sub-specific distinctions is, of course, a matter of opinion, with which I am not here concerned. Descriptions of rare sub-species will be found in the Rare Bird section.

F. B. KIRKMAN,
Editor of the *British Bird Book*.

Letchworth, Herts.
August 9th, 1910.

[Mr. Kirkman's claim that the "Classified Notes" in the *British Bird Book* are as much or more compressed yet contain more information than the chapters in Saunders' well-known *Manual* is indeed a bold one. My comparison was made to give the reader an idea of the scope of this part of the new work and the amount of detail likely to be found there, and on re-examination I think my statement is perfectly fair and correct. I did not intend that the comparison should be taken as meaning that in every particular there was less detail nor that the information was the same. The comparison was instituted as a criticism of the plan of the book, and Mr. Kirkman's claim of compression is in reality an admission of the whole point of my criticism. The need for compression in a single small volume like the *Manual* is at once apparent, but why compress and thus sacrifice detail in a large work of this kind? Mr. Kirkman's claim astonishes me. If space was needed, a title of that occupied by irrelevant discussions in large type in the Finch chapter would have provided sufficient.

With regard to the question of nomenclature, had Mr. Jourdain been allowed "to go as far as he could have wished" in the matter of trinomials, I am sure that I should have had no complaint to make because Mr. Jourdain is in perfect agreement with me as to the importance of the full recognition of geographical forms and the necessity of their separate treatment. We cannot, however, expect too much, and perhaps we should be thankful that Mr. Jourdain has, at all events, been allowed to go so far as he has.—H.F.W.]

BRITISH BIRDS

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ASSISTED BY

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NOTES ON VARIOUS SPECIES OF BRITISH BIRDS

(From Part VI. of the *Vögel d. pal. Fauna*.)

BY

ERNST HARTERT.

THE CORRECT NAME OF WHITE'S THRUSH.

INSTEAD of under the "familiar" name *Turdus varius*, White's Thrush appears on p. 642 of my *Vögel der Paläarktischen Fauna* as *Turdus dauma aureus*. My

British friends are horrified, because they are, in opposition to the ancient Gauls whom Cæsar described as "*rerum novarum cupidi*," somewhat too conservative, at any rate in matters of nomenclature. Let us see why this change of a name has been made. Holandre described the bird distinctly in 1825 (*Annuaire de la Moselle*, p. 60) as *Turdus aureus*, while Pallas' name appeared in the *Zoogr. Rosso-Asiat.*, I, p. 449, a work which was not issued before 1827, although most examples bear on the title-page the date 1811, and some writers quote it as 1831, a date which is found on the title-page of some copies. The correct date should be 1827 (see *Vög. pal. Fauna*, I, p. 277, footnote, and K. E. v. Baer, *Berichte über die Zoogr. Rosso-Asiat.*, 1831, pp. 16, 22, 23). Therefore the name *aureus* appeared before that of *varius*, and this bird, being a very closely allied sub-species of *T. dauma*, the correct name is *T. dauma aureus*. But the question now arises: will British Ornithologists allow their attachment to old friends to be their guiding rule in nomenclature, instead of the laws and rules adopted by Zoologists generally? Will they follow in the footsteps of the Ornithologists of a generation ago, who did what I do now—*i.e.*, accept the name *aureus* instead of *varius*, as Newton, Tweeddale, Dresser, Seebohm, Sharpe and others accepted *varius* instead of *Whitei*, which was formerly the "familiar" name used by Eyton, Gould, Blasius, Yarrell, Temminck, Schlegel, Gray, Naumann and others, or will they consider their present convenience instead of that of future generations and continue to call the bird *Turdus varius*? Let us wait and see!

THE PROPER NAME OF THE SONG-THRUSH AND RED-WING.

Linnæus (*Syst. Nat. Ed.*, X, 1758, p. 169) described the Redwing under the name of *Turdus musicus*. The diagnosis "*alis subtus ferrugineis, linea superc. albicante*" is clearly that of the Redwing. Therefore the Redwing should be called *Turdus musicus*. The name *Turdus*

iliacus of 1758, on the other hand, is not available, because under that heading appears a mixture of descriptions of the Song-Thrush, Redwing and Mistle-Thrush, while in 1766 the name *iliacus* was transferred to the species formerly named *T. musicus*. The Song-Thrush was described by Brehm in 1831 as *Turdus philomelos*, and therefore it must henceforth be called by that name. The British form of the Song-Thrush, which is darker and more olive-coloured, as acknowledged (*in litt.*) by many of my friends and correspondents, such as Messrs. Eagle-Clarke, Bonhote and Drs. N. F. and C. B. Ticehurst, was described by me as *Turdus philomelos clarkei* (see *Vög. pal. Fauna*, p. 651).

ON THE BLACK-THROATED AND EARED WHEATEARS.

These two birds, generally known as *Saxicola stapanina* and *S. aurita*, are one and the same species, but the male appears in two forms, one with a black, the other with a whitish throat, and the females, too, have sometimes blackish, sometimes white throats. Pastor Kleinschmidt was the first recent author who threw out a hint that they might be one species, and the interesting observations by Dr. Schiebel and Herr Reiser in south-eastern Europe have shown that the two supposed species do not differ in any way in their habits or in their nests and eggs, and have left hardly any doubt that they are one and the same bird, especially as black-throated males do not always pair with dark-throated females and *vice versa*.

An unbiassed and careful study of a large series of skins, and last, but not least, my own personal observations in company with the Hon. W. Rothschild in Algeria, have confirmed Pastor Kleinschmidt's suspicion, and the observations of Messrs. Schiebel and Reiser.

This dimorphic plumage is found alike in the western form, *S. hispanica hispanica*, and in the eastern subspecies, *S. hispanica xanthomelaena*. Neither the name *S. stapanina*, nor that of *S. aurita* need henceforth be used

for this species, for Linnæus named it "*Motacilla hispanica*" in the *Syst. Nat.*, Ed. X, p. 186. His description is solely based on Edwards (*Orn. nov.*, I, Pl. 31 and letterpress), who figured and described a black-throated and a white-throated male. Although rightly believing them to be specifically identical, he erroneously described them as male and female.

A similar dimorphism occurs in *Saxicola pleschanka*, the white-throated form of which has been described as a different species under the name of *S. vittata*. On October 19th, 1909, this bird was added to the British list. (*Cf. antea*, Vol. III., p. 296.)

THE NAME OF THE BLACK REDSTART.

The Black Redstart is now generally known as *Ruticilla tithys*, but its correct name is *Phoenicurus ochruros gibraltariensis*. The description of *Motacilla titys* (Linnæus, *Syst. Nat.*, Ed. X, p. 187) is that of a female of *Phoenicurus phoenicurus*, the Common Redstart. Not only is this evident when one carefully peruses the diagnosis, but in Ed. XII (1766) Linnæus himself says that his *titys* is the female of the Common Redstart.

It is, therefore, an impossible and unscientific proceeding to retain the name *titys*, and it must be replaced by the next oldest name, which is *gibraltariensis* Gmelin, 1789. Seebohm (*Catalogue Birds Br. Mus.*, V, p. 339) accepted Scopoli's name *tithys* of 1769, but this proceeding is of course quite unjustifiable, as the name had already been used by Linnæus in another sense, although Saunders and others have adopted Seebohm's nomenclature.

Unfortunately, this is not all, but as our Black Redstart is a sub-species of the Caucasian form, which was already named *Motacilla ochruros* in 1774, our bird becomes *Phoenicurus ochruros gibraltariensis*.

With regard to the generic name, it is known, and now generally accepted, that *Phoenicurus* antedates *Ruticilla*.

It is most regrettable that the wrong name, *titys* (occasionally spelt *tithys*, *tytis*, *tythis*, *titis*, *thytis*, *thitis*, *tites* !) has been used so long. The reason must have been either that nobody carefully read Linnæus' descriptions of 1758 and 1766, or was familiar with the plumages of female Common Redstarts.

THE WRENS OF THE BRITISH ISLES.

Much discrepancy has recently existed in the writings of various authors concerning the generic name of the European Wrens; the term *Troglodytes* having been restricted to a group of American Wrens with rather longer bills and tails, while the European (and some American) Wrens, which had been erroneously called *Anorthura* by Sharpe, were baptized *Olbiorchilus* by Mr. Oberholser, until Professor Lönnberg found out that they had already received the name *Nannus* from Billberg. All this trouble is, in my opinion, unnecessary, because the generic separation of *Troglodytes* and *Nannus* rests on such slight grounds, that the two supposed genera are much better united, and in that case *Troglodytes* remains as the oldest name of the genus.

Studying the Wrens inhabiting the British Isles I came to the following conclusions :

Specimens from England, Scotland and Ireland are alike and cannot be separated from the continental form.

The Wrens from the Shetland Islands are very different, being very much larger, and therefore much nearer to the forms inhabiting St. Kilda, the Færöes, and Iceland. The bill is as long as in *T. troglodytes islandicus*, the culmen measuring 15-16 mm., but the wing is shorter; those of three males measuring only 52-53·3 mm., that of a female 48·1 mm., against a wing of 57·5 to 61 mm. in *T. t. islandicus*. The colour of the upper-side, especially of the head and wings, is darker than in *T. t. borealis* (from the Færöes) and in *T. t. islandicus*, and the under-

side is also slightly darker. From *T. t. borealis* they also differ by their much larger bills, and from *T. t. hirtensis* in the darker colour of their plumage, especially on the under surface.

I have, therefore, named this very distinct form *Troglodytes troglodytes zetlandicus* on p. 777 of my book. The specimens which I examined, including the type, are in the Royal Scottish Museum in Edinburgh.

The Wrens from the Hebrides and from Fair Isle have been a great puzzle to me. They stand between *T. t. troglodytes*, the common British Wren, and *T. t. zetlandicus*, and some seem to me to be indistinguishable from some *T. t. borealis*. The individual variation being rather great, and the specimens which I have been able to examine not very numerous, I have deferred judgment about this form, hoping that I or someone else may in future be able to study a better series. It must also be remembered, that it is quite possible that in autumn single specimens may be blown southwards from one island to another, and, therefore, a series obtained in the breeding-season should be examined.

I may here remark that there does not appear to exist an adequate series of *T. t. hirtensis* in any museum, while series of eggs are to be found in many collections, and clutches are constantly offered for sale in dealers' shops and figure in many of Stevens' sale lists. We are now sufficiently aware that the eggs from St. Kilda are larger, and nothing is gained by the collecting of larger series of clutches, while the few skins in museums are mostly from spirits, and a good description can hardly be made from them. I have only been able to measure three adult birds in fairly good condition.

THE BRITISH DIPPERS.

The British, and especially Irish, Dippers have often puzzled ornithologists. Dresser, in 1874, said that he had not been able to examine an English-killed specimen of the Scandinavian form (which he called *C. melano-*

gaster), while he referred a bird from Ireland to the latter, because it "agrees closely with specimens from Sweden."

In 1881 Sharpe cautioned his readers against the above statement, declaring that "the specimens" (Dresser mentioned only one!) referred to by Mr. Dresser were only young birds of the year of the ordinary *C. aquaticus* after their first moult, at which time they were hardly distinguishable from *C. cinclus* (the Scandinavian form).

Sharpe's view was repeated and generalized by Seebohm two years later. The same author then added that birds from the Peak of Derbyshire, 1,500 feet above the sea, were darker than those which are found lower down the valleys, a statement afterwards repeated by various authors, among others by Saunders, who makes a similar observation with regard to the Dippers in the Pyrenees.

Sharpe, in 1894, called the British Dippers *Cinclus aquaticus*, and admitted *C. cinclus* from Scandinavia as a visitor to the eastern counties of England. In 1902 Tschusi separated the British Dipper as *C. c. britannicus*.

I have tried to examine as many British Dippers as possible and have come to the following conclusions:—

Dresser, in 1874, was nearest to the truth, when he considered the Irish Dipper to be different from those of England and Scotland. Sharpe, on the other hand, had apparently not seen the specimen on which Dresser based his statement, for young British Dippers do not look like adult birds of the Irish form.

Seebohm's statement, that birds from the Peak of Derbyshire were different from those of lower altitudes, and more like Swedish ones, was apparently based on the comparison of one or two specimens and generalized without any reason whatever. Saunders' assertions, that Pyrenean birds from higher elevations differed from those of the valleys, and that the Pyrenean form is like the Norwegian one, are not quite correct; it is true that the Pyrenean Dipper differs from that of Spain, but all Pyrenean birds, as far as I have been able to ascertain, belong to a distinct race, *C. cinclus pyrenaicus* of Dresser,

while those of Spain are almost exactly like the German *C. c. aquaticus*, but up to the present the material from the Iberian Peninsula has been inadequate for purposes of comparison.

Irish Dippers, as I have said before, differ from English and Scotch ones. They have wider black borders to the feathers of the upper-side than *C. c. cinclus* and *C. c. britannicus*, so that the back appears almost uniform black in freshly moulted examples, and the rufous pectoral area is more restricted than in *C. c. britannicus*, but wider than in typical *C. c. cinclus* from Scandinavia. I have been able to compare six Irish Dippers, which were all distinguishable from twenty-three out of twenty-four from Great Britain. Only one, a skin from Tillicoultry, in Scotland, agreed with the Irish Dippers in the black upper surface. Adding to my observations Dresser's observation of 1874, I considered that I had sufficient reason to separate this form, and I named it *Cinclus cinclus hibernicus* on page 790 of my book.

THE GENERIC NAMES OF OUR SWALLOWS.

The nomenclature of the Swallows has been subjected to most extraordinary treatment, the name of *Chelidon* Forster, 1817, having been disregarded and *Chelidon* Boie, 1822, which was based on no better grounds and not diagnosed, accepted—*Chelidon* Forster being the generic name for the British Swallow, *Chelidon* Boie that for the House-Martin. But to make things still worse, *Riparia* Forster (also 1817) has been accepted for the Sand-Martins. It stands to reason that, if one of Forster's names is valid, the other must be equally so, and the case is really very simple; Linnæus and subsequent authors called all Swallows *Hirundo* and included the Swifts, but Forster, in 1817, divided them into *Chelidon (rustica)*, *Hirundo (urbica)* and *Riparia (riparia)*, each of these genera being monotypic. This nomenclature must be accepted and supersedes all subsequent alterations and shiftings of names.

ON INCUBATION.

BY

ERIC B. DUNLOP.

THE majority of British birds do not commence to incubate their eggs until the complement has been deposited. This is obviously to their advantage, in most cases, for if the powers of progression varied to any great extent in nestlings of the same brood, the work of the parents in tending and feeding them would certainly be greatly increased.

For instance, take the case of the smaller *Nidicolæ*. Many enemies are ready to destroy them as soon as they quit the nest ; the adult birds are taxed to the uttermost to keep the young out of danger, but in spite of their efforts numbers of nestlings do fall a prey to ever-watchful carnivorous birds and beasts. Now, if there were four or five days' difference in the age of the oldest and youngest nestlings, there can be no question that the difficulty of the parent birds' task would be enormously increased, for a few days make a great difference to the powers of flight of a young bird, and to keep all their offspring under control would be beyond the powers of the parents.

Similarly, in the case of the *Nidifugæ* the dangers would be greatly increased without any advantage accruing. Take, for instance, the Partridge (*P. cinerea*). Although the male is a careful parent, very few of the young would reach maturity if the hatching-period extended over a fortnight or three weeks ; for upon the brood being threatened by danger their powers of escape would be so varied that several of the young would be inevitably lost. The *Anatidæ* would suffer yet more severely, for in most cases the drake does not assist the duck to rear the young.

It is thus evident that in most instances it is to the benefit of the species that the full clutch should be deposited before incubation commences. However, even in those

species which normally lay the full clutch before commencing to incubate we occasionally find individuals that prove the exception to the rule. Also there are a few species which habitually commence incubation with the laying of the first egg. In these cases there is always some factor which causes the habit to be beneficial to the species, any disadvantages being outweighed. It is with the latter class that this paper chiefly deals.

It may be well to give a few examples of the more general type (*i.e.*, in which incubation commences with the laying of the last egg) for the sake of comparison with those species which commence to incubate as soon as the first egg has been laid.

A Jackdaw (*C. monedula*) laid five eggs, the last on April 26th; on that date incubation commenced. Four eggs hatched on May 14th; the fifth was not fertile.

A Song-Thrush (*T. musicus*) which laid four eggs on consecutive days, the last on April 18th; commenced incubation on that date. All four eggs hatched on May 2nd.

A Dipper (*C. aquaticus*) laid five eggs on consecutive days, the last on April 30th, when incubation commenced. On May 16th four of the eggs hatched, the fifth proving to be infertile.

The three foregoing cases are typical of their kind.

The following observations made on the nesting of a Great Tit (*P. major*) are exceptional:—The nest was found on May 23rd. It contained seven eggs. The bird laid regularly one egg a day until she had the large clutch of thirteen. She, however, commenced to incubate when the tenth egg had been laid, on May 26th. Six of the eggs proved to be infertile; six hatched on June 9th, and the last one on June 11th.

The Magpie (*P. rustica*) and Jackdaw are two species which normally do not commence incubation until all the eggs have been laid, but I have known an instance of each species commencing incubation with the first egg.

We now come to those species which habitually incubate on the laying of the first egg. From observations made in previous years I suspected that the Rook (*C. frugilegus*) was one of the number, I therefore kept some nests under close supervision during the past spring. The result was that my suspicions were confirmed, for each bird commenced to sit as soon as the first egg had been deposited. The following are some of the particulars obtained:—

- | | | |
|------------------|---------------------|--|
| I.—April 4th, | First egg laid. | The nest was visited at various times of day, the bird being on in every instance. |
| April 5th, | Second egg laid. | |
| April 6th, | No change. | |
| April 7th, | Third egg laid. | |
| April 8th, | Fourth egg laid. | |
| II.—April 7th, | First egg laid. | At whatever time the nest was seen the bird was on. |
| April 8th, | Second egg laid. | |
| April 9th, | Third egg laid. | |
| III.—April 22nd, | First egg laid. | The bird was always on the nest when it was visited. |
| April 23rd, | Second egg laid. | |
| April 24th, | No change. | |
| April 25th, | Third egg laid. | |
| IV.—Four eggs. | | |
| April 8th, | First egg hatched. | |
| April 9th, | Second egg hatched. | |
| April 10th, | Third egg hatched. | |
| April 11th, | Fourth egg hatched. | |
| V.—Three eggs. | | |
| April 12th, | First egg hatched. | |
| April 13th, | Second egg hatched. | |
| April 14th, | No change. | |
| April 15th, | Third egg hatched. | |

Why does the Rook incubate as soon as the first egg has been laid? The following explanation occurs to me. Everybody knows what arrant thieves Rooks are whilst nest-building is in progress; they help themselves to their neighbours' property whenever the opportunity presents itself. Also they are well known to be egg-thieves. We can hardly suppose that birds that help themselves to the nesting-materials would leave the eggs untouched if a chance of appropriating them occurred.

We have already seen in the case of species which normally do not incubate until the full clutch has been laid, that there are occasional exceptions—that individual birds give way to the desire to brood as soon as the first egg has been laid. At one time the Rook as a species probably did not incubate until the whole clutch had been laid, and no doubt the birds suffered severely from the depredations of their own species. Any bird which incubated with the laying of the first egg would reduce the risk of losing her eggs to a *minimum*, and thus gain a great advantage over other Rooks; birds hatched

from these eggs would inherit the tendency to sit as soon as the first egg had been deposited, and in course of time through the process of natural selection the species as a whole would be affected. The very real benefit gained would in all probability cause the time needed to bring about the change to be short, that is, comparatively speaking.

It may be objected that the Jackdaw breeds in colonies and is also an egg-stealer, but yet does not incubate until the full clutch has been laid. The case, however, is very different, for the eggs are not exposed, the nests being in holes. The Jackdaw is a wary bird, and will not venture off-hand into a hole that may be occupied by one of the rightful tenants, and the risk of being taken in the rear is also, without doubt, a deterrent. It is significant that when the nest is found in the branches of trees, it is frequently domed, if not already protected by impending foliage.

It is well known that such birds as the Sparrow-Hawk (*A. nisus*), Kestrel (*F. tinnunculus*), Long-eared Owl (*A. otus*), and Short-eared Owl (*A. accipitrinus*) commence incubation with the first egg. It is also well known that an interval of a day or more occurs between the laying of each egg. All these birds deposit their clutches with no attempt at concealment, and to any of the Crows passing overhead they would appear conspicuous objects and would, of course, pay the penalty. Also, as the eggs are not laid on consecutive days, the danger of being discovered extends over a considerable period. Thus, it is evident that birds of these species which incubate as soon as the first egg is laid, are much more likely to rear young than those which do not do so.

The case of the Barn-Owl (*S. flammea*) is rather different, for the eggs are not exposed as are those of the birds last mentioned, but the habit of covering the eggs is undoubtedly of great advantage to the species by protecting the eggs from the attacks of rodents.

Another bird that certainly does not wait for the clutch to be completed before commencing incubation is the

Heron (*A. cinerea*), for young birds in the same nest exhibit considerable variation in size, and judging from this, it seems probable, in some instances at all events, that an interval of several days occurs between the laying of the eggs. This species rears two broods in the season. The first clutch is hatched in March or the beginning of April. It seems certain that if the eggs were not covered by the birds a large number would be spoilt by frost and snow. Of course, in the earlier as well as the later laying, the risk of losing the eggs through the attacks of the *Corvidæ* is much reduced by the Herons being constantly on them.

I have known one or two cases in which Ravens (*C. corax*) commenced incubation before the clutch had been completed, but cannot say whether this is always the case. Young Ravens were found during March of the past spring (this, of course, is not unusual) in a nest in the face of a crag situated high on the fell, and very much exposed to the elements. Anyone who has experienced the snow-storms and the occasional severity of the cold at these altitudes during the early months of the year, will readily realise that the eggs in a nest so situated would frequently be rendered infertile if not covered by the bird as soon as they were laid.

In this connection it is interesting to note that Naumann states that the Crossbill (*L. curvirostra*) begins incubation as soon as she has laid her first egg.

During a visit to a well-known gullery I was able to make observations on the incubation of the Black-headed Gull (*L. ridibundus*), Common Tern (*S. fluviatilis*), Sandwich Tern (*S. cantiaca*), and Little Tern (*S. minuta*). Some of the results obtained are appended :—

HATCHING OF *L. ridibundus*.

- I.—Two eggs. June 23rd, first hatched.
June 24th, second hatched.
- II.—Three eggs. June 25th, first egg hatched.
June 26th, second egg hatched.
June 27th, no change.
June 28th, third egg hatched.

- III.—Three eggs. June 27th, first egg hatched.
June 28th, second egg hatched.
June 29th, third egg hatched.
- IV.—Two eggs. June 29th, first egg hatched.
June 30th, second egg hatched.

HATCHING OF *S. fluviatilis*.

- I.—Two eggs. June 24th, first egg hatched.
June 25th, no change.
June 26th, second egg hatched.
- II.—Three eggs. June 25th, first egg hatched.
June 26th, second egg hatched.
June 27th, third egg hatched.
- III.—Two eggs. June 26th, first egg hatched
June 27th, second egg hatched.
- IV.—Three eggs. June 27th, first egg hatched.
June 28th, second egg hatched.
June 29th, no change.
June 30th, third egg hatched.
- V.—Three eggs. June 27th, first egg hatched.
June 28th, second egg hatched.
June 29th, no change.
June 30th, no change.
July 1st, third egg hatched.
- VI.—Three eggs. June 28th, first egg hatched.
June 29th, second egg hatched.
June 30th, no change.
July 1st, third egg hatched.

LAYING OF *S. fluviatilis*.

- VII.—June 25th. A bird was watched back on to a single egg.
On June 26th the nest contained the single egg at 10 a.m.,
but a second had been deposited by 1.30 p.m.
- VIII.—Bird watched back on to single egg on June 27th. No change
on 28th. A second was laid on June 29th.
- IX.—Bird watched back on to single egg on June 28th. No change
on 29th. Nest contained a second egg on June 30th.
- X.—Watched bird back on to single egg on June 28th and again
watched it incubating on single egg, June 29th. A
second egg laid on June 30th.
- XI.—Contained one egg on June 22nd. Two on June 23rd. On
June 24th it still contained two eggs, but more material
had been added to the nest. June 25th, a third egg
laid.

Though hundreds of clutches were seen hatching off, no single instance
was noted of the eggs in a nest hatching at the same time.

HATCHING OF *S. cantiaca*.

- I.—Two eggs. June 25th, first egg hatched. No change until
June 28th, when the second hatched.
- II.—Two eggs. June 26th, first egg hatched. No change until
June 29th, when the second hatched.
- III.—Two eggs. June 24th, first egg hatched. No change until
June 26th, when the second hatched.
- IV.—Two eggs. June 26th, first egg hatched. No change until
June 28th, when the second hatched.

It may be worth noting *en passant* that the Common and Little Terns remove the shells of hatched eggs from the vicinity of the nest, whereas the Sandwich Tern apparently *never* does so.

It is certain that the habit of the Black-headed Gull, Common and Sandwich Terns is to commence incubation as soon as the first egg has been laid. Gulls are notorious egg-stealers, and there can be no question that if the Black-headed Gull has the opportunity it will rob the nests of its own species. In several cases single eggs disappeared from clutches of three; they had evidently been sucked. On one occasion I saw a Gull carrying a large object in its beak, being pursued by another bird of the same species; the first dropped its booty. On reaching the place I found it to be an egg of the Black-headed Gull, almost on the point of hatching. It is when the birds have been disturbed from their nests, I think, that the opportunity is seized and the eggs taken.

Likewise, in the case of the Terns, several instances were noted of eggs being sucked just after the birds had been disturbed. Though the Black-headed Gulls were never detected in the act, there is no doubt that they were the culprits, for no other species of egg-sucking bird ventured on to the Terns' nesting-ground. Frequently the Gulls were chased off, but at other times little notice appeared to be taken of them. As Terns usually nest on Gull-haunted ground, there can be no doubt that the covering of the eggs by the birds from the time the first has been deposited is of great value to the species, especially as the eggs are not laid on consecutive days, for the risk of losing them is reduced to a *minimum*, being in fact practically *nil* where the birds are left undisturbed. This is most markedly the case with the Sandwich Tern, for the eggs are very conspicuous, and three days frequently elapse between laying.

Now, each of these three species is well known to exhibit a great range of variation in the colouring of its eggs. I think we have here the explanation. It is evident that

in all three species there has been a strong tendency towards individual variation in the colouring of the eggs. As they are covered from the time they are laid, the action of natural selection (in the form of egg-sucking birds, which would otherwise check variation, by destroying all those eggs which departed from the type which agreed most closely in colouring with the environment) has been in abeyance, and therefore, as variation has continued practically unchecked, we now have the exceptional range of colouring shown in the eggs of the Black-headed Gull, Common and Sandwich Terns.

Two other species noted for the wide range of variation in the colouring of their eggs are the Razorbill (*A. torda*) and the Guillemot (*U. troile*). As these birds only deposit a single egg, the case appears to be analogous with those previously mentioned.

Only three nests of the Little Tern (*S. minuta*) were noted hatching off, but these were of great interest. In one clutch of two eggs the first hatched on June 29th, the second was hatching on July 1st. In the two other cases, each a clutch of two, the eggs hatched at the same time. Further observation is needed, but it may be suggested that as the species has not the physical force of the Common and Sandwich Terns, it has suffered more from the ravages of egg-sucking birds; therefore a type of egg has been evolved, the protective colouring of which saves them from the keen vision of the birds that seek them; and so, in some cases at all events, the birds do not incubate until the full clutch has been laid, for natural selection working on other lines has caused it to be immaterial that they should do so.

The eggs of the Curlew (*N. arquata*) are protected to some extent by their coloration, as is the case with other Limicoline birds. A nest found on April 26th, which then contained two eggs, was visited daily; it was not until April 30th that the third and last egg was laid. In the only other nest of this species that I have watched there was also a considerable interval between the laying

of the eggs, but I did not ascertain precisely what it was. If there is always a considerable interval (and this does not seem unlikely when the size of the egg compared to the bulk of the bird is taken into consideration), it is evident that eggs left exposed in this manner run great risks of being destroyed, and it is certain that any variation which tended to make them at all conspicuous would result in the whole clutch disappearing.

The range of variation in the colouring of the eggs of such a species as the Black-headed Gull is very striking when compared with the uniformity in the colouring of the eggs of the Curlew.

THE NOTES OF THE BRITISH WILLOW-TIT.

BY

C. J. ALEXANDER.

FOR nearly three years, since the notices of the British Willow-Tit (*Parus atricapillus kleinschmidti*) appeared in the early numbers of BRITISH BIRDS, my brother, H. G. Alexander, and I have paid special attention to the notes of the black-capped Tits. In January, 1908, we heard one of these birds singing in a manner similar to the Alpine Willow-Tit, which we had both of us heard in Switzerland. This bird also made a deep plaintive note. Since then we have repeatedly watched birds making this note, at all times of the year, and in no instance has the same bird uttered either the common double note characteristic of the British Marsh-Tit (*Parus palustris dresseri*) or the succession of notes constituting the song of that species : and the converse holds true.

Although we did not succeed in making out any certain difference in plumage between the two species, we considered the evidence sufficient to allow us to assign the notes above-mentioned to the Willow- and Marsh-Tits respectively. However, a few months ago Colonel R. H. Rattray, of Tonbridge, wrote to my brother that he had heard the plaintive note and had caught the bird that was making it : on comparing this with a Marsh-Tit he found that all the differences mentioned in Dr. Ticehurst's *Birds of Kent* were distinguishable.

I therefore have now no hesitation in giving a comparison of the notes of the two species.*

British Marsh-Tit (*P. p. dresseri*) :—

- (1) Double note; the most usual; often followed by a harsh note repeated several times. (The Great Tit occasionally makes a precisely similar note.)

* This is slightly different from the account given in Dr. Ticehurst's *History of the Birds of Kent*, that I sent him two years ago; and as it had not occurred to me that he would put it in his book, I did not emphasize the fact that I was then not sufficiently sure of it to publish it. I much regret that I should have been the means of introducing any inaccuracy into the book.

(2) Thin, sharp notes.

(3) Songs : (a) A loud clear note, repeated about seven times ; the usual song. (b) Based on a more liquid pronunciation of (1), but sometimes including low notes of a different character.

British Willow-Tit (*P. a. kleinschmidti*) :—

(1) Deep plaintive note, sometimes prefixed by one or two thin notes.

(2) Thin, sharp notes ; more frequently uttered than the corresponding notes of the Marsh-Tit.

(3) Song : Rich, Nightingale-like notes, mingled with a soft musical warbling.

The Marsh-Tit makes its song (a) only from December to April, but regularly during most of that period ; the song (b) is uttered occasionally during many of the summer months. The Willow-Tit's song-period extends from January to April and July to September at any rate—this corresponds in general to the song-periods of the Coal and Blue Tits—but it only sings rarely.

I have now met with the Willow-Tit in the following places :—Kent—Wye and Tunbridge Wells ; Sussex—from Tunbridge Wells to Ashdown Forest ; Surrey—Reigate and Leith Hill ; Hants.—Eechinswell, close to the Berks. boundary and the neighbourhood of Selborne ; Berks.—Shinfield and Grazeley, near Reading ; Wilts.—Little Bedwyn ; Oxon.—Checkendon, in the Chilterns ; Herts.—Rothamsted, near Harpenden. My brother has observed it at Capel Curig, North Wales, besides some of the above localities ; he has not yet found it at Cambridge, where the Marsh-Tit is decidedly uncommon.* About Tunbridge Wells their numbers seem to be about one-third or one-quarter those of the Marsh-Tit ; and near Reading, perhaps about the same. At Wye and other places in the east of Kent they seem to be rare. We have nearly always met with them in well-wooded districts.

* Mr. A. H. Evans informs us that near Cambridge *P. a. kleinschmidti* is the only species observed by him, and that it is scarce and local there.—[EDS.]

NOTES

ARCTIC BLUETHROAT IN NORFOLK IN SPRING.

AN Arctic Bluethroat (*Cyanecula suecica*) was obtained during the third week in May last on the north coast of Norfolk. It was shot in a garden facing the sea by a man who fired at it out of his dining-room window. A prevalence of easterly winds at the time probably accounts for the occurrence, as the Red-spotted Bluethroats appear to miss our coasts on the spring migration to northern Europe to a great extent, although one was recorded from near Newcastle as far back as May 26th, 1826, and others have been obtained at Worthing on May 2nd, 1853, and near Lowestoft in May, 1856, as well as more recently in Norfolk on May 16th, 1906. There are also at least two occurrences from the Scottish mainland and one from the Pentland Skerries in the month of May.

CLIFFORD BORRER.

EXTRAORDINARY DEVOTION OF A PAIR OF LESSER WHITETHROATS TO THEIR NEST.

No doubt many will call to mind the unusual severity of the gales during May, 1910, and the consequent effect on many birds that were nesting. One case in particular seemed to me to be beyond the usual perseverance of birds, and concerned a pair of Lesser Whitethroats (*Sylvia curruca*). The nest was built with no stronger support than stems of grass and stinging nettles, and when I found it the whole structure was exposed to view, and nearly blown away—in fact, the sides had already given way. Notwithstanding the fact that the hen bird was obliged to sit on the side of the nest, she was actually using her wings to keep there at all. The first photograph I took shows the nest with five eggs, and gives some idea of the position, for, following my rule, nothing was disturbed before taking the photograph.

Knowing it was useless to leave the nest in this position, I decided to move it to more sheltered quarters, and placed it some yards away under the shelter of a sloe bush.



FIG. 1.—LESSER WHITETHROAT'S NEST TORN AWAY FROM ITS SUPPORTS BY THE WIND.



FIG. 2.—THE SAME NEST AS SHOWN IN FIG. 1 REMOVED TO A SECURE POSITION, AND NOT DESERTED BY THE BIRD.

Visiting the spot on June 17th I was glad to find four healthy young in the nest, and my second photograph shows them being fed in their new surroundings, and it can be distinctly seen that the nest has been repaired.

The trials of these unfortunate birds seemed endless, for, whilst taking my photograph, I was discovered by a boy, whom from past experiences I had every reason to fear, so had to resort to a ruse to protect my *protégés*. Removing the nest, I let the boy see me put rings on the young, then, telling him I was taking them home with me, wished him good-day. When the young rascal was well out of sight, I held the nest in my hand and enticed the old birds to a thick hedge, where once more the nest was securely placed. Then I retreated a short distance, and in less than five minutes *both* parents had transferred the caterpillars they had been holding during the ringing, etc., to the young.

It was nearly a week later when the young left the nest, and I had the satisfaction of seeing all four on the wing.

This incident shows how birds vary in temperament, for the Lesser Whitethroat is as a rule one of our most timid birds.

H. W. FORD-LINDSAY.

YELLOW-BROWED WARBLER IN SUFFOLK.

ON September 3rd, when walking along the edge of the low cliffs about a mile to the north of Southwold, a small bird rose almost at my feet, and settled on a plant a few yards away, allowing me a short but very clear view. The bright greenish-yellow colour, double bar on wings and eye-streak showed that it was undoubtedly a Yellow-browed Warbler (*Phylloscopus superciliosus*), a bird not previously recorded for this county, though there are several Norfolk records. It flew away, and I lost sight of it in a field of cabbages.

JULIAN G. TUCK.

PIED FLYCATCHERS IN SUSSEX.

ALTHOUGH it is probable that a few Pied Flycatchers (*Muscicapa atricapilla*) pass through Sussex on the spring migration every year, they have so seldom been detected that individual records are still of value. It is only by the gradual accumulation of these that we can hope to come to any definite conclusion as to the *status* of the scarcer visitors in the county and the routes they follow in their seasonal movements.

On April 29th I saw a single female at West St. Leonards (the first Pied Flycatcher I have ever seen alive in Sussex), and have since heard from Mr. Curtis Edwards that he has this spring obtained an adult male from a boy at Rye Harbour, who killed it with a stone there on May 18th. N. F. TICEHURST.

AGGRESSIVENESS OF A BUZZARD IN WESTMORLAND AND A GOLDEN EAGLE IN INVERNESS-SHIRE.

A REMARKABLE characteristic of the Buzzard (*Buteo vulgaris*) is the difference in the behaviour of individual birds at the nest. As a rule, it is a most inoffensive, not to say timid, bird, and the approach of an intruder is the signal for the parents to leave the nest at once and take to flight, with plaintive mewings. At rare intervals, however, instances of a decidedly combative disposition occur. Mr. H. E. Forrest (*Vert. Fauna of N. Wales*, p. 223) quotes three cases: one when the Rev. C. Wolley Dod was attacked in Merioneth, and the two occasions on which Mr. O. R. Owen was fiercely stooped at for over an hour—also in North Wales. Last year the daily papers contained an account of an attack on a visitor to the Lake District by a “hawk of the Kestrel species,” and during the present season another instance of aggressive conduct by a Buzzard took place on July 4th. The Rev. Hugh F. Lloyd was near the top of Ill Bell, when a Buzzard appeared and stooped at him several times, but was kept off with a stick. Soon after it was joined by its mate, and the two repeatedly stooped to within a yard of his head, until he turned and went down the side of the fell (H. F. Lloyd, *in litt.*).

Another raptorial bird which rarely adopts aggressive tactics is the Golden Eagle (*Aquila chrysaetus*). But Mr. E. S. Gooch, writing from Banavie, Inverness, in the *Field* for July 2nd, 1910, states that a Grouse, closely pursued by an Eagle, took shelter between a keeper, who was seated on the ground, and his retriever. The Eagle sheered off, but two hours later, while the same keeper was sheltering from a thunder-shower by a burn, the Eagle swooped down on him and fixed its talons in his ankle and was only killed with difficulty.

F. C. R. JOURDAIN.

ABNORMALLY COLOURED GANNET.

DURING a visit to the Bass Rock on July 14th, 1910, I noticed on the wing a Gannet (*Sula bassana*) distinctly different from its fellows, but could not locate its nesting-site. On a second visit on July 31st and August 1st this was discovered, and some time was spent by Mr. Riley Fortune and myself in watching this bird and its normally coloured mate and in photographing the pair. (*Cf. Zoologist*, 1910, p. 340.)

The feet, tail and wing primaries were normal; the head and neck were biscuit-coloured, distinctly darker than ordinary

birds and more inclined towards grey. The breast and upper surface were dappled all over with buff and white, darker towards the tail and lighter on the wing coverts.

The situation of the nesting ledge is on one of the sheer precipitous sides. This, fortunately, will make it difficult for the bird to be interfered with, but does not favour photography. However, I hope the print will help the above attempt at description.

JASPER ATKINSON.



VARIETY OF GANNET.

(Photographed by Jasper Atkinson.)

FOOD OF THE COMMON HERON.

IN a note on this subject (*antea*, p. 85), Dr. C. B. Ticehurst states that he found several shrimps turned quite pink by the digestive process in the stomach of a Heron about a week old.

I may add that, upon examining the contents of a Heron shot December 27th, 1904, I found in the gullet and stomach

as many as eighty-four prawns (*Leander serratus*); all were quite pink, as though they had been subjected to heat by boiling. The bird was shot on marshes bordering the sea-shore.

It appears to be generally believed that prawns are distinct from the common "pink shrimp," but as a matter of fact the former are only large specimens. The common brown shrimp belongs to a distinct family, the *Crangonidæ*, and, unlike most crustacea, does not turn pink when cooked. F. W. FROHAWK.

COMMON SCOTER BREEDING IN IRELAND.

A PAIR of Common Scoters (*Eidemia nigra*) have again nested on the lough in Ireland, which they have frequented during the nesting seasons since 1904 inclusive (cf. Vol. II., p. 86, and III., p. 197). I saw a pair for the first time in 1910 on April 29th, and on May 24th a male alone off the north shore of an island. He seemed restless, but apparently unwilling to rise. Shortly after I landed on the island a female Scoter rose, and, on reaching the spot, I found one egg deposited on some dry grass. The site was about twenty yards from the water, somewhat open at this time to the east, but with cover from view in other directions and from above. (All the Scoters' nests on this lough that I have seen—five in number—have had cover from view from above.) On visiting the nest on June 5th there were eight eggs, cold, and covered with dry grass. My man wrote me under date July 4th: "I visited the nest on Sunday, July 3rd. When I was passing the island, the duck came on to the water off the nest, so I went and looked at it. The eight young ones were sitting in the nest. This was about 4 o'clock, and they were not quite dry, so that they could not have been long hatched out. I went away quietly from the place." Neither my man nor I have seen the old or young birds since July 3rd.

HERBERT TREVELYAN.

VELVET SCOTERS IN CAITHNESS IN SUMMER.

ON July 11th, 1910, in company with a friend, while boating off the Caithness coast, I observed four male Velvet Scoters (*Eidemia fusca*) flying northward, at no great distance above the water. We were quite near enough to observe the red legs and orange-tinted bills, and the conspicuous white patches on the wings were very noticeable.

My friend, who is a resident of Dunbeath, was much surprised as he has seldom seen these birds, even in winter, in that locality.

Two years ago, when in Seapa Sound, in Orkney, about the middle of May, Velvet Scoters were in considerable numbers and of both sexes. When swimming, the white wing patch is almost entirely concealed, but the size is markedly greater than that of the Common Scoter (*Edemia nigra*).

Towards the end of May we found the Common Scoters assembled in considerable numbers on the Caithness Dhu lochs preparatory to breeding.

The keepers report that the number of breeding birds is increasing and their breeding-area extending.

CHARLES CAIRNIE.

FOUR EGGS IN A WOOD-PIGEON'S NEST.

ON August 3rd, 1910, I found the nest of a Wood-Pigeon (*Columba palumbus*) in South Holderness containing two eggs. On August 23rd a bird was shot at off this nest, in my presence, and hard hit. Unfortunately, I did not, at this time, examine the nest; but on September 7th I was surprised to find that it contained four eggs. The contents, as might be expected, were highly decomposed. Two eggs had been within a day or two of hatching; the other two perhaps a week incubated. They might also be fairly said to present two types, since the first pair measured 4.4 and 4.25 cm. respectively, in long diameter, while the second pair measured 4.05 and 3.95 cm. No doubt the cock had lost his mate when the eggs were nearly hatched, and had found a second partner who laid her eggs in the same nest and was (probably) shot on the occasion mentioned.

In this district I see more nests of *C. palumbus* containing eggs after the middle of July than before that date.

M. WINZAR COMPTON.

[On one occasion I found four eggs in a Wood-Pigeon's nest and believe them to have been the produce of one bird, but two of the eggs were slightly discoloured and had apparently been rendered infertile by frost. Probably the hen had laid a second clutch after an interval, as the Woodcock has been known to do. Mr. R. H. Read (*Zoologist*, 1889, p. 436) mentions having found three eggs in a Wood-Pigeon's nest and the remains of a fourth lying broken on the ground beneath; this seems to have been a similar case to that recorded by Mr. Compton, as the eggs were of two different types. Dr. N. F. Ticehurst informs me that he once found a Wood-Pigeon incubating three eggs and on two occasions found Stock Doves (*Columba ænas*) doing the same thing, while other instances of Stock Doves laying three eggs are recorded in the

Zoologist, 1876, p. 4875, 1888, p. 393, and the *Field*, May 28th, 1898, and May 5th, 1900, so that in the case of the latter species the normal clutch of two is, sometimes at any rate, exceeded.—F.C.R.J.]

UNEQUAL WING-STROKES IN FLIGHT.

MR. HEADLEY'S illustrations (*antea*, pp. 115, 116) of Pigeons flying show the danger of judging from photographs. In Fig. 1 the bird may be parachuting, in which case the swaying from side to side would account for the position of the wings, or it may be turning and so be tilted dorsally towards the spectator. In Fig. 3 the apparent slight inequality in the height of the wings is due to perspective, and if a straight edge be laid on the tips of the wings it will be found to converge with the lines of the ledge, which we may assume to be horizontal.

ALLEN W. SEABY.

QUAIL AT STORNOWAY, OUTER HEBRIDES.

ON August 3rd, 1910, our yacht was lying in Stornoway Harbour, and when taking a walk up to Goat Hill farm at about 8 o'clock one evening, I was surprised to hear a Quail (*Coturnix communis*) calling quite close to me in an uncut hay-field. Not being sufficiently familiar with Quail to be absolutely certain of the note. I brought a friend with me the next evening, who knew Quail and their ways well, as they come round his place every summer. He at once recognised the call, with which he was so familiar. I went into the field, but, as I expected, was unable to flush them. An old man cutting hay told me that the reaping machine had killed some little birds about the size of young Corncrakes a few days before. These were very probably not Corncrakes at all, but young Quail.

Mr. Bisshop, the Oban taxidermist, told me later that he had never received any from Stornoway.

Messrs. C. V. A. Peel and J. A. Harvie Brown record them from Barra, where they seem to have been not uncommon in 1893.

In the north of Ireland the call-note of this species is rendered by the words "wet-my-foot," by which name the bird is known amongst the country folk; it is not a bad imitation of the note.

It would be interesting to hear if any of your readers have noted the Quail in Lewis.

W. H. WORKMAN.

MANŒUVRES OF LAPWING IN DEFENCE OF YOUNG.

THE following account of the manœuvres of a Lapwing (*Vanellus vulgaris*) in defence of her chicks was communicated to me by my father's gamekeeper, William Edwards, a very observant man, and interested in all bird and animal life.

While occupied with his young pheasants in North Wales, his attention was called to some Lapwings about a hundred yards away, in a state of agitation. He went up towards the spot and found a stoat close to the young chicks. The Lapwing was screaming close to the stoat and was gradually decoying it away from the chicks, flapping on the ground as if wounded and spreading its wings as if unable to fly, but keeping just out of reach of the stoat all the time. The stoat was trying to catch it, but the Lapwing was quick enough to keep just out of danger, and slackened its pace when the stoat went more slowly. In this manner it was enticed away from the chicks till it was about four hundred yards distant. Edwards then crossed over to the stoat and killed it.

Altogether there were six old Lapwings present, and they helped to lure the stoat away from the chicks. After the stoat had been shot, Edwards went back to see if there were any more about, and noticed three young chicks too young to fly (there may have been more hiding in the grass). All six birds returned to the spot where the young birds were after the shot and ran about collecting the chicks.

HUBERT LYNES.

FURTHER NOTES ON TAME SNIPE.

ON August 6th, 1910, I caught a young Snipe (*Gallinago caelestis*), which, as nearly as I could judge, was then almost exactly three weeks old. I brought her (?) home and put her in my old Snipe's cage (I am glad to say he is still very well and tamer than ever: *cf. antea*, Vol. II., pp. 249—258). For the first few hours the young one did nothing but run after the old bird, squeaking in a most irritating key, and tried to snatch worms, etc., out of "John's" bill. This made me think that Snipe must feed their young from the bill for a very much longer period than I imagined, though I was certain that they did so for a time. The young bird would not attempt to feed herself although quite old enough to do so; but I suppose she was too shy and nervous; however, the next day I saw her feeding all right, and the following day, to my delight I found that the old Snipe had adopted her, and watched him feeding her with great interest. He would hardly eat anything himself, but held out all the food

to the young one. Meal-worms (a favourite "dish" of his) were well beaten and probed until quite soft, and then held out to the young one, who took them out of his bill. Maggots and worms were also held out to her, although these latter were not beaten unless the worm was rather a large one. I never heard him call her up to feed; I suppose because there was no need, for the young one never let him get six inches away from her for at least a week! Now, August 26th, the young one is fully grown and feathered; indeed, she is larger than "John," but he still feeds her at intervals if he finds any particular delicacy and always gives her the meal-worms. I have great hopes that the young one will prove to be a female; but there is no external way of telling the sex that I know of. "John" has had three companions since he was hatched (two years ago last May), and he has cordially disliked them all. Two have died, and they both proved cocks on dissection; the other I liberated in the spring, as he was beyond doubt also a cock. Should this young one be a female, I see no reason why they should not breed, or attempt to breed, as she is becoming very tame, though I do not even hope that she will become as tame as he is. Each spring "John" goes through his full nuptial display to me whenever I go near his cage; indeed, he starts his loud spring call directly he hears my step in the house, and it is a curious fact that he has again started his spring call and display to me, although in full moult, since the young one has been with him; but as far as I can judge, the display is for my benefit and not the young bird's, as he does not "perform" unless I am close to his cage or speak to him.

This year there are several late hatched Snipe about; in this neighbourhood (West Norfolk) all the early hatched ones must have been drowned, so that probably accounts for so many second broods. H. WORMALD.

BLACK TERN IN SURREY.

ON July 31st last I watched at close quarters, at Frensham Great Pond, an adult example of *Hydrochelidon nigra*. The bird had just commenced to assume the winter-plumage, the forehead being pure white, while the throat and sides of face and neck were of a dirty white colour.

Although at one time a fairly regular visitor to Surrey (Bucknill, *Birds of Surrey*, pp. 320-1), the Black Tern appears to have been of less frequent occurrence during recent years, judging from the small number of records which have come to light. HOWARD BENTHAM.



REVIEWS

The Glasgow Naturalist. Vol. I., parts I-IV.; Vol. II., parts I-III.
Edited by D. A. Boyd and John Paterson.

THIS publication, which is the journal of the Natural History Society of Glasgow, contains some interesting and useful papers and notes upon birds, and generally reaches a higher level of excellence than most publications of the kind. In the first volume we find a useful paper on "The Birds of Lendalfoot" (pp. 5-23) by the late Charles Berry, in which we note that the *Marsh-Titmouse* is not uncommon and breeds occasionally, and is far more numerous in winter. In his paper on the "Birds of the Glasgow District" (*vide infra*) Mr. Paterson remarks that the Marsh-Tit has a "puzzling," and apparently very local, distribution about Glasgow (Vol. II., p. 47). The Marsh-Tit is a rare bird in Scotland, and it should be noted that apparently all the specimens procured in the Forth and Moray areas proved to be *Willow-Tits* and not Marsh-Tits at all (*cf. Fauna Tay Basin*, pp. 90 and 91, footnotes); it would therefore seem advisable that the Marsh-Tits from these districts should be carefully examined. A *Bittern* mentioned as shot at Lendalfoot contained six trout from four to six inches long. Two *Glossy Ibis* are noted as seen near the same place on September 15th, 1889; a *Turtle-Dove* on November 28th, 1908; a *Little Gull* on December 16th, 1902; an *Iceland Gull* on January 19th, 1903, while a *Great Shearwater* was found dead on October 3rd, 1904. In some "Jottings" (pp. 35-38) by the same writer, we note the occurrence of a *Song-Thrush* and *Blackbird* interbreeding at Lendalfoot. Four young were hatched, but they all apparently got killed, and Mr. Berry can only say that he could see no difference in their appearance from young Blackbirds. The increase and spread of the *Stock-Dove* in the Clyde Area is treated by Messrs. R. S. and H. W. Wilson in a useful paper (pp. 101-110), and a note on the same subject is to be found in Volume II. (p. 30), while some evidence is given of the recent occurrence of the *Greater Spotted Woodpecker* near Glasgow (p. 99).

In the "Notes" we find records of a pair of *Gadwall* on April 25th, 1909, seen at Bishop Loeh (Lanark) by Mr. J. Paterson (p. 100); a *Hoopoe* picked up near Leadhills (Lanarkshire) on June 1st, 1909 (p. 145); a *Fulmar* picked up near Cambo (Fife) on July 4th, 1909 (*l.c.*); a *Spotted*

Redshank, a *Black-tailed Godwit*, and two *Ruffs* seen in east Renfrew in the middle of September, 1909. In the two summers (1906 and 1909) part of which Mr. J. Paterson has spent in the east Neuk of Fife he has found the *Quail* not rare in fields there (pp. 145-6).

In Volume II. we find the *Bar-tailed Godwit*, which is very rare inland in Scotland (as far as records go), added to the fauna of east Renfrew in September, 1909 (p. 30); some interesting observations on the habits of *Sedge-Warblers* (pp. 1-8) by Mr. W. Rennie; a list of summer-birds of Shiskin, Arran (pp. 20-24), by Mr. T. Thornton Mackeith; a long and useful paper "On the Birds of the Glasgow District" (pp. 43-61) by one of the editors, Mr. John Paterson; and some "Summer Notes on the Birds of Garelochhead," by Mr. W. R. Baxter (pp. 69-78). In Mr. Paterson's paper we note that the only substantiated record for the *Lesser Whitethroat* in the Glasgow district is that of an occurrence in August, 1908. Since Mr. Gray wrote his account of the birds of the Glasgow district for the meeting of the British Association in 1876 there are many changes to record. New information appears under *Black Redstart*, *Marsh-Titmouse*, *White Wagtail* (a familiar bird of passage), *Blue-headed Wagtail*, *Great Spotted Woodpecker*, *Bewick's Swan* (regular in winter at Bishop Loch), *Gadwall*, *Tufted Duck* (familiar in the nesting-season), *Stock-Dove* (now well recognised in the nesting-season), *Spotted Crake*, *Grey Plover*, *Little Stint*, *Curlew-Sandpiper*, *Ruff*, *Spotted Redshank*, *Green Sandpiper*, *Bar-tailed* and *Black-tailed Godwits*, *Whimbrel*, *Black Tern*, *Lesser Black-backed Gull* (now recognised as a summer-bird), *Great Black-backed Gull*, *Kittiwake*, *Little Auk*, *Puffin*, *Black-throated Diver*, *Eared Grebe*, *Storm-Petrel*, *Fork-tailed Petrel* and *Manx Shearwater*. In Mr. Baxter's paper it is interesting to note that both the *Carrion* and *Hooded Crows* nest in the district of Garelochhead.

H. F. W.

BRITISH BIRDS

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ON THE POSITIONS ASSUMED BY BIRDS IN FLIGHT.

BY

BENTLEY BEETHAM, F.Z.S.

I. STARTING.

THE flight of birds must ever remain a source of interest and inspiration to man, for should he eventually master aërial, as successfully as he has terrestrial, locomotion, birds would, by reason of their inherent sensibility to gauge the varying air-currents, still remain vastly his superior in the art, if not in actual pace at least in the finer manipulations.

But whether we regard flight from the standpoint of the ornithologist or the aviator, the actions of these naturally-equipped performers cannot be too closely regarded.

The great difficulty met with in studying the flight of birds is the indefinite and almost inexpressible nature of much of our observation. We see a bird make a sudden turn or falter in its course: a little thing, yet even if we could analyze its actions, which is improbable, it would take a page or two of writing before we could be sure that another would understand the positions and actions as we saw them. In our present lack of intimacy with the subject words are quite inefficient, and we must largely rely on pictures, photographs by preference, wherewith to record our observations.

The slower and individual movements of the wings and tails of such large birds as Herons, Gulls, or Eagles are easy to perceive, and in many cases their object or result can be appreciated, if only one can get close enough. Unfortunately, however, our near glimpses of large birds on the wing are usually but momentary, and it is only by piecing together little isolated scraps of observation that we can get a consecutive idea of what has taken place. Often the combination of our eyes and brain is far too

slow to analyze and follow the different movements, and the only impression the mind receives is one of rapid beating motion, as is so noticeable in the flight of bees and other insects. Too often is this the case when trying to follow the flight of some small bird, the beating of the little wings being quite too rapid for our senses. We will here confine ourselves to those birds possessed of ample expanse of wing, for, generally speaking, the larger the wing the less rapid is the beating, and therefore the more easily can we follow its movements.

To gain the velocity in order to create the resistance necessary for the support of all heavier-than-air "machines," some birds run or swim, others simply spring into the air and by the vigour of their flapping achieve the same result; while others, again, launch themselves from some coign of vantage—a tree or rock—and in falling gain the desired resistance. In this article I give some particulars regarding the latter method, illustrated by photographs of the Gannet (*Sula bassana*).

Stepping to the cliff-edge, and, if there is no cause for undue haste, having raised and partly unfolded its wings, the bird prepares to dive into space. This dive, it should be noted, is not directed downwards, but rather as horizontally outwards from the cliff as may be (sometimes it appears to have even an upward tendency). If the bird is one possessed of broad large wings not much altitude is lost, and it skims through the air in much the same fashion as does a piece of cardboard thrown horizontally. If, however, as in the case of Auks, the wings are small and narrow and the body heavy, then the bird at first drops nearly vertically, only being able to gain a more horizontal course as its velocity increases.

Sometimes birds of this latter class, presumably through misjudgment of the space they have to work in, do not get the horizontal course in time, and crash into the rocks or sea at the foot of the cliff. This is very noticeable when a group of Puffins (*Fratercula arctica*) hurriedly takes flight from a steep boulder-strewn slope. Under

these circumstances I have frequently seen quite a number of the birds come to grief on the rocks within thirty yards of starting. Most of these, though somewhat dazed by the impact, flutter and claw their way on to the top of some big boulder, and after a moment's pause again dive forth. but not infrequently with no better result. The first failure is, I believe, often caused by their paying too much attention to and looking behind at whatever startled them, instead of gauging their proper angle.



FIGURE 1.—RAISING THE WINGS PREPARATORY TO GOING.
(*Photographed by Bentley Beetham.*)

The raising and unfolding of the wings is worthy of a little consideration. The former usually takes place not after, but previous to, the diving or springing forward, while generally the whole "foot" is at rest upon the rock. Of course, when suddenly alarmed birds sometimes cast themselves from the cliff without first raising their wings, and in consequence fall rapidly.

In Figure 1 the Gannet has not even risen to its feet prior to lifting the wings, but is sitting on the edge of the nest. The apparent leg supporting it on the near side is a delusion, for instead of being the metatarsus, as it seems, it is really the closed webbed toes hanging downwards from the raised and hidden leg, only the claws really touching the nest. The reason for this peculiar position is the newly-hatched chick, hardly discernible,



FIGURE 2.—ABOUT TO DIVE FORTH.
(*Photographed by Bentley Beetham.*)

lying in the nest, which would inevitably have been crushed had the bird rested on its expanded foot.

This raising of the wings preparatory to diving forth is perhaps more convincingly shown in Figure 2, as the photograph is taken from a point on the same level as the bird, and shows the wings held up far above the bird's head. This picture, as also Figure 1, embraces

another and a more important point—that the unfolding or straightening of the wing takes place, if again there is no extreme haste, subsequent to the raising. This especially refers to the pinion.

It will be noticed that although the humeri are raised almost to meeting above the back (Figure 2), the ulnæ



FIGURE 3.—GOING.

(*Photographed by Bentley Beetham.*)

are not fully extended and in line with them, while the pinions are little divergent from the latter, still making an acute angle with them. Casually one might have expected that, had there been any precedence, the pinion being the most important factor, would have been the first to assume the position requisite for flight, but if these two photographs be carefully examined the reverse appears to be the case. In short, it may be said that

the unfolding of the units of the wing seems to be sequential, starting with the humerus, and not simultaneous.

This is, I fear, directly at variance with the writings of many leading ornithologists and anatomists, and I can only put forward the photographs in support of my observations. Undoubtedly the arrangement and articulation of the wing-bones appear to indicate that the unfolding will take place mechanically throughout



FIGURE 4.—GONE.
(*Photographed by Bentley Beetham.*)

on any one part being extended, but laboratory theories, however much they may be upheld by inanimate evidence, cannot pass unchallenged when they are found to be in apparent contradiction to observation of the living action supported by corroborative photographs.

Figure 3 shows the bird at the very moment it is diving from the cliff, only the tips of its toes touching the rock, and it will be noticed, as intimated before, that the slope of the body is strongly upwards. The wings have not

even yet been fully straightened. This final unfolding and stiffening appears, so far as I can ascertain, to take place at the very moment of departure, and had this photograph been taken a minute fraction of a second later it would no doubt have revealed the wings as fully extended as in Figure 4.* Here the wings are just beginning to feel the weight of what they are to support and are commencing their first downward beat. And now, though it has only travelled a few inches from the



FIGURE 5.—FAIRLY ON THE WING.
(*Photographed by Bentley Beetham.*)

rock and the feet have not yet been tucked away under the tail, the Gannet is fairly on the wing, exasperatingly able and wishful to go beyond the range of our lens or even of our observation.

* The tip of the left wing of the bird in this figure has been retouched, as owing to an accident a portion of the photograph (involving about half of the primaries) had become obliterated. The other photographs have not been retouched in any way and have been chosen to illustrate the various points discussed rather than because they were good photographs.

THE "LIFE OF WILLIAM MACGILLIVRAY."*

ALTHOUGH William MacGillivray (1796-1852), the great Scotch naturalist and author of the *History of British Birds* (1837-1852), died nearly sixty years ago (in the autumn of 1852), the first published account of his life in book form has but recently appeared. This work can, however, hardly be said to have added much of interest or importance to the somewhat scanty amount of information which was already available regarding MacGillivray's life and writings.

The authors of the "Life" have divided their book into three parts. The first dealing with MacGillivray's life; the second consisting of a "scientific appreciation" of his work; and the third containing extracts from his published writings "descriptive of Bird Life, of Personal Adventure for Scientific Investigation, of Picturesque Scenes, etc."

The few observations which follow must refer to the first and certainly the most important portion of the book; that containing the "scientific appreciation" deals with little of interest that could not have been included in the "Life," while the extracts, thirty-five in number, consisting of one from his *Descriptions of the Rapacious Birds of Great Britain*, p. 223 (1836)—the reference to which has been omitted—twenty-three from the *History of British Birds*, and the remainder from the *Natural History of Deeside* (1855), savour somewhat of the nature of "padding." Mr. William MacGillivray, namesake of the naturalist and author of the first part of the work, had already printed for private circulation a *Memorial Tribute to William MacGillivray* in 1901, in connection with the erection of memorials to the great ornithologist in Edinburgh and Aberdeen.

Much of the information in the "Memorial Tribute" is incorporated in the volume now under review, and Mr. MacGillivray has also had access to two of the journals kept by the naturalist, which will be presently referred to. Although the "Life" by no means supplies the details which the many admirers of MacGillivray had hoped for, it must

* Life of / William MacGillivray, / M.A., LL.D., F.R.S.E.; Ornithologist; professor of / natural history, Marischal College and / University, Aberdeen / by William MacGillivray, W.S. / author of "Rob Lindsay and his school" etc. / with a scientific appreciation / by / Arthur Thomson / Regius professor of natural history, Aberdeen University / with illustrations / "in the eye of Nature he has lived" / London / John Murray, Albemarle Street, W. / 1910.

be at once frankly acknowledged that the omission is not altogether the fault of the author. As he tells us in his "Introductory Chapter" :—

"No detailed biography of Professor MacGillivray has ever been written, and the materials for such do not now exist. From an early period he kept careful journals of his life and work, and from these a biography of great interest and value could have been compiled; but unfortunately all but two volumes were accidentally destroyed by fire in Australia many years ago. I recently discovered that two volumes in MacGillivray's neat and careful handwriting remained in the possession of the family of the late Dr. Paul MacGillivray, an eminent surgeon in Australia, son of the Professor; and having been allowed the privilege of perusing them, I found them to be of great interest and importance, and I shall make use of them freely in the following narrative."

This narrative Mr. MacGillivray has divided into five successive periods, which together cover the fifty-six years of the naturalist's life. These consist of (1) his boyhood in Harris; (2) his life at Aberdeen University, 1808–1820, his study of medicine, and his final abandonment of that branch of learning for the fascinations of natural science; (3) his residence in Edinburgh from 1820–1831; (4) his work as Conservator of the Museum of the Edinburgh College of Surgeons from 1831–1841, the period which embraces the "grand climacteric" of his intellectual life and includes his acquaintanceship with Audubon and the publication of the first three volumes of the *History of British Birds* [1837–1839–1840]; and (5) the final period, which comprises his professorship of Natural History in Marischal College, Aberdeen, the completion of the *History of British Birds* in 1852, and his death in that same year.

The interest of MacGillivray's career may be said to commence with the second of the above periods, and as the journals already mentioned were written in 1818 and 1819 they belong to this portion of his life. They are respectively entitled "Journal of a Year's Residence and Travels in The Hebrides, by William MacGillivray, from 3rd August, 1817, to 13th August, 1818, Vol. 1," and "Notes taken in the Course of a Journey from Aberdeen to London, by Braemar . . . in 1819 by William MacGillivray."

Interesting as the journals undoubtedly are, and graphic as is the description they afford us of the struggles and hardships of the naturalist's early life, it is a disappointment to find that they contain—so far as the extracts given enable us to judge—practically no ornithological references of any kind: * a singular omission on MacGillivray's part, since he tells us that the main object of his journeys was "to extend my

* Except three of small importance on p. 31.



THE GREAT AUK.

(From a drawing by MacGillivray in the British Museum).

Reproduced by permission from the *Life of William MacGillivray*.

Edinburgh, 19th June 1834.

Dear Sir,

I beg leave to introduce to you my excellent and esteemed friend Mr. Bell, who will have the honour of visiting you on his way to India. As he has a special liking to natural history, you would confer a great favour on me by facilitating the visit which he intends to make to the Museums in London, particularly that of the Zoological Society, and as his scientific acquirements and zeal render it probable that he may extend our knowledge of the botany and zoology of the country in which he is about to sojourn, it would be furthering our common views to impart to him any advice or instruction, which your long experience and successful investigation so well qualify you to give.

I have the honour to be, Dear Sir,
your obedient Servant
W. MacGillivray.

A REDUCED FACSIMILE OF MACGILLIVRAY'S HANDWRITING.
(From a letter lent by Mr. Ruthven Deane, Chicago, through Mr. J. A. Harvie-Brown, Dumfries).

Reproduced by permission from the *Life of William MacGillivray*.

knowledge in natural history, especially in ornithology and botany, which can only be done by travelling,” and a still stranger omission on the part of Mr. MacGillivray if any such references exist and have not been recorded. Two extracts, however, are given which are of great interest, as they refer to the production of the naturalist’s “great work,” as he rightly termed it, viz., the *History of British Birds*. The first, which is under date 1818, shows that he was then already contemplating the subject, for he writes:—“I have not yet seen an account of the birds of Britain with which I am entirely satisfied, and I have of late been thinking upon the subject.” And in the second, written in 1819, on the completion of his arduous journey on foot from Aberdeen to London—during which he subsisted chiefly on bread and water, travelling at one time a distance of 240 miles on an expenditure of twelve shillings—he records the following notes when visiting the collection of birds at the British Museum:—“I do not altogether agree with modern ornithologists, and possibly I may become some day the author of a new system.” The story of MacGillivray’s life on his return from London and his residence in Edinburgh, 1820–1831, has already been described by the naturalist in the preface to his *Rapacious Birds of Great Britain*, and as Mr. MacGillivray has nothing of importance to add we may pass on to the years which comprise his association with the American naturalist, John James Audubon, and the production of the first three volumes of the *History of British Birds*.

MacGillivray’s share in the authorship of Audubon’s *Ornithological Biographies* is now well known, and Mr. MacGillivray duly chronicles the meeting of these two great men in 1830. The following is Audubon’s own account of this episode—extracted from his journals in *The Life and Adventures of John James Audubon*, by Robert Buchanan, 1868:—“I applied to Mr. James Wilson, to ask if he knew of any person who would undertake to correct my ungrammatical manuscripts, and to assist me in arranging the more scientific part of the ‘Biography of the Birds.’ He gave me a card with the address of Mr. MacGillivray, spoke well of him and his talents, and away to Mr. MacGillivray I went. He had long known of me as a naturalist. I made known my business, and a bargain was soon struck. He agreed to assist me, and correct my manuscripts . . . and I that day began to write the first volume.”

This meeting led to a warm friendship between the two men, and amongst the many projects discussed by them was

that of a book on British birds. On May 7th, 1831, MacGillivray thus writes to Audubon:—"As I understood your proposals respecting the Birds of Britain to have ended in nothing, and as you do not allude to the subject, I shall suppose all our ideas to have dispersed, and shall think of the matter myself" [*The Auk*, Vol. XVIII., p. 241]; and writing again in 1834 he says:—"Now that your American birds are completed I suppose you will have at the European or the British. In the latter case what will become of mine? However, I have resolved, God willing, to go through with my task. I have at least 20 drawings superior to anything in the way ever seen by me, excepting always 'The Birds of America,' and so good that one might look at them without disgust even after seeing yours" [*Tom. cit.*, p. 245]; and in 1836 he tells Mrs. Audubon in a letter that "I have on hand just now a work on British Birds on a larger scale than that of the Rapacious species . . . there will be several plates representing the digestive organs and a few skeletons, with a multitude of woodcuts, and I expect the first volume to be out by the middle of March at the latest" [*Tom. cit.*, p. 248].

Mr. MacGillivray has very little information to afford us on the subject of the *History of British Birds* and of its reception by the public. The matter is dismissed in a few lines, and these contain at least one serious error (p. 109). The period elapsing between the publication of the third and fourth volumes being twelve, and not fourteen years. Nor does he offer us any explanation of MacGillivray's long delay in publishing the remaining portion of the "great work." This delay arose, no doubt, from the unfavourable reception afforded to it, and also from his new duties in his professorship of Natural History at Marischal College. This is no place to seek for a detailed explanation of the want of appreciation with which MacGillivray's contemporaries received his "British Birds." Some remarks on that subject have already been made in the pages of this magazine (Vol. II., p. 391), and it will here suffice to quote by way of illustration a criticism of the first volume of the *History of British Birds* which appeared in the *Magazine of Zoology and Botany*, Vol. II., p. 267 (1837-1838).

This review was written by Sir William Jardine, one of the editors of the magazine and himself an ornithologist of repute, and MacGillivray was at that time a contributor to its pages.

"We do not wish to appear unnecessarily critical regarding the manner in which Mr. MacGillivray has accomplished this object, but we should not act fairly to our subscribers were

we to say that it is done successfully. The writing appears to us an affected attempt to imitate the styles of Isaac Walton and of Audubon, which being extremely peculiar, can only be relished in the originals—and here, as in the case of similar imitations, we desiderate their freshness, and dislike the misplaced quaintness of expression. . . . The incidental remarks and digressions liberally dispersed through the volume (often totally irrelevant to the subject, see p. 125) are sometimes expressed scarcely with a kindly feeling. . . . ”

MacGillivray’s “great work,” however, has long outlived such adverse criticisms, and now holds the high place it deserves as a leading authority on British birds, but before leaving this subject we must express the wish that the authors of the “Life” had given us some slight information concerning those who by their valuable observations assisted MacGillivray in his great ornithological work, foremost amongst whom seems to have been T. D. Weir, of Boghead, Linlithgowshire, whose descriptions, *e.g.*, “Missel Thrush feeding young,” Vol. II., p. 123, are amongst the most brilliant in the “History.”

The fifth period contains some pleasing appreciations of MacGillivray’s character and his success as a teacher during his professorship at Aberdeen, contributed by his pupils and others who knew him, and also deals with his excursion in the autumn of 1850, which he undertook in connection with his last written work, *The Natural History of Deeside and Braemar*. The fatigues of this expedition no doubt hastened his end, and after a visit to Torquay, during which the fourth volume of the *History of British Birds* was published, he returned to Aberdeen, lived to see the fifth and final volume of the “great work” issued in July, and died there on September 8th following, 1852.

It only remains to add that the “Life” is illustrated with twelve plates (two of which we are kindly permitted to reproduce), including eight reproductions of drawings of birds by MacGillivray, the originals of which are in the British Museum, and a reduced facsimile of one of his letters to Audubon. These drawings show MacGillivray to have been an accomplished artist, though how accomplished only those who have had the privilege of inspecting the originals of his anatomical plates can determine. The “Life,” in spite of its shortcomings, is likely to remain our standard authority on William MacGillivray, and if its belated publication should be the means of directing fresh attention to the writings of our greatest ornithologist, its authors will not have performed their task in vain.

W. H. MULLENS.

ON A SUPPOSED EGG-DAUBING HABIT
OCCASIONALLY EXHIBITED BY THE JACKDAW.

BY

J. WIGLESWORTH, M.D.

IN *Ootheca Wolleyana* (Vol. I., p. 502) Professor Newton records a case, communicated to him by Mr. C. B. Wharton, of four eggs of the Jackdaw (*Corvus monedula*) which had been found by that gentleman in a nest placed in a hole in a branch of a tree, which had been so completely daubed over with clay (evidently by the bird itself) that the natural colour was wholly hidden. These eggs were exhibited by Mr. Wharton at a meeting of the Zoological Society in 1872, and were presented by him to Professor Newton in 1887. The above observation has, so far as I know, remained unique, but a similar instance having lately come under my notice I think it worth placing on record.

On May 6th, 1908, I visited a locality in Cheshire where there is a considerable colony of Jackdaws, somewhat widely scattered over an extensive wooded district, where the birds have taken to building open nests in trees after the manner of their congeners, a practice which, as is known, these birds occasionally, though rarely, resort to. I climbed up to two of these nests, which were placed in the branches of oak trees, and as the trees at this date were, of course, bare of leaves, the nests were very conspicuous. One of these nests contained four eggs, which presented nothing abnormal, but one egg was cracked and empty of its contents, so that it is probable that this nest was deserted. The other one, from which the bird flew, contained three fresh eggs, and two of these were thickly plastered all over with mud, so that the ground-colour was completely concealed; the third egg had some smears of mud on it, but not sufficient to conceal the ground-colour altogether. There was no mud or clay in the nest, and the uniformity and thickness with which the mud had been laid on over the entire surface of the two eggs seemed incompatible with any accidental fouling of the eggs, the condition of which certainly

conveyed the impression that the daubing was an operation which had been deliberately carried out by the bird. The eggs when cleaned were of the ordinary type.

I may mention here that I visited the locality again in May last year, and examined three more of the open nests of this bird, in all of which the eggs were normal, but all these nests were built near the tops of Scotch fir trees, the evergreen boughs of which, arching over the nests, afforded them some concealment, which is a point of some significance.

As to the cause of this phenomenon, although the likelihood of accidental contamination cannot of course be excluded, I think it possible, if not probable, that the explanation suggested by Mr. Wharton in his case may be correct, and that the bird may itself have daubed the eggs for the purpose of concealment. The Jackdaw has for so long a period abandoned the tree-building habit, and taken to nesting in covered sites, that the eggs have to a great extent lost the protective coloration of the *Corvidæ*, and now when laid in open sites they are very conspicuous. It may be that certain individual Jackdaws have recognised this and have adopted this means of hiding their eggs from other egg-stealing birds. Such an action would show a remarkable degree of intelligence on the part of a bird, and, if established, would be a fact of great interest. There is, however, no direct evidence that the bird itself daubed the eggs, and further observations are needed before such an explanation could be accepted. If, however, it were found that eggs daubed in this way were never found in completely covered sites, but only in those somewhat rare instances in which the bird breeds in open situations, it would go far to establish the fact that the daubing was done by the agency of the bird for the reason suggested.

I may add that in Mr. Wharton's case above referred to, the eggs, though laid in a hole which was in a large horizontal branch of a tree, were apparently plainly visible from outside, and could be readily seen by a bird flying past.

NOTES

RECOVERY OF MARKED BIRDS.

- SWALLOW (*Hirundo rustica*).—B.B., No. A500, marked by Messrs. Robinson and Smalley at Aldcliffe, Lancaster, on June 29th, 1910. Recovered at Villedon, Indre-et-Loire, France, about September 25th, 1910. The bird was found dead.
- CORMORANT (*Phalacrocorax carbo*).—B.B., No. 8944, marked by Mr. R. M. Barrington on Saltee Island, co. Wexford, on June 26th, 1910. Recovered on Strangford Lough, co. Down, on September 18th, 1910. Reported by Mr. H. T. Malcomson.
- TEAL (*Nettion crecca*).—B.B., No. 3949, marked by Mr. Thos. Hepburn at Old Hall Marsh, Tolleshunt D'Arcy, Essex, on February 14th, 1910. The bird was reared in confinement from a wild bird's egg at Netherby, Cumberland, and was turned down in Essex when full grown with wing clipped. Recovered on the island of Fohr, off the coast of Schleswig, on August 21st, 1910. Reported by Herr H. Boysen.
- COMMON EIDER (*Somateria mollissima*).—B.B., No. 495, marked by Dr. N. F. Ticehurst at Lambholm, Orkney, on June 24th, 1909, as a nestling. Recovered on Isle of Copinshay, Orkney, in February, 1910. The bird was found washed up by the tide, and was reported by the Rev. J. R. Hale.
- COMMON SNIBE (*Gallinago caelestis*).—B.B., No. 7776, marked by Mr. Walter Wilson at Elslack, Yorkshire, on May 30th, 1910, as a nestling. Recovered at Skipton, Yorkshire, on September 3rd, 1910. Reported by Major Tempest.
- COMMON TERNS (*Sterna fluviatilis*).—B.B., No. 20157, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on July 14th, 1910, as a nestling. Recovered on the River Wyre, at Poulton le Fylde, Lancashire, on September 4th, 1910. Reported by Mr. Arthur Plant.
- B.B., No. 20379, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on July 23rd, 1910, as a nestling. Recovered at the estuary of the River Ribble, Lancashire, on September 4th, 1910. Reported by Mr. John Wright.
- B.B., No. 20407, marked by Messrs. Robinson and

Smalley at Ravenglass, Cumberland, on July 23rd, 1910, as a nestling. Recovered at Bolton-le-Sands, near Carnforth, Lancashire, on August 22nd, 1910. Reported by Mr. Henry Bowker.

B.B., No. 20477, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on July 25th, 1910, as a nestling. Recovered at Carsethorn, Solway Forth, on August 19th, 1910. Reported by Mr. John Kirkpatrick.

B.B., No. 20450, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on July 23rd, 1910, as a nestling. Recovered on the Lammermuir Hills, Berwick, N.B., on September 20th, 1910. Reported by the Rev. W. McConachie.

B.B., 20339, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on July 23rd, 1910, as a nestling. Recovered about twenty-five miles south of Oporto, Portugal, about September 12th, 1910. Reported by Mr. Alfred W. Tait.

B.B., No. 1790, marked by Mr. R. Oswald Blyth at Loch Thorn, Renfrewshire, on August 1st, 1910, as a nestling. Recovered at Sunderstone Bay, Renfrewshire, on August 13th, 1910. Reported by Mr. James Young.

B.B., No. 11692, marked by Herr G. J. van Oordt at the Hook of Holland, on July 16th, 1910, as a nestling. Recovered at Boulogne, France, on September 1st, 1910. Reported by Mr. C. F. Pybus.

BLACK-HEADED GULLS (*Larus ridibundus*).—B.B., No. 9251, marked by Mr. J. S. T. Walton at Denton Fell, Cumberland, on June 4th, 1910, as a nestling. Recovered at Ryhope, near Sunderland, about September 12th, 1910. Reported by Mr. H. Knapton.

B.B., No. 9287, marked by Mr. J. S. T. Walton at Denton Fell, Cumberland, on June 4th, 1910, as a nestling. Recovered at Ravenstonedale, Westmorland, on August 24th, 1910. Reported by Mr. J. H. Beck.

B.B., No. 9324, marked by Mr. J. S. T. Walton at Denton Fell, Cumberland, on June 4th, 1910, as a nestling. Recovered on the Humber, near Marfleet, on August 27th, 1910. Reported by Mr. Gofton Jarrett.

B.B., No. 9614, marked by Major H. A. F. Magrath at Loch Spynie, near Elgin, on June 4th, 1910, as a nestling. Recovered at Foveran, Aberdeenshire, on August 19th, 1910. Reported by the Rev. Wm. Serle.

B.B., No. 3720, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 10th, 1910, as a

nestling. Recovered at Nethertown, Cumberland, on September 25th, 1910.

B.B., No. 30002, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 10th, 1910, as a nestling. Recovered at Kirkhampton, near Carlisle, on September 13th, 1910. Reported by Mr. W. J. Hardie.

B.B., No. 30436, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 11th, 1910, as a nestling. Recovered at Seascale, Cumberland, on October 9th, 1910. Reported by Mr. J. A. Lewthwaite.

B.B., No. 30729, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 13th, 1910, as a nestling. Recovered near Kendal, Westmorland, on August 26th, 1910. Reported by Mr. F. B. Pollitt.

B.B., No. 9703, marked by Mr. Howard Bentham at Ravenglass, Cumberland, on June 11th, 1910, as a nestling. Recovered between Crossens and Southport, Lancashire, on August 18th, 1910. Reported by Mr. J. W. Taylor.

B.B., No. 30894, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 13th, 1910, as a nestling. Recovered on the River Ribble, at Preston, Lancashire, on October 8th, 1910. Reported by Mr. H. Taylor.

B.B., No. 30644, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 13th, 1910, as a nestling. Recovered on the River Ribble, at Longton Marsh, Preston, Lancashire, on October 8th, 1910. Reported by Mr. W. H. Heathcote.

B.B., No. 30762, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 13th, 1910, as a nestling. Recovered at Urvic Tarn, south of Ulverston, Lancashire, on July 11th, 1910. Reported by Mr. John Dobson.

B.B., No. 30725, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 13th, 1910, as a nestling. Recovered at Rochdale, Lancashire, on August 11th, 1910. Reported by Mr. P. Fulton.

B.B., No. 3761, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 10th, 1910, as a nestling. Recovered on the River Tees, at Middlesbrough, Yorkshire, on September 18th, 1910. Reported by Mrs. A. E. Sleightholm.

B.B., No. 30822, marked by Messrs. Robinson and Smalley, at Ravenglass, Cumberland, on June 13th, 1910, as a nestling. Recovered in the New Joint Dock, Hull, on August 29th, 1910. Reported by Mr. Fred Cawkwell, Junr.

B.B., No. 30083, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 10th, 1910, as a nestling. Recovered at Clondalkin, co. Dublin, on October 5th, 1910. Reported by Mr. R. L. Blackham.

B.B., No. 8282, marked by Major H. Trevelyan at Lower Lough Erne, co. Fermanagh, on June 17th, 1910, as a nestling. Recovered at Hall-craig, Monea, co. Fermanagh, on August 30th, 1910. Reported by Mr. Nat J. Nixon, Junr.

COMMON GULL (*L. canus*).—B.B., No. 31989, marked by Mr. W. I. Beaumont at Stirk Island, off Lismore, Lynn of Lorn, Argyllshire, on July 12th, 1910, as a nestling. Recovered at Seaton Sluice, Northumberland, on September 3rd, 1910. Reported by Mr. John Mitchison.

HERRING-GULLS (*L. argentatus*).—B.B., No. 31907, marked by Miss A. E. Jackson at Cromarty Firth, on July 9th, 1910, as a nestling. Recovered at Roseheart, Aberdeenshire, on August 19th, 1910. Reported by the Rev. Wm. Serle.

B.B., No. 32009, marked by Miss A. E. Jackson at Wick, Caithness, on July 14th, 1910, as a nestling. Recovered at Loch Limbe, off Fort William, Inverness, N.B., on August 27th, 1910. Reported by Mr. W. T. Kilgour.

LESSER BLACK-BACKED GULL (*Larus fuscus*).—B.B., No. 31007, marked by Messrs. Robinson and Smalley at Foulshaw, Westmorland, on June 24th, 1910, as a nestling. Recovered at Point St. Gildas, mouth of the Loire, France, on September 23rd, 1910. Reported by Mons. R. Rousseau Duelle.

ON SOME ISLE OF WIGHT BIRDS.

RAVEN (*Corvus corax*).—We Hampshire naturalists were no little grieved last year to hear that the last pair of Fresh-water Ravens were first robbed of their five eggs and then shot. The Royal Society for the Protection of Birds, aided by Lord Tennyson and their excellent watcher, Alfred Isaacs, did all that they could to bring the offenders to justice, but in vain. However, we have the good news to report this year that a pair nested in another part of the island and safely brought off three young. Isaacs tells me that the island Ravens feed largely on dead rabbits and also visit the slaughter-houses, a habit which has more than once proved fatal to them.

[GOSHAWK (*Astur palumbarius*).—In our *Birds of Hampshire* Mr. Munn and I had some hesitation about rejecting a record of two of these birds, which were seen

at close quarters in the island by a careful observer. Mr. Percy Wadham, of Newport, informs me that one of these birds was shot soon afterwards and was found to be wearing jesses, so that our decision was well justified.]

PEREGRINE FALCON (*Falco peregrinus*).—These birds safely brought off three young last year and four this year. Isaacs has observed them to prey upon young Herring-Gulls (which they take from the nest), Jackdaws (old and young), Blackbirds and, in one case, a Mistle-Thrush. The necessity for the protection now afforded to these birds is proved by the fact that before a watcher was appointed they were robbed for no less than eleven years in succession.

COMMON SHELD-DUCK (*Tadorna cornuta*).—About forty of these birds were seen together in the island this spring.

LESSER BLACK-BACKED GULL (*Larus fuscus*).—The various naturalists who have catalogued the island birds, down to Mr. Fox, who wrote the list in Morey's *Natural History of the Island* (1909), have usually reckoned only two or three pairs of this species as nesting among the Herring-Gulls, but Isaacs tells me that he considers that quite fifty pairs bred this year on the Freshwater cliffs.

BLACK-HEADED GULL (*Larus ridibundus*).—We are enabled to add this bird to our list as a breeding-species for the first time.*

J. E. KELSALL.

BLUETHROATS IN NORFOLK.

THE Bluethroat is not a rare bird in Norfolk on the autumn migration, but the influx this September (1910) having been greater than any other in my experience, it may be worth while putting the facts on record. The wind had been N.W. almost from the beginning of the month, and on the 8th it became N.E., developing into a gale on the 13th. On the 14th it was still more easterly, with small rain falling all the morning. About two o'clock, as the rain was lessening, we went out, and half-an-hour later met with a Garden-Warbler, evidently just arrived. A few minutes afterwards I flushed a Bluethroat, and walking along the beach towards the west we came upon many others. The visitation extended over about two miles, and there must have been at least thirty or forty

* It is important to chronicle the increase of breeding colonies of the Black-headed Gull which appears to be taking place in various parts of the country. This year I visited a flourishing two-year old colony of some sixteen nests on the Hampshire mainland, where previously no colony was known. I should, however, like to have information about the Dorset colony, which I hear has been much harried of late, and it seems possible that the birds may be forsaking it.—H.F.W.

birds in the bushes, scattered about singly, not in parties. From all I could gather there were nearly as many adults as there were immatures. They were accompanied by various other small birds, mostly Wheatears. Garden-Warblers were, however, unusually numerous, and there were also many Redstarts, with a sprinkling of Robins, Pied Flycatchers, Goldcrests, Willow-Wrens, Chiffchaffs and Lesser White-throats, but no Common Whitethroats. On the 15th the wind was again N.E., and all these birds were still about in lesser numbers, together with two Blackbirds, two Song-Thrushes, two Tree-Pipits and one Merlin. On the 16th there were still a few, and a new arrival was a Red-backed Shrike. On the 17th, the wind being still N.E., the rush was over—I only saw one Bluethroat at the most westerly point of the sandhills. A Snow-Bunting arrived that day. The migration, as someone put it, was short and sweet, for the bushes were practically empty both before and after it.

E. C. ARNOLD.

BLUE-HEADED WAGTAIL IN CARNARVONSHIRE.

In May, 1910, I was camping in a field which faces Llandudno Bay, and on the morning of the 15th I found that a small party of migratory birds had arrived during the night, and were feeding close to my tent. This party consisted of three Greenland Wheatears, a Whinchat, a Pied and three White Wagtails, and a female Blue-headed Wagtail (*Motacilla flava flava*). The birds were tame, and fed together in this and the next field until the evening of the 18th, but they were not visible on the 19th or later. In the early mornings, before anyone was stirring on the field, they frequently came to within a few feet of my tent, and I was able to watch them, unobserved, from behind the curtains. I was at once struck by the white eyestripe and chin of the Blue-headed Wagtail, but never having seen the bird alive before I did not feel satisfied until, on my return to Cheshire, I had carefully watched many female Yellow Wagtails.

The Blue-headed Wagtail has not, I believe, been previously observed in Carnarvonshire, but it has been taken in the neighbouring county of Merioneth (Saunders' *Manual*, 2nd edition, p. 127; Forrest, *Fauna of North Wales*, p. 116). It is interesting to note that the Yellow Wagtail (*Motacilla raii*) is only known as a bird of passage in the immediate neighbourhood of Llandudno, and that the Whinchat is rare as a nesting-species.

T. A. COWARD.

THE RED-BACKED SHRIKE'S "LARDER."

THE interesting account of the Red-backed Shrike's "larder" in the August number of BRITISH BIRDS (p. 79) suggests that the "larder" deserves its name. After inspecting several during the last year or two I have been inclined to think that storage is not at any rate the primary object. The "Butcher Bird" wishes to tear her victims up into small pieces suitable for her young in the neighbouring nest. Since it is not her habit to hold them in her claws, she spikes them. In 1909 I watched a Red-backed Shrike tearing up a field-mouse, the only thing in the "larder," and making several journeys to carry the flesh to her nestlings. She showed remarkable skill in separating the meat from the skin; the latter was left hanging on the thorn. The "larders" which I have seen have been very meagrely supplied compared with the one described by Mr. Tracy. One which I inspected three or four times never contained more than one "joint," but each day a different one.

F. W. HEADLEY.

PIED FLYCATCHERS IN SUSSEX.

IN reference to Dr. N. F. Ticehurst's note (*supra*, p. 151), I have seen the Pied Flycatcher on the following occasions at Newhaven, Sussex:—April 24th, 1891; August 13th, 1895; and August 9th, 1896, both the latter being immature birds.

NORMAN H. JOY.

BEHAVIOUR OF THE GREENFINCH AT THE NEST.

IN view of Mr. H. W. Ford-Lindsay's record of a Greenfinch (*Ligurinus chloris*) swallowing the *faeces* of her young (*supra*, p. 80), it may be of interest to note that three pairs of Greenfinches, which I had under observation this year, neither swallowed nor removed the *faeces*.

In two cases the nests were built in a thorn-hedge, and were placed four to five feet from the ground. The third was in a pear tree, and was not so easy to watch as the others, for the leaves were thick and the nest sixteen feet up. The first nest was in a thin part of the hedge, and by pushing aside the hawthorn-twigs I was able to get an uninterrupted view of the behaviour of the birds when feeding their young.

About ten feet from this nest a pair of Chaffinches (*Fringilla caelebs*) had built in the same hedge, and they were feeding six young birds, whilst the Greenfinches were providing for five.

I never saw the Greenfinches make any attempt to remove the *faeces* of the nestlings, and the photograph shows the

dirty condition of the nest after the young had flown. On the other hand the Chaffinches invariably carried away the *fæces*, and the nest was quite neat and clean when vacated.



NEST OF GREENFINCH TO SHOW ITS DIRTY CONDITION
AFTER THE FLEDGING OF THE YOUNG.

(Photographed by C. K. Siddall.)

The habits of the other two pairs of Greenfinches were similar, and the nests in the same foul condition after use.

It would appear from the above that individuals of the same species may differ in their behaviour.

C. KINGSLEY SIDDALL.

[Perhaps the young Greenfinches in the nest watched by Mr. Ford-Lindsay were very small. Certainly the dirty condition of the nest as above described is usual in this species.—EDS.]

THE CROSSBILL IRRUPTION.

No advantage is likely to accrue from the publication of further notes regarding the movements of Crossbills, unless indeed a fresh irruption occurs. I should, however, wish to publish every authentic instance of nesting, and would especially draw my readers' attention to the importance of discovering whether the birds breed next year and, if so, in what numbers.

I am making an attempt to draw up an account of the course of the "irruption" of 1909-10, and shall be very

grateful if those correspondents who have recorded the presence of Crossbills and have *not* recorded their departure or continued presence would let me have concise information by postcard or letter on the following points:—(1) When did the Crossbills depart (if they did depart) from the locality. (2) When and to what extent did their numbers diminish (if they did diminish). (3) If none appeared to depart, or if only a percentage departed, what was the last date they were observed and in what numbers were they. (4) Did they breed in the locality.

H. F. WITHERBY.

BRECON.—“During the last winter,” plentiful until “quite late—in one place until April.” None were observed after the middle of April (E. Cambridge Phillips, *Field*, 10. IX. 1910, p. 537).

KENT.—On the evening of September 5th, 1910, a single Crossbill flew, calling, into a fir-tree under which I was standing at Ingleden, Tenterden. This is the only bird that has been seen here since the passing flocks which I recorded seeing on June 26th (*antea*, p. 83) (N. F. Ticehurst).

MERIONETH.—A flock of twenty-five or thirty passing overhead at Dinas Mawddwy on August 9th, 1910 (H. H. Farwig).

SOMERSET.—A visitation at Burnham is recorded by Mr. P. Percival in the *Field* (13. VIII. 1910), but no date is given.

SURREY.—Two observed at Frensham and six at Millbridge on September 11th, 1910. None noticed in the Oxted neighbourhood since July 17th (*Howard Bentham*).

ON behalf of the Migration Committee of the B.O.C. I am sending the following notes of the occurrence of Crossbills which were sent us during the autumn of 1909, and which were overlooked in our previous communication on this subject:—

SUSSEX.—During the month of August, 1909, several were seen in the parish of Isfield (*Miss A. Shenstone*).

NORTHAMPTONSHIRE.—A family party seen at Hazelbeach on August 5th, 1909; two at Harlestone Firs, near Northampton, on August 6th; and a party of about three dozen at Maidwell Dales, near Hazelbeach, on August 22nd. Still numerous at Hazelbeach on November 2nd, 1909 (*W. A. Shaw*). N. F. TICEHURST, Hon. Sec.

CROSSBILLS NESTING.

IN SUFFOLK AND NORFOLK.

ON the 2nd and 3rd of April, 1910, I was in the neighbourhood of Thetford, in the company of Mr. C. S. Meares and Mr. P. B. Smyth, in the hope of seeing Crossbills, having heard that they had been seen in the district. As we were unusually fortunate in finding not only the birds, but many nests, it may be worth while putting on record what we actually saw. The birds themselves were by no means conspicuous, but we soon found that they were distributed in fair numbers all over the district. They were very partial to the thin strips of fir trees which border the roads and separate the fields, and which are quite a characteristic of this district.

In the course of about twenty-four hours we came upon no less than twenty-three nests. Of these thirteen contained either eggs or young—seven contained eggs, six young—in all stages from fresh eggs to fledged birds. As far as could be seen, no nest contained more than four eggs or young, three being observed in several cases. From the remaining nests the young had flown, some quite recently, the others possibly a month previous to our visit. They were situated at heights varying from seven to sixty feet from the ground, mostly on the lateral branches of Scotch firs. One was built in a similar situation in larch and, as the leaves had not yet appeared, was very conspicuous. One other was in a spruce tree placed close to the trunk. We noticed two distinct types of nests. Perhaps the larger number were composed of pine-twigs neatly woven together, with a lining of hair, feathers and soft grass. In the other type the foundation and outside of the nest was made of grass and roots and showed no pine-twigs, being not unlike large nests of the Linnet. The district worked was mostly in the county of Suffolk, but close to the Norfolk border, and about one-third of the nests were in the latter county.

From this account it will be evident that a considerable number of young were reared, and it will be interesting to see if any of these stay to nest next spring. J. BEDDALL SMITH.

[Notes on the Crossbills nesting in this district appeared in Vol. III., pp. 302 and 371-2.—EDS.]

IN SURREY.

ON April 28th, 1910, I found a Crossbill's nest in Surrey, not far from Aldershot, which contained four fresh eggs. The nest was in a pine tree, near the extremity of a branch, about twenty feet from the ground. C. W. COLTHRUP.

ON THE LATE NESTING OF THE CIRL BUNTING IN SOMERSET.

ON September 15th, 1910. I found a nest of the Cirle Bunting (*Emberiza cirlos*) at Badgworth, Somerset, with young in the down, which was dark grey. The young were fledged and sitting about the hedge on the morning of the 21st. The feeding was performed entirely by the female bird, the male never once putting in an appearance, which made a careful identification necessary.

H. W. MAPLETON.

[Cirle Buntings undoubtedly breed until late in the summer. Instances may be noted of eggs hard-set on September 6th, 1903, in Dorset (*Field*, September 26th, 1903), and for previous notes on the subject in our pages compare Vol. III., pp. 125 and 195, while the article in Vol. I., pp. 275-9, might also be consulted.—Eds.]

CEREMONIAL GATHERINGS OF THE MAGPIE.

WITH regard to Mr. F. J. Stubbs' note on the ceremonial gatherings of the Magpie (Vol. III., p. 334), I would remind readers of BRITISH BIRDS who live in a "Magpie country" that now is the time to find out the earliest date which these gatherings take place. Nearly all my life has been spent in "Magpie country," and in Mid and West Lothian I have seen winter-gatherings of well over one hundred. Here in the Blantyre district of Clyde Magpies are fairly plentiful and gatherings of from one to two score are often seen, and on looking up some of my notes I find the earliest are:—Gathering of about twenty-five, January 8th, 1908; about thirty, January 10th, 1909. My latest dates are:—Gathering of about twenty-five, March 15th, 1909; about thirty-five on 22nd and again 29th March, 1910.

WALTER STEWART.

THE PERSISTENCE OF THE RIGHT OVARY AND ITS DUCT IN THE SPARROW-HAWK.

ON September 12th, 1910, I had sent to me a female Sparrow-Hawk (*Accipiter nisus*) from Dumfriesshire. On dissecting it I discovered to my astonishment that, instead of only the left ovary and its duct being functional, the *right* ovary also was persistent and equal in size to the left, and that the right oviduct was also present, though not quite so long or wide as the left one. As I had never met with a similar case in the dissection of some hundreds of birds of many species I sent the specimen to the British Museum, where Mr. Pycraft examined it, and confirmed my findings, remarking that he also had never come across a similar case. Since then I have had two more female Sparrow-

Hawks for dissection, one taken on September 18th, 1910, off the Norfolk coast, and one shot at Battle, Sussex, on October 18th, 1910. Both these birds had *both* ovaries equally developed: in the former the right oviduct was in much the same condition as in the first bird; in the latter the right oviduct appeared to be reduced to a ligamentous strand, but it was not easy to be sure, as it had been shot in that region. It is, however, interesting to note that this bird was an adult and had laid eggs this year, as evidenced by the condition of the left oviduct. It would have been interesting to have seen whether during the breeding season both ovaries were active (which seems probable), and whether the ovum from the right ovary travelled down the left oviduct.

Mr. H. F. Witherby informs me that he has a skin of a female Sparrow-Hawk obtained by Commander H. Lynes on March 20th, 1910, in the Sierra de Jerez, South Spain; on dissecting this bird Commander Lynes found it to have a double ovary.

Mr. J. H. Gurney writes to me that Mr. T. E. Gunn, taxidermist, of Norwich, has informed him that he has found a double ovary in the Sparrow-Hawk, Kestrel, and Montagu's Harrier.

If the presence of two ovaries in the Sparrow-Hawk is normal it is very curious if it has not been noticed before, yet the finding of this condition in three successive birds must surely be more than coincidence. MacGillivray apparently had not noticed it, and in Newton's *Dictionary of Birds* I only find the following remarks (pp. 782-3), "In the *female* [*i.e.*, of birds as a class] a pair of Ovaries are developed, but with rare exceptions only that on the left side becomes functional. . . . In young birds both oviducts are almost equally developed, but the right one soon becomes reduced to an insignificant ligamentous strand along the ventral side of part of the Kidney. This one-sided suppression of the organs may possibly be referable to the inconvenience that might be caused were each oviduct to contain an egg ready to be deposited."

Nothing is said as to what are the "rare exceptions."

CLAUD B. TICEHURST.

QUAILS IN LEWIS, OUTER HEBRIDES.

WITH reference to Mr. W. H. Workman's note in the last number of *BRITISH BIRDS* (p. 156), recording the Quail in Lewis, I may note that on September 23rd, 1907, I put up and shot a Quail near Gress Lodge, Isle of Lewis. The bird was stuffed, and is now in the possession of the shooting tenant of the Gress Lodge beat, Mr. F. P. Birch.

Major Matheson, of Lews Castle, Stornoway, who owns the majority, if not all, of Lewis, was told about this Quail, and, as far as I can recollect, he stated that he knew of two previous occurrences of this species in the island, and I fancy he has a stuffed specimen in his possession. A note which I sent to the *Field* about this bird was, unfortunately, put under the "Shooting Notes" heading, and thus no doubt escaped the attention of naturalists.

W. M. CONGREVE.

GREAT BUSTARD IN HAMPSHIRE.

A GREAT Bustard (*Otis tarda*) was shot on January 12th, 1910, in a turnip-field on Jamaica Farm, St. Mary Bourne, Hants. The bird is an adult female and in good condition; the state of its plumage does not show any signs of its having been in captivity, nor was it at all tame, and I cannot hear that any have been kept in captivity in the neighbourhood. The weather in England at the time it was obtained was very unsettled and changeable, with heavy gales from the S.W., W. and N.W. and snow, hail and rain; and possibly severe weather may have driven it from its usual haunts.

It is, of course, difficult to say with any certainty whether it is an escaped bird or not, but perhaps this note may elicit some information on the subject.

PHILIP W. MUNN.

THE MOULT OF THE GREAT BUSTARD.

WHAT we wrote about the moult of the Great Bustard (*Otis tarda*) in *Wild Spain* (by W. J. Buck and myself in 1892)—and I had made the same mistake in *The Ibis*, 1884, p. 70—was wrong. That is all a long time ago, and we were correcting the mistake in our new work, *Unexplored Spain* (now in the press), when the point was raised in BRITISH BIRDS (*supra*, p. 32). The explanation we roughly transcribe from our new book, as follows:—In spring it occasionally happens that old male Bustards are found in so damaged a condition—with some flight-feathers missing, others broken—as to be incapable of flight. Several such instances had come under our notice, and at the time misled us, and many others, to conclude that the incapacity arose from a spring-moult, similar to that of wild-geese and of some ducks. The true reason, however, is as follows:—From daydawn in spring the male Bustards engage in continuous fighting, and as the corn-growth is already quite tall and all vegetation saturated with night-dews, the plumage of the combatants becomes completely dew-drenched (*rociada*, in Spanish); and when, in addition, many quill-feathers are pulled out and others broken during the fighting, it happens on occasion that a heavy old male will be left incapable of rising from the ground.

This, however, arises from the dual causes named and not from a moult. Bustards moult gradually and never from that cause lose the power of flight.

ABEL CHAPMAN.

BLACK-HEADED GULL CAPTURING YOUNG WHEATEAR ON THE WING.

IN the month of July a Black-headed Gull (*Larus ridibundus*) was seen by the bird-watcher at the Ravenglass colony of Gulls and Terns to strike several times at a young Wheatear (*Saxicola oenanthe*) on the wing, and eventually to kill and fly off with it. The incident happened not on the actual breeding-ground, but on the shore about two miles north of it, and these Gulls were also guilty of killing young Terns there this year, and *vice versa*, as a fair number of young Gulls are mobbed and killed by the Terns when trespassing on their breeding-ground, as I pointed out last year in BRITISH BIRDS (Vol. III., p. 170).

H. W. ROBINSON.

KITTIWAKES SWIMMING IN VERY HEAVY SEAS.

ON March 10th, 1910, being at anchor in H.M.S. "Dido," about one hundred and twenty miles from land, in the latitude of Edinburgh, in a very heavy sea and strong gale of wind, it was observed that four Kittiwakes (*Rissa tridactyla*) began to swim and continued to do so for an hour. The sea was not only very large at the time, but was breaking a good deal as well. When a breaking wave or a patch of foaming water approached one of the birds, it raised itself slightly above the level of the sea, as if standing on the surface. In one case at least a small wave was seen to break right over one of the birds, which, however, emerged from the foam shaking itself, but otherwise undisturbed. There were no other gulls about on this occasion.

On March 16th, on passage from Lerwick in the Shetlands, and about halfway between that and the Orkney Islands, in a very heavy gale, with a tremendous sea running, about a dozen Kittiwakes were noted to be swimming in company, and apparently very comfortably. On this occasion numerous Herring-Gulls (*Larus argentatus*) were flying round about, but none were seen on the water.

Although Kittiwakes are often seen one hundred miles and more from land in heavy weather, Herring-Gulls appear at such distances only if the weather is fine—at least that is my experience.

KENNETH H. JONES.

UNEQUAL WING-STROKES IN FLIGHT.

WITH reference to Mr. Seaby's note (*antea*, p. 156) concerning my photographs (*antea*, pp. 115-116), in Figure 1 the bird's



FIG. 1.—YOUNG GULL.

body may be tilted, it is obvious that the wings are not balancing one another. In Figure 3, whatever illusions perspective may be responsible for, it is nevertheless clear that the right wing is held more back, so that its under-surface is presented to the spectator, whereas the left wing shows him its front edge. Besides this, the left wing is more straightened out.

In the *Aeronautical Journal* for April last is a photograph of mine showing a Pigeon taking unmistakably unequal strokes. The two photographs accompanying this also supply good evidence. Fig. 1 is a young Gull; the right wing is bent at a right angle, while the left is held straight, or almost so, at the wrist-joint. Fig. 2 is a figure of a Pigeon alighting, and the conspicuous difference in the positions of the wings cannot be accounted for by any trick of perspective. I may add that I have other photographs that make the point clear. Unfortunately two of the most convincing were not sufficiently in focus for reproduction.



FIG. 2.—PIGEON ALIGHTING.

F. W. HEADLEY.

BLACKBIRDS AND SONG-THRUSHES NESTING ON THE GROUND.—Several correspondents have sent us notes on this subject, but, as has been pointed out, the habit is by no means a rare one. Mr. W. S. M. D'Urban, however, assures us that

it is a very unusual habit in Devon, and he reports a case of a Blackbird nesting for three years in succession on the ground in the same clump of nettles and for a fourth year in another clump of nettles in the same field near Topsham, Devon, and a Song-Thrush nesting on the ground in a large bed of nettles, as the only instances that have occurred to him.

FLOCKING OF THE RED-BREASTED MERGANSER IN AUTUMN.—Major H. Trevelyan contributes a further note on this subject to the *Field*, September 3rd, 1910. (Cf. BR. BIRDS, Vol. III., p. 167.) He saw a pack of about fifty young Mergansers on August 22nd on a large inland lake in Ireland, which were unable to fly, but too wild to allow of close approach. An hour later, on the same water, he found two small parties of young birds, and about a mile away another large pack of about one hundred flappers. According to local information this packing often takes place in August, but does not become general till September, and as many as two hundred young are said to have been seen in a flock, with one adult female as leader. Major Trevelyan writes us that his boatman tells him that he saw about three hundred young with, so far as he could tell, only one adult on September 25th, 1910. In former years, when Mergansers bred more plentifully than now, as many as five hundred to a thousand young are said to have been seen together in a pack, accompanied apparently by only one old bird. Attempts were made by those interested in the fishing to reduce their numbers by driving them into a net stretched across an opening between the mainland and an island, but with only partial success.

THE BOUNDARY OF STAFFORDSHIRE AND WARWICKSHIRE.—Mr. J. R. B. Masefield informs us that Harborne was formerly part of Staffordshire, and on investigation we find that it was transferred to Warwick by the Provisional Local Government Board Act of 1891, so that at the time it was found the specimen of the Razorbill (*Alca torda*) referred to (*antea*, p. 112) was actually in Staffordshire! As, however, the bird was not recorded till 1910, nineteen years later, it seems better to adhere to the present boundaries so as to avoid unnecessary duplication of records.—F.C.R.J. and H.F.W.



REVIEWS

“ BIRDS OF AYRSHIRE.”

SOME three years since, a manifestly incomplete “ Birds of Ayrshire,” by the editor (George Rose), appeared in the *Annals* of the Kilmarnock Glenfield Ramblers, No. 5, printed at the office of the *Kilmarnock Standard*. Another part (No. 6) of the *Annals* of this Society has just appeared, and contains a supplement (pp. 67-72) to the list of Ayrshire birds in the preceding part. It contains little of importance, but a few of the more interesting occurrences may be mentioned. A pair of what Mr. Nicol Hopkins took to be the Greenland Wheatear (*S. æ. leucorrhœa*) was observed by him on October 24th, 1908, presumably in the Darvel district, where he resides, and where he saw a Mealy Redpoll (*L. linaria*) on February 5th, 1908. The alleged occurrences of the Cirl Bunting and Little Bunting are not likely to be accepted without demur. Neither is authenticated, and it might have been well if these alleged occurrences had been withheld until there was some confirmation, as we know has been done in another quarter with statements relating to the occurrence of the Cirl and the Ortolan Buntings in Ayrshire. Doonside and Loudoun are added to the list of nesting-sites of the Heron (*A. cinerea*). The former locality is one previously tenanted. It is further stated that a pair nested and raised two young at Muirkirk in 1908. Bewick's Swan (*C. bewicki*), claimed as new to Ayrshire, has been known from Gray's time till the present year as an Ayrshire bird. A Glaucous Gull (*L. glaucus*) was observed in February, 1908, by Mr. McCrindle, Dunure. There is one preserved at Dunure which was obtained in that locality. A Great Skua (*M. catarrhactes*) at Dunure in July, 1906, and the observations on the Manx Shearwater (*P. anglorum*) in flocks of at least a hundred in the Firth of Clyde are the only other matters calling for notice. J.P.



LETTERS

To the Editors of BRITISH BIRDS.

BRITISH SONG-THRUSHES.

SIRS,—I wish to say a few words about our “British Song-Thrushes.” I care not whether their name be *T. musicus*—*auctorum plurimorum*—or *T. philomelos*, in this connection, because “*British Song Thrushes*” (*sic*) will do quite as well.

What I desire to refer most directly to is: the differences which exist between the usual typical olive-backed British-nesting Song-Thrush and that variety which is found nesting throughout the Outer Hebrides.

The exceedingly dark olive—almost a smoky-black—is most conspicuous. No good observer in the field can fail to see this even at a distance of a fifty-yards rise, out of the heather, and during the bird’s quick flight of a few yards further.

Now, Dr. Hartert has as yet, I think, only got so far as to distinguish between our British home-bred Song-Thrushes and others of continental localities. May I be permitted to make one more step—forward? (or otherwise—). I clearly distinguish between our Hebridean home-bred Song-Thrushes and those which we have with us here in our central districts and on the mainland as a whole. I cannot, from memory or field-notes, say what other shades of olive tints occur in the backs of Song-Thrushes in other parts of England, or in Britain north of Tweed. But I am sure that I can point my finger at yet one other colour of back in Scotch-bred Song-Thrushes, and that on certain portions of the east coast of Scotland, taking the month of May as choice of a right time to make the observation. Again, at a distance of thirty to fifty yards the almost absence of olive at all on the backs of the birds flying away from the observer was quite as conspicuous, and equally startling, as was the deeper tone of olive (or smoky-blackness) of the backs of those of the Western Isles, as distinguished from the typical olive-backs of our general mainland birds.

Here, then, we have three grades or colour-forms: (a) On the east side of Scotland—conspicuously on the east of Forfar and among the sand-dunes there; (b) the usual central or (?) typical British form; and (c) the dark—conspicuously dark—olive or sooty-bluey-black-backed birds of the west.

The late Professor A. Newton used to say, “We may soon have a new ‘sub-species’ for every parish.” But it is a long time ago, and many tides have flowed and ebbled, since Professor Wm. Macgillivray resided in the Outer Hebrides and remarked the “dark-backed Thrushes” of the Isles as compared with those he knew in “Dee” and on the mainland of Scotland. And many later writers have also placed strong emphasis upon their own similar observations. Thus,

we have all the following remarking upon it: Macgillivray, Robt. Gray, Rev. H. A. Macpherson, Buckley, and myself, as well as others.

For my own part I think—always have considered—that such varietal forms—if they are to be so distinguished as to receive a trinomial, and sub-specific rank at all—should be possessed of (or by) more descriptive and more definite geographical names than those usually applied; or otherwise be simply distinguished—for *Museum uses*—by letters of the Greek alphabet. And for field purposes such *nonsense cognomens* are useless and confusing, and give no aids to field-study or “bird-watching,” whatever their uses may be in museums. It would be pedantic and ridiculous to expect them to exist under the pure air of any open country-side.

J. A. HARVIE-BROWN.



C.G. Davies
-1910-

Frontispiece Vol. IV.]

[B. B., Vol. IV., Pl. 3.

CROSSBILLS AT THE NEST.

(Drawn by C. G. Davies, from material collected in England in the Spring of 1910.)

BRITISH BIRDS

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

ASSISTED BY

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ON THE POSITIONS ASSUMED BY BIRDS
IN FLIGHT.

BY

BENTLEY BEETHAM, F.Z.S.

II. STEERING, SLOWING-UP, AND TURNING.

THE old idea that the wings of a bird simply flap up and down, and that by some means the body travels steadily along on a level horizontal course, has long been dispensed with. It is, however, difficult to realize, but none the



FIGURE 1.—THE TWO EXTREMES OF POSITION.
(*Photographed by Bentley Beetham.*)

less true, that at each full wing-beat the body is raised as well as propelled. Perhaps this can be more readily appreciated by reference to a photograph, such as that represented in Figure 1. By good fortune the two Gannets shown there so near together exhibit the two extremes of the positions which these birds ordinarily assume in flight. In the top left-hand bird the wings are raised and the body seems to be dependent from them, while in the lower bird the wings are far depressed and the body

appears pushed up and supported by them ; and this is precisely its position. The wings in their rapid descent found resistance in the air, and as soon as this resistance exceeded the force of gravity acting on the bird, the body was elevated at the same time that it was driven forward, only, of course, to sink once again on the wings being raised. Thus the path of a flying bird is a succession of ups and downs, but the movements of the wings being so very much greater in extent cloak those of the body,

and so gracefully and smoothly are the actions performed that we do not realize the undulatory nature of the course.

The attitude of the right-hand top bird, a Kittiwake, in the same photograph (Figure 1), is interesting, as it shows the bird steering by the aid of its feet. The very extensive use some birds make of their feet during flight



FIGURE 2.—THE FEET USED AS BRAKES.
(Photographed by Bentley Beetham.)

requires consideration. Not only are they freely used for steering, but they are also often employed as brakes to lessen speed, much in the same way as a drag is used to take way off an incoming vessel. In Figure 2 the immature Gannet there depicted is trailing its partly expanded and lowered feet, thereby causing considerable resistance to its forward progress. To birds which quarter the surface of the ocean for a livelihood, feet have yet another use during flight. As the bird swoops downwards

to snatch its swimming prey, the legs are dropped, and the moment the quarry has been seized, if not before, the feet are plied vigorously to run along the surface of the water, and thus not only act as buffers and prevent the body from striking the water, but also help to increase the velocity necessary to enable the bird to rise again. In Figure 3, although the feet of the Kittiwake have ceased to touch the surface, the bird is still running, as it were, in space.



FIGURE 3.—RUNNING, AS IT WERE, IN SPACE.

(Photographed by Bentley Beetham.)

Another method often practised by birds to lessen speed is that of depressing the tail, and so offering a resistance to the air rushing along the under-surface of the body, and this is illustrated in the Gannet shown in Figure 4. This use of the tail is very similar in its purpose and result to the use of the feet as brakes, Steering is also, of course, aided by the tail, it being visibly turned from side to side, raised or depressed,

when flight is being executed amid tumultuous currents. But this method of steering by the tail is rather corrective than initiative in its use, being principally employed to compensate for irregularities in the air-currents. When a bird is suddenly and deliberately changing the direction of its course—turning an aerial corner, so to speak—the plane of the wings is changed from the horizontal position assumed when gliding to a more or less vertical position, the inclination depending on the abruptness of the turn and the pace at which it is executed. If the turn is to the right, then the left wing is raised and the

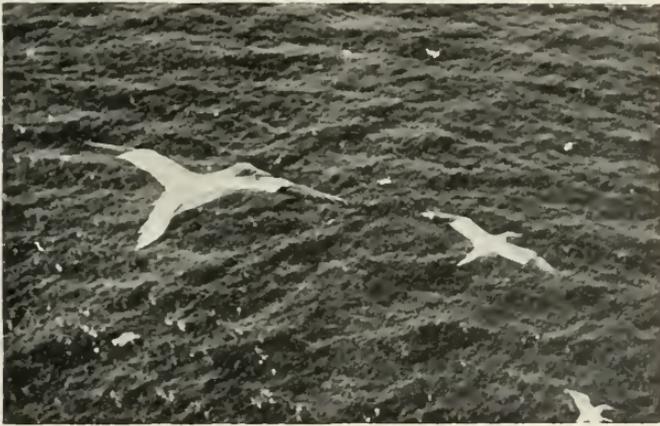


FIGURE 4.—THE DEPRESSED TAIL USED AS A BRAKE.
(Photographed by Bentley Beetham).

right depressed, and, of course, *vice versa* for a turn to the left. When writing here of one wing being raised and the other depressed, I refer to their positions relative to each other, and not to their relation with the body. That is to say, the wings and body may be held rigidly in one plane, the inclination of this as a whole being changed from the horizontal to towards the vertical. This vertical position has been almost reached by the bird, of which, unfortunately, only a portion is shown, in the upper part of Figure 5. It will be noticed that the left wing is depressed

and the right raised ; the bird is therefore sweeping round to the left. I have seen birds when thus suddenly altering the direction of their course actually exceed the vertical position, turning the plane of their surface through an angle of about 105° , thus making an angle of about 75° with the horizon, their backs then, of course, being on the under side.



FIGURE 5.—NEARLY VERTICAL IN POSITION.

(Photographed by Bentley Beetham.)

The question of air-currents is of paramount importance in flight, though it is probable that owing to their invisibility we have as yet little idea of how extensive and acute these movements are. If, however, we watch small companies of Gulls flying leisurely in the same direction,

we shall often see them pass through such local air-currents, whose existence is plainly indicated by the sudden and harmonious wheeling of the birds. It is often very noticeable, too, how precisely in the same manner all the birds will compensate for the current. This is suggested in Figure 6, where the four central birds are



FIGURE 6.—SUDDENLY AND HARMONIOUSLY WHEELING.

(Photographed by Bentley Beetham.)

passing through a disturbance, and it will be noticed how each is "trimming" for it in much the same way, even to the awkward bend in the neck.

THE "BRITISH BIRDS" MARKING SCHEME.*

PROGRESS FOR 1910 AND PLANS FOR THE FUTURE.

BY

H. F. WITHERBY.

THE number of birds ringed in 1910 by those readers of BRITISH BIRDS who have taken an active interest in the work has been remarkable ; over twelve thousand rings have been issued and about seven thousand nine hundred have been used. The result is a notable testimony to the activity and zeal of our helpers. Special thanks are again due to Messrs. Smalley and Robinson, who have ringed no fewer than two thousand three hundred and thirteen birds this year ! In their list are to be found sixteen species, the largest numbers being one thousand two hundred and twenty-two Black-headed Gulls, six hundred and thirty-three Common Terns, one hundred and fifty-seven Swallows, and one hundred and five Lesser Black-backed Gulls. Mr. Norman H. Joy has ringed the large number of seven hundred and six, while a number of others have ringed great numbers, as will be seen in the list which follows. Indeed, the success of the scheme, so far as the ringing is concerned, has far exceeded my expectations, and I would here take the opportunity of heartily thanking all those who have assisted.

The number of species represented in the list of birds ringed is one hundred and twenty-nine—a really extraordinary number.

Turning now to the results, it is, I think, as yet too early in the course of the inquiry to judge as to whether the ringing of birds will repay the trouble and expense involved. By it we expect to learn what cannot be otherwise known of the movements of *individual* birds. So far our results are mainly dependent upon chance ; a very large proportion of the published recoveries

* For a report on the ringing done in 1909 see Vol. III., p. 179.

having been reported by post by people who knew nothing of the scheme. I think it is of great importance that our "ringers" should turn their attention to catching up birds and recording the recovery of those that are ringed. This applies chiefly to small birds, disappointingly few of which have been reported. Small birds can be caught up in a variety of ways without any harm coming to them, and if they are ringed, the number can be noted and the bird let go again. The number can generally be seen without removing the ring by holding the bird up to the light.

The results of trapping ringed birds in this way would, I am sure, be most valuable. We could learn, for instance, where individuals of "resident" species spent the autumn and winter, and we could discover, perhaps, where the young nested, and whether the same individuals returned to the same nesting-place. Unless this is done I fear that the results from the ringing of small birds are not likely to be very successful. So far as the larger birds are concerned I have little doubt that we shall reap a harvest of useful facts.

With regard to the future of the scheme, I should like to propose that next year, in any case, we should again mark all kinds of birds, both large and small, and I feel sure that my readers would co-operate in the same hearty fashion as they have this year. A difficulty, however, presents itself in that the costs of the inquiry have this year completely outgrown the financial resources of the Magazine, which, not being of a "popular" nature, cannot be expected to support the very considerable expense attendant upon the manufacture and issuing of so large a number of rings and the keeping of the mass of records in such a way that any number can be traced at a moment's notice. There are, I know, many of my readers who are keenly interested in the project, and I feel sure that funds will be forthcoming to carry it on. I shall be glad to send a balance-sheet in due course to all those who care to subscribe to the expenses of the scheme,

and I may here state that unsolicited donations have been very kindly sent by Messrs. A. Bankes, J. Bartholomew, E. Earle, Rev. J. R. Hale, Messrs. N. H. Joy, R. H. Leach, and A. Mayall.

NUMBER OF BIRDS RINGED.

Messrs. Robinson and Smalley (2,313), N. H. Joy (706), H. W. Ford-Lindsay (350), J. Bartholomew (319), J. R. B. Masefield (308), J. S. T. Walton (293), J. Murray (gamekeeper to Mr. H. S. Gladstone) (243), A. G. Leigh (243), W. E. Suggitt (225), W. I. Beaumont (199), Miss A. C. Jackson (190), Mr. R. O. Blyth (178), North London Nat. Hist. Soc. (C. L. Collette, Sec.) (159), Messrs. J. Hutton (gamekeeper to Mr. J. Bartholomew) (138), J. Steele Elliott (112), G. J. van Oordt (109), H. Bentham (108), Major H. A. F. Magrath (100), Mr. B. Beetham (98), Capt. B. G. Van de Weyer (89), Messrs. A. Bankes (84), H. S. Gladstone (79), R. M. Barrington (66), Colonel R. H. Rattray (60), Messrs. H. L. Popham (56), C. Collier (54), Rev. J. R. Hale (53), Messrs. T. C. Hobbs (48), M. W. Compton (45), H. F. Witherby (40), Smith Whiting (40), C. K. Siddall (39), R. Cringle (38), A. Mayall (38), A. H. M. Cox (37), W. Davies (36), Miss C. Acland (35), Mrs. Pateson (33), Mr. H. W. Finlinton (31), Major H. Trevelyan (30), Dr. C. B. Ticehurst (28), Mr. R. E. Knowles (25), Lord William Percy (25), Messrs. J. M. Charlton (23), S. Duncan (23), W. Portal (23), A. B. Wigman (20), J. O. Sidebotham (20), S. Maples (20), Hon. G. Legge (20), Messrs. W. W. Lowe (19), E. G. B. Meade-Waldo (19), A. W. Kloos (19), T. Hepburn (19), E. Earle (17), Dr. N. F. Ticehurst (17), Messrs. I. Clark (16), W. Wilson (16), Commander H. Lynes (14), Miss and Mr. Garnett (13), Messrs. W. P. Mail (13), H. Noble (13), P. F. Bunyard (13), P. W. Munn (13), W. S. Medlicott (10), and others who have ringed less than ten birds each.

NUMBER OF BIRDS RINGED OF EACH SPECIES.

	1909.	1910.		1909.	1910.
Thrush, Mistle ..	2	48	Warbler, Sedge ..	1	4
Thrush, Song ..	71	625	Sparrow, Hedge ..	18	117
Redwing	—	7	Dipper	4	9
Fieldfare	—	48	Tit, Long-tailed ..	—	3
Blackbird	83	505	Tit, Great	16	127
Wheatear	1	15	Tit, Coal	—	4
Whinchat	7	30	Tit, British Coal ..	—	8
Stonechat	—	10	Tit, Marsh	—	25
Redstart	1	15	Tit, Blue	12	54
Redstart, Black ..	—	5	Tit, Willow	—	1
Redbreast	41	217	Nuthatch	—	4
Nightingale	—	11	Wren	9	38
Whitethroat	22	53	Creeper, Tree	—	3
Whitethroat, Lesser	1	19	Wagtail, Pied	12	29
Blackcap	—	7	Wagtail, Grey	5	6
Warbler, Garden ..	3	9	Wagtail, Yellow ..	1	—
Warbler, Dartford ..	—	5	Pipit, Tree	14	26
Wren, Golden-crested	—	16	Pipit, Meadow	27	32
Chiffchaff	2	16	Pipit, Rock	—	6
Wren, Willow	50	107	Shrike, Red-backed	2	15
Wren, Wood	—	12	Flycatcher, Spotted	23	65
Warbler, Reed	—	4	Swallow	113	463

THE "BRITISH BIRDS" MARKING SCHEME. 207

		1909.	1910.			1909.	1910.
Martin, House	..	13	128	Pigeon, Wood	..	3	20
Martin, Sand	..	—	25	Dove, Stock	..	1	4
Greenfinch	..	28	100	Dove, Turtle	..	1	11
Goldfinch	..	—	8	Grouse, Red	..	7	3
Sparrow, House	..	8	109	Grouse, Black	..	2	—
Sparrow, Tree	..	17	49	Pheasant	..	7	6
Chaffinch	..	6	103	Partridge	..	1	1
Linnet	..	20	65	Rail, Land	..	3	—
Redpoll, Lesser	..	—	8	Moorhen	..	—	34
Bullfinch	..	—	8	Coot, Common	..	1	4
Bunting, Yellow	..	4	13	Curlew, Stone	..	1	4
Bunting, Reed	..	2	8	Plover, Ringed	..	—	35
Starling	..	21	428	Plover, Golden	..	—	2
Jay	..	—	5	Lapwing	..	56	254
Magpie	..	—	7	Oyster-catcher	..	7	16
Jackdaw	..	11	5	Avocet	..	—	5
Crow, Carrion	..	—	6	Woodcock	..	6	10
Rook	..	—	1	Snipe, Common	..	1	23
Lark, Sky	..	1	20	Dunlin	..	5	1
Nightjar	..	3	—	Sandpiper, Common	..	5	10
Wryneck	..	14	16	Redshank	..	5	19
Woodpecker, Green	—	—	8	Godwit, Black-tailed	—	—	4
Woodpecker, Great				Curlew	..	14	10
Spotted	..	2	2	Tern, Sandwich	..	57	79
Cuckoo	..	4	4	Tern, Common	..	786	836
Owl, Barn	..	—	10	Tern, Arctic	..	25	—
Owl, Long-eared	..	—	2	Tern, Common or			
Owl, Tawny	..	—	13	Arctic	..	—	25
Owl, Little	..	—	1	Tern, Little	..	—	31
Hobby	..	1	—	Gull, Black-headed	417	1,828	
Hawk, Sparrow	..	—	5	Gull, Common	..	—	184
Merlin	..	1	4	Gull, Herring	..	5	117
Kestrel	..	1	—	Gull, Lesser Black-			
Cormorant	..	—	3	backed	..	12	137
Shag	..	—	4	Gull, Great Black-			
Heron, Common	..	14	13	backed	..	1	8
Sheld-Duck	..	1	24	Kittiwake	..	4	11
Mallard	..	11	20	Skua, Richardson's	..	—	2
Shoveler	..	—	2	Razorbill	..	—	31
Pintail	..	—	13	Guillemot	..	—	23
Teal	..	1	21	Puffin	..	4	15
Wigeon	..	—	3	Grebe, Great Crested	..	1	—
Duck, Tufted	..	3	—	Grebe, Little	..	—	1
Eider	..	3	—	Petrel, Storm	..	1	—
Merganser, Red-							
breasted	..	1	—				

NOTES

RECOVERY OF MARKED BIRDS.

SONG-THRUSHES (*Turdus musicus*).—B.B., No. 11,488, marked by Mr. T. C. Hobbs at Gosforth, Northumberland, on July 14th, 1910, as a nestling. Recovered near Easington, Castle Eden, Durham, on November 5th, 1910. Reported by Mr. J. Frankland.

B.B., No. 6656, marked by Mr. N. H. Joy at Bradfield, Berkshire, on April 26th, 1910, as a nestling. Recovered at Swainsthorpe, near Norwich, on November 6th, 1910. Reported by Mr. H. R. Cunningham.

GREAT TIT (*Parus major*).—B.B., No. 1479, marked by Mrs. Patteson at Limpsfield, Surrey, on June 19th, 1910, as a nestling. Recovered at the same place on October 31st, 1910. Reported by Mr. Horace Barry.

GOLDFINCH (*Carduelis elegans*).—B.B., No. B907, marked by Mr. H. W. Ford-Lindsay at Pett, Sussex, on July 31st, 1910, as a nestling. Recovered in St. Helen's Wood, near Hastings, on October 26th, 1910.

PINTAIL (*Dafila acuta*).—B.B., No. 8457, marked by the Rev. J. R. Hale in the Orkney Islands, on June 6th, 1910, as a nestling. Recovered in the same place on October 5th, 1910. Reported by Mr. T. P. Aldworth.

COMMON SNIPE (*Gallinago caelestis*).—B.B., No. 5599, marked by the Rev. J. R. Hale in the Orkney Islands on June 6th, 1910, as a nestling. Recovered in the same place on August 15th, 1910. Reported by Mr. T. P. Aldworth.

B.B., No. 5585, marked by the Rev. J. R. Hale in the Orkney Islands on June 6th, 1910, as a nestling. Recovered in the same place on October 4th, 1910. Reported by Mr. T. P. Aldworth.

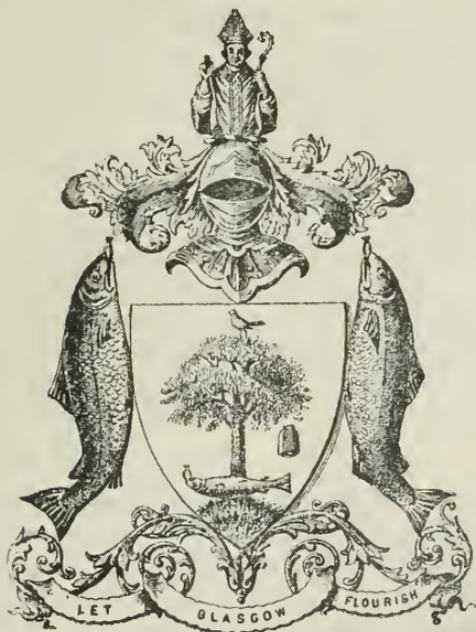
BLACK-HEADED GULLS (*Larus ridibundus*).—B.B., No. 31100, marked by Messrs. Robinson and Smalley at Ravensglass, Cumberland, on June 25th, 1910, as a nestling. Recovered at St. Bees, Cumberland, about June 28th, 1910. Reported by Miss M. Garnett.

B.B., No. 30032, marked by Messrs. Robinson and Smalley at Ravensglass, Cumberland, on June 10th, 1910, as a nestling. Recovered on the River Severn, near Sharpness, Gloucestershire, on October 10th, 1910. Reported by Mr. S. Baker.

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Burns on Trees and Birds. By JOHN PATERSON.

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On the Beeches in the "Clyde" Drainage Area. By JOHN RENWICK.

The Stock-Dove in the "Clyde" Area. By ROBT. S. and H. W. WILSON.

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Additions to the Fungus-Flora of the "Clyde" Area. By D. A. BOYD.

On the Genus *Phoxocephalus* (with two plates). By ALEX. PATIENCE.

Preliminary Description of a new British Amphipod. By ALEX. PATIENCE.

A selection from the Papers in Volume II.

The Sedge-Warbler at Possil Marsh in 1908-1909. By WILLIAM RENNIE.

A specimen of *Ligula simplicissima*, Rudolphí; with notes on the life-history of the *Ligulinæ*. By J. F. GEMMILL, M.A., M.D.

Additions to Fresh-water Algæ of "Clyde." By ROBERT GARRY.

On the Summer-Birds of Shiskin, Arran. By T. THORNTON MACKEITH.

List of Arran Hepatics. By SYMERS M. MACVICAR.

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On the Zoological Collection in the University of Glasgow. By J. GRAHAM KERR.

List of species of insects described by J. C. Fabricius in Dr. Hunter's Collection. By J. GRAHAM KERR.

On the Sycamores in the "Clyde" Drainage Area. By JOHN RENWICK.

Some of the Contents of Part I. of Volume III. Ready 30th November, 1910.

Early Tree-Planting in Scotland—Historical Notes. By HUGH BOYD WATT.

Night-notes of some Birds. By JOHN ROBERTSON.

Additions to "Clyde" Fresh-water Algæ. By GEORGE LUNAM.

Notes on the Ruff in Lanark; the Mealy Redpole in Ayr, Lanark, and Renfrew; Irruption of Guillemots inland in Renfrew and Glasgow Harbour; Increase of the Jay on Loch Lomond Islands; Flamingo in Dumbartonshire; a new Beetle from Possil Marsh and Frankfield Loch; Comparison of the Arrivals of Summer-birds in 1909 (1) in "Clyde" and the rest of the Scottish mainland, and (2) in "Clyde" and the North of England and the Isle of Man.

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COMMON GULL (*Larus canus*).—B.B., No. 9803, marked by Mr. W. I. Beaumont at Stirk Island, off Lismore, Lynn of Lorn, Argyllshire, on July 8th, 1910, as a nestling. Recovered at Port Stewart, co. Londonderry, on November 22nd, 1910. Reported by Mr. W. J. McGirgan.

BARRED WARBLER IN NORFOLK.

ON September 27th, 1910, an immature Barred Warbler (*Sylvia nisoria*) was shot in east Norfolk. Mr. E. C. Arnold states (*Zool.*, 1910, p. 393) that he noticed a Barred Warbler on September 20th at the identical spot. I have communicated with Mr. F. I. Richards, who considers it unlikely that this was the individual that he was fortunate enough subsequently to obtain. I exhibited the specimen on behalf of Mr. Richards at the October meeting of the British Ornithologists' Club (*cf. Bull. B.O.C.*, XXVII., p. 16). CLIFFORD BORRER.

YELLOW-BROWED WARBLER IN LINCOLNSHIRE.

ON October 3rd, 1910, I shot a Yellow-browed Warbler (*Phylloscopus superciliosus*) in the bottom of a thick hedge near the sea-bank at North Cotes, Lincolnshire. The bird was a male and very fat. There was no migration in progress at the time as a heavy westerly gale was blowing, but there was a light east wind on the night of the 1st. This is the fourth Lincolnshire example of this little warbler. I obtained it for the first time on October 7th, 1892, and from that time I saw no more of the species for sixteen years, when I found one dead on the coast on October 19th, 1908, and shot a third on October 12th of the following year, all four examples having been killed within a mile of the same spot. G. H. CATON HAIGH.

THREE OR FOUR LONG-TAILED TITS TO ONE NEST.

IN connection with the observation of Mr. Smith Whiting on the above subject in the August number of BRITISH BIRDS (p. 78) and the previously recorded cases of Mr. Bonhote and Mr. Cerva (BRITISH BIRDS, Vol. I., pp. 32 and 62), it is interesting to recall what is probably the earliest published instance of the kind. A. G. C. Tucker, in his *Ornithologia Danmoniensis* (1809), of which the unfinished Introduction was the only part that ever saw the light, states (p. xlvi.) that the Long-tailed Titmouse is the only exception known to him to the rule that but one pair of birds joins in nidification and incubation; and in a footnote he gives his proof of this statement:—"In the year 1798 the author, in taking a walk

with a friend, discovered a Long-tailed Titmouse's nest, in which were thirteen eggs, and on which were then sitting three old birds; the fourth was seated in a neighbouring bush." J. WIGLESWORTH.

GREAT TIT NESTING IN HEDGES.

DURING the last five years, near Croydon, Surrey, I have frequently found nests entirely built by Great Tits (*Parus major*), and containing eggs, in hawthorn hedges, on the edge of a small copse. Nesting-holes are very scarce in the immediate neighbourhood. C. W. COLTHRUP.

TAWNY PIPIT IN NORFOLK.

AT a meeting of the British Ornithologists' Club, held on October 19th (*Bull. B.O.C.*, XXVII., p. 16), I exhibited on behalf of my friend, Mr. F. I. Richards, an adult specimen of the Tawny Pipit (*Anthus campestris*) obtained by one of his collectors in east Norfolk on September 15th, 1910.

CLIFFORD BORRER.

BEHAVIOUR OF THE GREENFINCH AT THE NEST.

REGARDING the further notes by Mr. C. Kingsley Siddall on this subject (*supra*, p. 184), they are of great interest, showing how birds of the same species vary in nesting-habits. I think it worth noting that the young Greenfinches in the case reported by me were fully feathered, and after placing rings on them they refused to stay in the nest. It was owing to the fact that I had never before seen this habit on the part of the Greenfinch that I was induced to record it.

So far as my experience goes the Chaffinch does *not* remove the *fæces* at all. There is no doubt much yet to be learned by observation of this habit, and I may perhaps give the following list, which I have made this year whilst taking photographs of young being fed.

In the case of the following species the *fæces* were removed: Lesser Whitethroat, Bullfinch, Wryneck, Tree-Pipit; while in the following the *fæces* were not removed: Chaffinch, Greenfinch (except in one case, where they were swallowed), Robin, Linnet, Blackbird, Song-Thrush, Mistle-Thrush, Turtle-Dove, Spotted Flycatcher, Goldfinch, Red-backed Shrike.

These are only a few examples, and no doubt the selection of nesting-site would prove to be a matter of considerable importance on the point. As an example we should expect to find a bird nesting in a hole in a tree removing the *fæces*, but we soon find an exception in the Owls.

As a rule birds building in hedges do not remove the *faeces*, as they fall to the ground among rubbish and are not conspicuous, but even here we soon find another exception in the Bullfinch, which, as far as my experience goes, always removes them.

Again in the case of the Sparrow-Hawk, which builds a large nest, we find other means used for keeping it clean. If the young ventured near the edge of the nest (composed of loose sticks) they would soon fall to the ground, so they have the power of ejecting the *faeces* for a distance of several feet.

The theory that the *faeces* are removed in order that all traces of the young should so far as possible be obliterated, does not seem to me satisfactory, as we find in the case of a bird like the Starling often sufficient evidence of a nest of young at a great distance.

H. W. FORD-LINDSAY.

[The Blackbird, Song-Thrush and Mistle-Thrush have been recorded as swallowing the *faeces* of the young.—H.F.W.]

NORTHERN BULLFINCH IN SHETLAND.

ON October 23rd, 1910, I had the good fortune to see three Northern Bullfinches (*Pyrrhula pyrrhula*) in the garden at Leog, Lerwick. They flew out of a shrub and lighting on the ground at once began feeding within about twenty yards of where I was standing. I watched them with my naked eye and also with my glass for some time, but they were apparently too intent on feeding, as they paid no attention to me. All three birds were cocks, and, strange to say, when I first saw them, they were practically in the same place as the ones seen by me in November, 1905 (*Annals Scot. Nat. Hist.*, 1906, pp. 50, 115, and *BRITISH BIRDS*, I., p., 246). I left them feeding, but on looking for them next morning they were gone. Two cocks and a hen were reported as having been seen at Helendale, near Lerwick on the same day. JOHN S. TULLOCH.

CROSSBILLS NESTING IN ENGLAND.

[PLATE 3.]

THE coloured plate of the Crossbills which appears in this number is from a very careful drawing by Sergeant C. G. Davies (Cape Mounted Rifles). The material Mr. Davies worked from was collected in England during the spring of 1910, and I must here express my indebtedness to Sir Thomas H. C. Troubridge, Bart., who sent me a nest from which the young had flown, together with part of the tree in which the

nest was placed, and to Mr. Heatley Noble, who very kindly sent me the nestling, which was obtained in Norfolk on January 12th, 1910.—H.F.W.

IN KENT.

THE following details of the nesting of Crossbills in the neighbourhood of Maidstone, Kent, may be of interest. On January 11th, 1910, a small flock, about ten birds, was observed. On February 9th and 10th this flock was again seen, but on the 14th it had increased in numbers, while on the 18th we found about fifteen pairs and also saw small flocks flying overhead. On February 28th we found a Crossbill's nest ready for eggs at the extreme top of a lofty Scotch fir, close to a main road. On March 1st we found another nest containing two fresh eggs in a similar position. The nest of February 28th contained three eggs on March 7th, and the bird was sitting very close. At this time small flocks were flying about, from which one might have gathered that the birds were not yet nesting. We noticed the cock bird of this nest join these small flocks and then return to the nest. On March 8th we found three more nests, all high up on the *lateral* branches of Scotch fir, almost impossible to get at. At this time birds were in pairs and in flocks. On March 10th we discovered two more Crossbills' nests, one with three eggs and one with four eggs, one of these nests being placed at the extreme top of a spruce tree.

On March 16th we noted a new influx of birds in large flocks, and on the same day found two more nests, at which the birds were building very rapidly. These nests were more conspicuous and lower down.

We continued to find nests up to April 19th, when we had counted nineteen nests in all for certain. The birds were always to be seen around their nesting-places up to the end of June; during July they seemed gradually to disappear from their usual haunts; we noticed a small flock on August 1st and a few birds on August 7th, but since that date we have not seen them.

The nests contained three or four eggs, three being the rule, and, as far as one could judge, where there were three eggs *all three* hatched, while where there were four usually one or two were infertile. We *very rarely* saw the cock bird building. We noted that they were very thirsty birds and were drinking continually out of holes in trees where water had collected.

The nests always had a foundation of spruce fir and then strips of the inner bark of Spanish chestnut or birch, but

the lining was varied, wool, grass, string, feathers, and hair of cows being utilized. All the nests were near main roads. We should estimate the number of Crossbills in the district at about two hundred, but only a small proportion of these was breeding.

JAMES R. HALE.

T. P. ALDWORTH.

INCREASE OF STARLINGS IN CORNWALL AND DEVON.

SOME forty-five years ago, at a meeting of the Exeter Naturalists' Club, I called attention to the great increase of the Starling (*Sturnus vulgaris*) in Devon and Cornwall, and elicited some interesting information on the subject from various persons. According to Mr. J. R. Collins, it was not till the spring of 1855 that the Starling was known to breed in Cornwall, and then only one pair nested at Trewardale, near Bodmin, increasing to five pairs in 1864. Even up to 1878 Mr. Rodd stated he had not succeeded in marking it as a resident west of Truro. Before 1892, however, the Starling had become a resident throughout Cornwall.

A few years since Starlings decreased considerably in the neighbourhood of Exeter, probably owing to the great droughts we experienced, but they have been gradually increasing again, and their numbers this year exceed anything I have ever seen before. I noticed the first large flocks as early as June 16th this year. All through August very large flocks assembled here every evening. Some tall elms near the River Exe serve as a rendezvous, and small flocks may be seen arriving from all parts until gradually the main body has assumed enormous dimensions. They fly about the river for an hour or so, making excursions over the marshes for a mile or more returning to the trees to rest. As darkness comes on they leave the trees and sweep low over the reed-beds in the middle of the river, and after a few evolutions suddenly drop *en masse* into the reeds, where they roost.

W. S. M. D'URBAN.

THE CONTINENTAL JAY IN KENT AND SUSSEX.

IN my *History of the Birds of Kent* (p. 196), I referred to the probability that the continental Jay (*Garrulus g. glandarius*) occurred in the county sometimes (? regularly) as a migrant in autumn. At that time the records, though suggestive, were few, and no specimens were available for examination. This autumn accordingly I wrote to Mr. H. S. D. Byron, to whom I am indebted for so much information with regard

to Thanet, asking him to keep a look-out for the arrival of migrant Jays, and if possible to procure me specimens. I may add that our native Jay (*G. g. rufitergum*) is a scarce species in that district. In due course he wrote me that two had been seen to arrive and fly into Dumpton Park on October 16th [1910], and that numbers were there on the 18th; five that were shot there on the 17th and 18th he sent to me, and later a sixth that he had himself shot on the 19th from a straggling flock of about thirty flying, high up, from north to south. One of the birds shot on the 17th proved to belong to the British race (*G. g. rufitergum*), and was presumably one of the few resident birds of the district; all the others belonged to the continental race (*G. g. glandarius*), and were, by the greyer tint of their backs, easily separable from the single bird sent with them and the other British examples in my possession.

Curiously enough, about the same time I had an opportunity of examining a Jay that was shot at Northiam, in Sussex, on October 16th, 1910, and this also belonged to the continental race.

Although there cannot be any doubt that the continental Jay has occurred many times in England (Dr. Hartert states that it occurs sporadically), I am not aware of any previously published records of fully identified examples, so that perhaps the publication of this note may draw others—which I hope it may—for besides confirming the suspected occurrence of this race in Kent (and Sussex), it emphasizes once more the importance of the study and recognition of geographical races in connection with the study of migration.

N. F. TICEHURST.

SUPPOSED EGG-DAUBING BY THE JACKDAW.

WITH reference to Dr. Wiglesworth's article (*supra*, p. 176), I took, some years ago, a clutch of Jackdaw's eggs from a hole in a tree near Reading which were bedaubed with *fresh, wet* cow-dung. (It was a dry afternoon.) As far as I can recollect all the eggs had been about equally treated. They were not otherwise remarkable, and were not exposed to the view of passing birds.

H. M. WALLIS.

ON May 3rd, 1901, when investigating the nests of a colony of Jackdaws which inhabited the hollow limbs of a large walnut tree in Kent, I discovered a nest, *placed deeply in a crevice*, containing four eggs, all of which were completely covered with a thin coating of argillaceous loam, interspersed

with rabbit-fur. The rabbit-fur was no doubt derived accidentally from the lining of the nest, but the eggs were so thoroughly and evenly daubed with clay that it is difficult to imagine that the coating was not applied intentionally by the parent bird. The weather immediately preceding the day on which I found the eggs had been fine; the nest itself was clean; the eggs, so far as could be seen through the clay covering, were of a normal type and had been incubated probably for less than a week. On the day that these eggs were found, I examined three or four other nests in the same tree, but in none of these were the eggs in any way peculiar.

Considered as a method of rendering the eggs inconspicuous, daubing them with clay appears to be superior to the alternative method sometimes adopted by the Jackdaw (that of covering them with fragments of nesting-material) since at the time of greatest danger the bird might be forced to leave the nest before she had sufficiently covered up the eggs. On the other hand, an almost impervious covering of clay might have an adverse effect on the development of the egg.

If the habit of egg-daubing be of advantage to Jackdaws as a race, I cannot see that it would necessarily show, as Dr. Wigglesworth suggests (p. 177), "a remarkable degree of intelligence on the part of the bird." Rather it appears probable that the habit was developed by the usual process of natural selection.

The fact that clay-daubed eggs have been recorded from widely separated parts of England appears to point to the conclusion that egg-daubing is not a new habit that is being acquired, but an old habit that is being lost. Further, it is possible that the precaution of concealing its eggs with nesting-material is also being abandoned as unnecessary, for this practice is by no means universal amongst Jackdaws, as it is amongst Blue Tits, Grebes and many other birds.

EDWARD EARLE.

SHORE-LARK IN IRELAND.

THE increasing frequency of the Shore-Lark (*Otocorys alpestris*) in Great Britain since 1830 led me to expect that it would ultimately visit Ireland.

One has just been received, perfectly fresh, but much damaged by shot, from Wicklow Head, where it was killed on November 4th, 1910, by Mr. John M. Trant, who did not know the bird was rare and new to this country.

RICHARD M. BARRINGTON.

THE PERSISTENCE OF THE RIGHT OVARY AND ITS DUCT IN THE SPARROW-HAWK.

WITH regard to Dr. C. B. Ticehurst's note on this subject (*supra*, p. 188), I should like to say that so long ago as 1892 my attention was drawn to this matter by Mr. T. E. Gunn, the taxidermist of Norwich, with whom I have had intimate business relations for the past thirty years. He dissected an immature female Sparrow-Hawk shot on January 9th, 1892, and found both ovaries equally developed.

I do not know whether this was his first observation on the sexual glands of the female Sparrow-Hawk, but since then he has paid especial attention to these organs in the *Falconidæ*, and has accumulated a mass of valuable notes on the subject. I must have scores of letters from him, written during the last eighteen years bearing on the point with regard to raptorial birds that came into his hands for my collection or from other sources.

On May 13th, 1903, Mr. Gunn read a paper before the Science Gossip Club, an abstract of which is published in their report. He there refers to the question of two persistent ovaries in some detail, and mentions the Hen-Harrier, the Sparrow-Hawk, and the Kestrel as species in which he found both right and left ovaries present; he also quotes the passage from Newton's *Dictionary of Birds*, referred to by Dr. Ticehurst.

It is said there is nothing new under the sun, and perhaps someone before Mr. Gunn had been at work on the same subject and published his findings; unless this is so, it seems to me the priority belongs to Mr. Gunn, and that he should have the credit for the observation.

My collection, unfortunately, I cannot get at, but I have some of my note-books here, and I should like to give two or three extracts bearing on this question of a persistent right ovary.

From the small series of skins in my possession, it is quite impossible to be at all positive what the proportion of double ovaries to single is in a state of nature. In the case of my skins, about one in three had both ovaries developed, but a larger number might easily show that ratio to be either too high or too low, and I lay no stress on the accuracy of the numerical proportion. What the series does show is that, while the persistence of the right ovary is quite common in the case of the Sparrow-Hawk, it is certainly not the rule.

1. *A. nisus*. ♀ imm. Shot Jan. 9, 1892. Dissected by T. E. Gunn. Both ovaries equally developed.
2. *A. nisus*. ♀ imm. Apr. 11, 1892. Dissected by F. M. O. Both ovaries well developed, and contained numerous ova of various sizes. I think the forward condition of the ova shows the bird would have bred this season, though it was certainly only a last year's bird.
3. *A. nisus*. ♂ and ♀. Nest of 4 eggs. May 24, 1894. ♂ probably fully 4 years old; a very beautiful specimen, with deep red breast and underparts. ♀ probably a 2nd year's birds, with light margins to the feathers of the upper wing-coverts. (This and the previous specimen show another fact, namely, that the female Sparrow-Hawk frequently breeds before attaining mature plumage.) "Both ovaries equally developed. This is the second instance of equal development of the sexual organs in the female bird I have *recently* come across" (T. E. G., *in litt.*, 2/6/94). This seems to me a particularly interesting example, as the pair were certainly breeding, and four eggs had been laid at the time the female was shot. The rough sketch of the ovaries shows, I think, clearly enough that the right ovary is at least as large as the left, and that both are developing ova.
4. *A. nisus*. ♀ imm. Jan. 31, 1907. "It shows 2 ovaries nearly equal in size and development."



I have intentionally confined myself in this brief note to the sexual glands of the female Sparrow-Hawk. This species is still common in Great Britain and is rigorously and legitimately persecuted by the game-preserved whenever and wherever it is met with, so that there should be no difficulty in any naturalist obtaining a large supply of material to work upon, if he wishes to investigate this point.

But the occasional persistence of both ovaries is not confined to the Sparrow-Hawk. It may even be that this persistence is no more uncommon in the Sparrow-Hawk than in some other raptorial groups, the genus *Circus*, for example. But the material for examination is so much more scanty that it is hard to deduce any reliable *data* as to the frequency of the occurrence.

I have in my collection in all four female Hen-Harriers (*C. cyaneus*); and of these four, two had both ovaries equally developed and two only the single ovary on the left-hand side.

Mr. Gunn has, I think, notes of other Harriers that have passed through his hands with both ovaries persistent. He also found a Kestrel with right as well as left ovaries present.

This latter instance must, I imagine, be a very unusual occurrence. The Kestrel is far the commonest of our Hawks, and numbers of specimens are killed by gamekeepers every

year, so that in the case of this bird, as with the Sparrow-Hawk, ample material is readily available. Among my own skins I do not think I have one female that showed a right ovary on dissection.

F. MENTEITH OGILVIE.

SOME additional information will be found in the introductory section to the *Naturgeschichte der Vogel Mitteleuropas*, Vol. I. (1905), p. 60 (Der Bau des Vogelkörpers). In this article, by Professor O. Taschenberg, after stating that as a rule the female sexual organs are not symmetrically developed and that the left ovary and oviduct are alone functional, the writer goes on to state that, "it happens not very rarely that remains of the right ovary are retained, especially in the Sparrow-Hawk and Buzzard, much more irregularly in other *Accipitres*, and still more rarely in the Owls; isolated cases have been observed in the Pigeons, Parrots (*e.g.*, in *Sittace macavuanna*), in *Corvus corone*, *Ciconia ciconia* and *nigra*. Remains of the right oviduct have also been occasionally found both in the shape of a string at the distal end as well as a duct opening into the cloaca. Examples of this are the domestic Pigeon, Duck, Goose, Whooper Swan, White Stork, Coot, Waterhen, Short-eared Owl and Sea-Eagle." (Translation.)

In the same work (Vol. V. (1900), p. 70), O. von Riesenthal quotes Dr. Gadow as stating that "according to Stannius the right ovary is tolerably developed in *Astur* and *Buteo*, but much less consistently in the other Raptores." (Translation.)

Probably the exceptions referred to by Newton were those mentioned by Professor Taschenberg, among which the Sparrow-Hawk is definitely recorded.

F. C. R. JOURDAIN.

PINTAILS IN STAFFORDSHIRE.

IN the *Transactions of the North Staffordshire Field Club* for 1909, I reported that two immature Pintails (*Dafla acuta*) had been shot on December 11th, 1909, near Stone, by Messrs. Gilbert and Neil Harris. This year (1910) five of these ducks (all immature) have been obtained at the same place. *The Victoria History* says of this species:—"A winter visitor of which several occurrences have been recorded." W. WELLS BLADEN.

[The articles in the *Victoria History* were written about 1905, and much material has come to hand since. The Pintail, though far from common, appears to occur fairly regularly and generally in immature plumage.—EDS.]

WIGEON IN SUMMER IN STAFFORDSHIRE.

THE following dates at which I have seen Wigeon (*Mareca penelope*) during 1910 on Bellfields Reservoir, Staffordshire.

may be interesting. On April 14th I saw about twenty; on July 27th I counted eight, which seemed to be mostly old drakes; and on August 5th I saw about twenty. This reservoir is a large sheet of water, so there may very possibly have been more. During September I frequently saw Wigeon, and I think their numbers increased slightly during October. Unfortunately I was unable to visit the reservoir during May and June.

F. A. MONCKTON.

LONG-TAILED DUCK IN CHESHIRE.

A LONG-TAILED Duck (*Harelda glacialis*), apparently an adult female, frequented Marbury Mere, near Northwich, from the end of July to the end of September, 1910. It was noticed, as a strange duck, by the gamekeeper on July 29th, and on August 6th, 7th and 27th it was seen by Mr. Travers Hadfield, though never clearly enough for him to identify it. On September 12th, when in company with Mr. Hadfield, I had an excellent view of it, and saw, by the absence of wing-bar, the white collar and eye-stripe, the short bill and general build of the bird, that it was undoubtedly a Long-tailed Duck. Two days later it swam to within fifty feet of my hiding place, in a covert, and I could then clearly see, even without a glass, the lead-blue bill and hazel irides.

The Long-tailed Duck is only known in Cheshire as an occasional winter-visitor to the estuaries and coasts, and its appearance on an inland water at this season is suspicious. I have made inquiries from several owners of captive wild ducks in Lancashire and Cheshire, but not one of them has ever had this species in captivity. Beyond the fact that the bird remained in one locality for two months—I saw it several times during September, and I believe it was seen at the very end of the month by the keeper—there was nothing in its behaviour to suggest that it had been in captivity; it was very shy, and flew well.

T. A. COWARD.

RINGED PLOVERS' UNUSUAL CLUTCHES.

ON May 10th, 1910, on the Crumbles at Eastbourne, I found a nest of the Ringed Plover (*Egialitis hiaticola*), containing five eggs, all practically alike. I watched the female off and on the eggs again, the male keeping watch not far off. I saw no sign of a second female, and I have no doubt, from the great similarity of the eggs, that they were the produce of one female.

In another nest I found two out of the four eggs had the usual ground-colour of fawn replaced by blue-green at the

small end, about half an inch deep. I have also found this peculiarity in eggs of the Common Partridge.

C. W. COLTHRUP.

[The presence of a cap, or more usually a zone of blue-green, has been noticed on the eggs of many Waders as well as on those of some Terns and Gulls. It is probably due to the pressure of the sphincter muscle preventing the deposit of superficial colouring matter after the shell has absorbed the first deposit of colouring matter (biliverdin) in its soft condition. This green deposit is general, as may be seen by holding the egg up to the light.—F.C.R.J.]

AVOCETS IN SUSSEX.

ON September 3rd, 1910, Mr. M. J. Nicoll, whilst walking on the Parade at St. Leonards, saw a flock of seven Avocets (*Recurvirostra avocetta*) flying in a westerly direction about fifty yards from the shore. The birds settled at Pevensy Marshes, some few miles west of St. Leonards, where one was shot the same evening. Two were shot the next day (September 4th) and one on September 5th. These four birds were sent to Mr. Bristow for preservation, where I saw them on September 16th. They were all four adult birds, in fine condition, and on dissection proved to be two cocks and two hens.

H. W. FORD-LINDSAY.

BLACK-THROATED DIVER IN WESTMORLAND.

ON February 24th, 1910, after two or three days' gale, a male Black-throated Diver (*Colymbus arcticus*) was shot on Lake Windermere by M. Brockbank. It is an adult bird in winter-plumage and is now in my possession.

D. G. GARNETT.

NOTES ON BIRDS IN ORKNEY IN 1910.

BLACKBIRD (*Turdus merula*).—An increasing species nesting all over the mainland (Pomona) not only where there is cultivation and in the hedges, but also on the moors on the ground in heather-banks. Average number of eggs noted five.

THE MISTLE-THRUSH (*T. viscivorus*).—At least three pairs on the mainland (Pomona), near Finstown. We saw two nests in mountain ash trees, each with four eggs on May 20th. This bird has not nested, I believe, before in Orkney, and only recently has been noticed as a regular visitor.

WHITETHROAT (*Sylvia cinerea*).—A pair were in the garden at Balfour Castle, Shapinsay, between May 30th and June 3rd, and from their behaviour had a nest close by.

BLACKCAP (*S. atricapilla*).—We saw two pairs between May 30th and June 3rd, and one pair on the Island of Shapinsay undoubtedly had a nest.

SWALLOW (*Hirundo rustica*).—A few pairs round Binscarth had nests in the farm-buildings, and there were a few pairs round the farm-buildings at Balfour.

SHOVELER (*Spatula clypeata*).—A few pairs nest in Orkney. We put rings on the young on June 6th.

PINTAIL (*Dafila acuta*).—Increasing in numbers; most probably has nested in Orkney for the last two or three years, if not longer, but this year we found several nests with eggs and also caught some ten or twelve young on June 4th, and put rings on their legs. We saw on one occasion nine Pintail drakes together (June 10th).

TUFTED DUCK (*Fuligula cristata*).—We saw several pairs on May 25th, and found two nests with eggs on June 14th. The bird is increasing as a breeding-species.

BLACK-TAILED GODWIT (*Limosa belgica*).—We saw a single bird, which was very tame, on June 7th. JAMES R. HALE.

T. P. ALDWORTH.

NOTES ON BRITISH BIRDS IN CONFINEMENT.—Mr. J. L. Bonhote, the newly-appointed editor of the *Avicultural Magazine*, contributes to that journal (Third Series, Vol. I., pp. 259-267 and pp. 299-310) some interesting notes from observations made by himself in his own aviaries. We may quote the following, referring to British species:—*Song-Thrush*.—It is noted that both the continental and British races of this bird have been kept, and that they retain their distinctive shades of colour. *Tree-Sparrow*.—One is seven years eleven months old, and is still living; the longest-lived of the author's Passerine birds of which he has note. *Snow-Bunting*.—The author states that this species does not assume adult plumage until the second year. *Starling*.—Examples with a dull white ring round the iris are females. *Scops Owl*.—Incubation-period twenty-five days. *Common Buzzard*.—Two birds kept over ten years and over four years respectively were of the dark phase, and the plumage did not alter in the least with age. *Mallard*.—Ducks choose their own drakes, and in most cases birds once paired will, if opportunity occurs, mate again every year, although they may have been separated during the winter. The drakes remain with the ducks until the young are hatched, after which they retire to moult. The assumption of the eclipse-plumage of the drakes is to a large extent dependent on the hatching of the young, and generally first shows itself about five weeks after the duck commences to incubate. *Turtle-Dove*.—Incubation-period thirteen to fourteen days. *Water-Rail*.—Moults its flight-feathers simultaneously, like the rest of the Rails.

Moor-hen.—The bill loses its bright red colour for a month or two in autumn.

FIRE-CRESTED WREN IN SUSSEX.—Mr. B. C. R. Langford reports to the *Field* (10. IX. 1910, p. 537) that a specimen of *Regulus ignicapillus* was caught at Eastbourne, brought to him for identification, and subsequently released uninjured on September 4th, 1910.

RED-BACKED SHRIKES IN IRELAND.—Mr. R. M. Barrington records (*Irish Nat.*, 1910, p. 243) that an immature example of *Lanius collurio* was taken on October 1st, 1908, at Wicklow Head Lighthouse (this has already been recorded in our pages, cf. Vol. II., p. 409), and that another immature bird was captured on September 26th, 1910, at the Fastnet Rock Lighthouse. The latter is the third occurrence of the species in Ireland.

WRYNECK IN ROXBURGH.—Mr. Harvie-Brown records (*Ann. S.N.H.*, 1910, p. 248) an example of *Lynx torquilla* as shot at Jedburgh, but no date is given.

GREENLAND FALCONS IN SUTHERLAND AND ROSS.—A male *Falco candicans* was shot at Rogart, Sutherlandshire, on March 8th, 1910, and a young female was caught on the Ardross Moors, Ross-shire, on March 9th, 1910 (Annie C. Jackson, *Ann. S.N.H.*, 1910, p. 246).

KESTREL CATCHING A BAT.—During an excursion of the Glasgow Natural History Society to Cassilis, in Ayrshire, on March 26th, 1910, the members were fortunate enough to see a Kestrel (*F. tinnunculus*) capture a Pipistrelle (*V. pipistrellus*), which had been disturbed from a tree-trunk about noon and was flying about in the sunshine (*Glasgow Nat.*, Vol. II., p. 137).

PINIONED WHOOPER SWANS NESTING IN SHETLAND.—It should be put on record that a pair of Whooper Swans, which were wounded and afterwards pinioned, one in 1905 and the other in 1907, have this year mated and hatched their young in Shetland (T. Henderson, Junr., *Ann. S.N.H.*, 1910, p. 245).

RUDDY SHELD-DUCKS IN CAITHNESS.—Mr. David Bruce exhibited to the Glasgow Natural History Society on May 31st, 1910, a pair of *Tadorna casarca*, which had been shot near Scarsclet on June 27th, 1910 (*Glasgow Nat.*, Vol. II., p. 134). Whether these were genuine wild birds or not it seems impossible to say.

EGGS OF THE REEVE FROM LANCASHIRE.—At the October meeting of the British Ornithologists' Club, Mr. P. F. Bunyard exhibited a clutch of eggs taken in Lancashire on April 20th,

1910, and sent to him as those of a Snipe. Mr. Bunyard, however, considered that the eggs were undoubtedly those of a Reeve (*Machetes pugnax*). (cf. *Bull. B.O.C.*, Vol. XXVII., p. 17.)

RUFFS AND SPOTTED REDSHANKS IN EAST RENFREW.—Mr. J. Robertson records (*Glasgow Nat.*, Vol. II., p. 142) that he saw a pair of *Machetes pugnax* on August 14th, 1910, and a single bird on August 21st in east Renfrew. On June 26th, 1910, he saw a single *Totanus fuscus* in the same district, and again at the same place on August 14th and 21st, while on August 27th and September 4th he saw three birds of this species, and on September 11th two and September 18th one.

SPOTTED REDSHANK NEAR ABERDEEN.—Mr. L. N. G. Ramsay records (*Ann. S.N.H.*, 1910, p. 249) that he saw an example of *Totanus fuscus* at Donmouth, near Aberdeen, on August 30th, 1910.

BLACK-TAILED GODWIT IN ROSS-SHIRE.—Miss Annie C. Jackson records (*Ann. S.N.H.*, 1910, p. 247) that she saw a specimen of *Limosa belgica* at the Cromarty Firth on March 30th, 1910, and again on April 8th, but by April 14th it had departed.

BLACK TERNS IN SURREY.—Half a dozen examples of *Hydrochelidon nigra* were observed on August 15th, 1910, at Frensham Pond by Mr. E. C. Arnold (*Zool.*, 1910, p. 393).

INCREASE OF BREEDING COLONIES OF THE BLACK-HEADED GULL.—With reference to my note on this subject (*supra*, p. 182), I regret that I made a mistake with regard to the Dorset colony. Mr. A. Bankes writes me that he knows the colony well and that it is carefully protected. During the last ten or twelve years small offshoots of this colony appear to have settled in the surrounding districts, and Mr. Bankes thinks that this has been due to overcrowding in the main colony, where the available nesting-sites are limited. The colony, which had been harried was that near Hurn, five or six miles from the mouth of the Avon (Hants), as I am informed by Mrs. E. D. Leech. Mr. Thornton Mackeith writes that a new colony of some one thousand birds has been discovered in Renfrewshire.—H.F.W.

MANX SHEARWATER IN WILTSHIRE.—A specimen of *Puffinus anglorum* was picked up at Wootton Bassett, Wiltshire, "after the great storm on August, 29th, 1910" (D. P. Harrison, *Field*, 13. IX. 1910, p. 498).



REVIEWS

The Birds of Dumfriesshire. A Contribution to the Fauna of the Solway Area. By Hugh S. Gladstone. Illustrated. Witherby & Co. 25s. net.

A WORK on the birds of a Scottish county is a novelty, though there are papers of varied length on the birds of most of the counties of the Scottish south-west, *e.g.*, Kirkcudbrightshire, Ayrshire and Wigtownshire, and East Renfrew. None looking at the map of Dumfriesshire with which the volume under notice is furnished, can fail to see that this county makes a good geographical division. With its general slope to the south, its three parallel valleys, coursed respectively by the Nith, the Annan and the Esk, its "northern battlements" of hills which extend down the east and west to shut it off from neighbouring counties on these sides, and its sea-front to the south, it forms a tolerably satisfactory unit. The variety of the physical features within its limits, and the industry of Sir William Jardine formerly, and Mr. Robert Service and Mr. Gladstone recently, no doubt in part account for the satisfactory total of two hundred and eighteen species of which its avifauna consists.

Mr. Gladstone has carried out his labour of love faithfully and well, and is to be congratulated heartily on the completion of a work which makes ornithologists generally, and Scottish ornithologists particularly, his debtors.

Changes in the method of agriculture, the area under cultivation, the subjects cultivated, the increase of planting, the action of man as a destroyer all the time and a more or less intelligent protector recently, and gradual climatic changes over long periods (though this last is hypothetical) have all in some degree contributed to the alteration in the status of many birds. The causes of some changes remain obscure, none of the reasons above mentioned appearing satisfactory as explanations, but from whatever causes arising the changes are many, and must strike anyone who carefully peruses Mr. Gladstone's work.

Some of the changes which are hardly open to doubt may be mentioned: The Swallow is decreasing, and a "lamentable" decrease of the House-Martin is recorded; the Hawfinch "would seem to be" extending its breeding-range; the Goldfinch, formerly abundant and latterly a scarce resident, has nested recently, though not regularly, "in nearly every

parish"; and the increase in the Starling population is notorious. The Jay seems to be re-established in many places as a breeding-species; the Magpie is picking up; and the Jackdaw has undoubtedly increased "in the last fifteen years"; while of the Rook a substantial increase is reported. The Great Spotted Woodpecker is re-established as a breeding-species. Of the Barn-Owl it is sad to read that few are left, and it is hardly a compensation to be told that the Long-eared Owl is "on the increase," particularly when the next sentence contains a quotation from Sir W. Jardine to the effect that that species "is certainly the most common next to the White Owl," and that was in 1839! The Hen-Harrier, formerly a common resident, is now but a very rare visitor; the Sparrow-Hawk is decreasing; the Peregrine Falcon has had its breeding-quarters woefully curtailed in the interests of game-preservation while the Kestrel is increasing. Grey Lag-Geese now take the place of Bean and Pink-footed, which formerly predominated; Barnacle have decreased since 1899, and the Whooper is declining—Bewick's Swan predominating in recent years. Sheld-Duck are increasing annually, and the Tufted Duck has extended greatly as a breeding-species since 1890. The Stock-Dove is now a well recognised nesting-species. The Pheasant has gone up in numbers enormously, and Mr. Gladstone connects the decrease in the numbers of Black Grouse since 1870 with this phenomenon, as he also does the starving out of the Partridge, though the diminution of cropping in the upper districts has been an influence in the latter case. Ptarmigan, common till the beginning of last century, have been long extinct, but have been re-introduced recently. The Moor-hen has increased considerably, but the Coot is believed to be decreasing locally. It is only of late years that the Woodcock has become so plentiful as a breeding-species in Dumfriesshire. Ringed Plovers and Oyster-catchers are becoming more common as nesting-species on rivers inland. The Redshank since 1880 has become common in the nesting-season inland. The Black-headed Gull has undoubtedly increased. The Great Crested Grebe has become a nesting-species, and the Little Grebe is quite common in summer now, though formerly chiefly, if not exclusively, a winter-visitor. Such are some of the changes recorded, and they form a remarkable catalogue.

One turns with curiosity to the accounts of certain species regarding the occurrence and distribution of which, in Scotland, there seems to be some uncertainty. Here Mr. Gladstone, from lack of full personal knowledge, is not in-

frequently unconvincing. About twenty years since, proof of the nesting of the Lesser Whitethroat in Scotland began to be called for, as suspicions were then excited regarding assertions long current about its occurrence in many places. The interval has only shown it to be a casual on passage. Under the very peculiar circumstances of this bird as a nesting-species in Scotland, one egg out of five sent for verification, leaves something to be desired as a reason for acceptance. The Blackcap and Garden-Warblers present a bit of a tangle. Thus, the former is said to be more abundant than the latter although according to Jardine, in 1832, the latter was abundant and the former had only appeared "within these few years," and at the present day Mr. Laidlaw says, about the south of Eskdale, that the Garden-Warbler is "very plentiful," while the Blackcap is "very rare." Mr. Service, however, says that in most years the Blackcap "is decidedly more abundant than the Garden-Warbler." If there be doubt from season to season as to the relative numbers of these two species in Solway, or if the Blackcap be the more abundant (which is possible), then in either case Solway is in an interesting position of isolation, as there is no doubt whatever about the Garden-Warbler being abundant in "Clyde," "Forth" and Perthshire, and outnumbering its congener in all of them. The statement in Saunders's *Manual* that the Garden-Warbler "has been recorded as nesting in Perthshire," conveys as exact an impression as if one read in the same work of the Nightingale that "it has been recorded as nesting in Surrey." The Chiffchaff is local in Dumfriesshire, but, according to Mr. Service, is more frequent in Kirkcudbrightshire, and it is notable that in May, 1897, several Glasgow ornithologists found it to be quite common at Castle Kennedy, in Wigtownshire. Within the Clyde area it is, in any numbers, a south-western species, and in Solway appears to be a western species. Mr. Gladstone seems conscious of the difficulty of working up the Marsh-Tit's distribution. It is set down as "very scarce and local." The account of the White Wagtail is disappointing. No theory, however ingenious, about a change of flight-line explains the absence of old records. Mr. Service, who formerly opposed the idea of its being overlooked, has published a recantation. The view that it has been overlooked is the only one with any potentiality of growth in it, and it appears to the present writer that the author might safely assume that it passed through Solway in the time of the Romans (and earlier), and that it will continue to do so till the time of the Germans (and after)!

Regarding the Yellow Wagtail, one would like very partic-

ularly to know if the colony, which existed on the banks of the Annan in 1832, is not still to be found there. It is such a constant species where known in colonies, and respects its boundaries so strictly, that a narrative which does not clear up such an important point is incomplete. The inclusion of the Red-backed Shrike does not seem justified on the evidence. The Lochmaben chronicler may have been better informed than the Langholm one, but it is easy to account for the latter's mistake—he had heard of *the* Butcher-bird being seen, he stumbled on the information that *Lanius collurio* is a Butcher-bird, and that is how the history we have painfully to unravel is made. A reader not knowing anything of Mr. John Corrie's qualifications would like to be assured that his Red-backed Shrike was not a Redstart!

Mudie should surely have been left in obscurity. The quotation from him that the Spotted Flycatcher was rare in Scotland in 1841, "if indeed it at all reaches that country," may be put beside the following from the Rev. Wm. Patrick's account of Hamilton parish, Lanarkshire, written in 1835:—"This bird, as far as can be ascertained, is in this district confined to the vale of the Clyde at Hamilton and Bothwell. It builds in out-houses and in wall-trees, in the most frequented places. It is a tame and silent bird, and disappears in September."

One would not expect the Brambling to leave "in January and February." In recent years there have been many Scottish records (east and west) of flocks throughout March and April, and even till May 1st. Saunders's statement that by "the middle of March almost all have returned to their northern breeding-grounds" surely requires a more or less decided qualification. The Lesser Redpoll being very local in the nesting-season is a disappointment to the author, which will be shared by Scottish readers, who are more prepared to hear of the great scarcity of the Twite in summer. In the south-west, inland, it makes a poor show at that season. It is notable that the author quotes Theobald's emphatic condemnation of the Bullfinch from Kent, instead of following the more patriotic course of quoting Colonel Drummond Hay's emphatic commendation (*Scottish Naturalist*, V., p. 247). Perhaps the author's sympathies are with the former. The Crossbills have been most creditably disentangled.

The resuscitation of the Starling "had begun in 1865," according to Mr. Gladstone, but if he came over the hills into "Clyde," he would need to carry his narrative back several decades. One of the things rescued from the obscurity of the files of the *Dumfries Courier* by Mr. Robert Service, was the

narrative of the death of a boy, who was after a Starling's nest, at the castle on the island in Loch Doon in 1813.

The Lesser Spotted Woodpecker's inclusion, it is fair to the author to say, rests on Mr. Service's assurances, but as there is no conclusive fresh evidence, the misgivings which have hitherto obtained will not be removed.

The Red-breasted Merganser does not only breed "in Ireland and north-west Scotland," but is a common nesting-species in "Clyde." The nest is found on the shores of the sea-lochs in "Clyde," on its islands and many rocky islets, so that the statement about it being found "seldom at any great distance from fresh water" is quite erroneous, and is the more conspicuous from the rarity of such lapses.

The status of the Ruff in "Clyde," at any rate in the Glasgow district where observation is keen, is very much what it was stated by Sir Wm. Jardine to be in Solway, in the first half of last century. That being so, one would infer that the conclusion that it now only occurs "at fairly long intervals" is not justified. It is not a conspicuous species, and its occurrence is sometimes only revealed by its being shot with Golden Plover. The case of the Spotted Redshank is, perhaps, somewhat parallel. As Macpherson met with it on the English side of Solway "nearly every autumn," and it has occurred in the last two autumns, and in two consecutive autumns ten years ago in East Renfrew, it is probably an occasional, if not regular, visitor to the Solway, overlooked because it is unknown.

The occurrence of the Kittiwake twelve miles inland should hardly be described as "remarkable." I have seen it several times east of Glasgow, in winter and at the spring-passage.

The appearance of three Guillemots inland need not be attributed in all cases to "stormy weather." In the present autumn, in an unprecedented spell of halcyon weather, three have occurred inland in Renfrewshire, where they are quite unknown, and one was observed at the same season in Glasgow Harbour.

JOHN PATERSON.

The Home-Life of the Spoonbill, the Stork and some Herons.

By Bentley Beetham, F.Z.S. Pp. 47, and 32 mounted plates. Witherby & Co. 5s. net.

THE present artistically-produced volume forms a companion to *The Home-Life of a Golden Eagle*, which we had the pleasure of reviewing some months ago, and these two, we venture to hope, are only the first ones of a series which will deal in turn with the most interesting of our British birds.

The present volume deals with the Spoonbill, White Stork,

the Common and the Purple Heron. The letterpress is a simply-written narrative of the author's experiences undergone while procuring the photographs from which the plates are reproduced. Such experiences are always of great interest to that growing community of bird-photographers, and cannot fail also to interest those who have had no experience of this fascinating, but often disappointing, pursuit. The habits of the several species are fairly fully dealt with, and there are one or two observations which strike us as novel and are not without importance; we would particularly refer to the habit, which seems to be a very usual one, of the young Storks standing and even progressing about the nest, supported only upon their tibio-metatarsal joints, the tarsi and feet being held up off the nest with the toes dangling. The attitude of rest amongst the Storks, on the whole length of the tarsi, is, of course, well known, but the above observation appears to be new. The method by which the young Spoonbills are fed, viz., by taking regurgitated food from the base of the parent's bill is fully described, and the contrast with the method pursued by the Storks and Purple Heron, which scatter the disgorged food about the nest and leave the young to pick it up, is well brought out. The supplying of food is apparently also undertaken solely by one bird (? the male) in the case of the Spoonbill, whereas both sexes feed the young in the case of the Stork, while both share in the duties of incubation in the case of the Common Heron. Reference must also be made to the interesting description of the climbing powers of the Purple Heron.

The plates, which are exceedingly well reproduced, do the author great credit both for his patience and perseverance under trying circumstances and his technical skill as a photographer. Personally we would have preferred them mounted on a rather darker and warmer shade of brown, but this is perhaps *only* a personal opinion. The photographs of the Spoonbills and Purple Herons are undoubtedly the best of the series, and while those of the Storks are good, they no doubt lose a little as bird-portraits from (the necessary) distance at which the exposures were made; incidentally all of these exhibit very clearly the superior results that are obtainable when each picture can be focused separately by working at close quarters in a "hide" in contrast with those of the Common Heron, which perforce had to be taken with a fixed focus and the exposure made from a distance.

N.F.T.



LETTERS



To the Editors of BRITISH BIRDS.

THE GENERIC NAMES OF OUR SWALLOWS.

SIRS,—It has been my rule and practice, and one to which, whenever possible, I still intend to adhere, not to enter into nomenclatural controversies. On the present occasion, however, I have had to give an opinion on Dr. Hartert's recent innovations in the generic names of our Swallows and Martins, and as the matter has already been brought to the notice of your readers (Vol. IV., p. 136) I feel that arguments against the change should be brought forward. To my mind the chief object of a name is in order that naturalists throughout the world should know without any doubt to which species they are referring in the course of their writings, and hence it is most undesirable to change a universally accepted name except for very sound reasons. Such reasons do sometimes arise, and then, much as we may regret it, a well-known name has to be altered to one with which we are less familiar. To settle, or, I should say, to attempt to settle, the differences of opinion on this subject an International Committee, that meets at the International Zoological Congresses, was appointed, and this committee has drawn up a set of rules to which all zoologists, though they may hold their own opinions on various points, should conform, since by these means alone can we hope for any uniformity. Unfortunately, the committee itself committed a rather serious mistake by first agreeing to take the twelfth edition of Linnæus's *Syst. Nat.*, published in 1766, as the basis, and subsequently altering that decision and going back to the tenth edition of that work, published in 1758. The main arguments on this point I do not know, but the twelfth edition was the one used by the majority of ornithological writers in the nineteenth century, and that edition has given us many of the names with which we are most familiar. The committee, by altering their decision, therefore, not only emphasized the point that there was dissension in their camp, but have spread that dissension far and wide, and created, for the present at any rate, a considerable amount of confusion. Be that as it may, however, the tenth edition has now to be the basis, and we must adopt it, however little we may like it. Dr. Hartert has been much criticized, in this country at all events, for his innovations, many of which (but by no means all) are merely due to his following the strict letter of the rules, and to these we must submit. The Swallow question, however, comes in another category altogether. In order to save confusion the committee decided that no name should be allowed to stand unless a sufficient description of the characters or bird to which that name applied was given at the same time. Rule VII., par. I., *Proc. Int. Zool. Congr. Berlin*, p. 967, 1905, reads as follows :—

“The name of a genus or species can only be that name under which it was first designated, on the condition :

“(a) That its name was published, and defined or indicated.”

As will be seen, the whole question turns on the word “*indicated*.”

No description whatever is given in Forster’s *Catalogue*, and for that reason the names are, in my opinion, neither “defined nor indicated,” and therefore should not be used. Supposing last year I had published a list of birds and in that list occurred, “*Accentor harterti*, British Hedge Sparrow,” would Dr. Hartert have allowed my name to stand? I think (and hope) not. It is no argument to say that because Boie gave no description that therefore Forster’s names, which are equally lacking in that respect, should be used. Two wrongs never yet made a right. If Boie gave no descriptions, his names have no right to stand, but it is certainly no reason for using Forster’s.

Dr. Hartert says “*Riparia*,” Forster, has been accepted. I do not know by whom, and with such opportunities as I have had I have been unable to find a reference to it, nor does Dr. Hartert support his statement except by a single reference to a writer in 1908 in a German scientific periodical. But “one Swallow does not make a summer,” and it is certainly a stretch of imagination to speak of one reference as “accepted.” It seems to me therefore that Forster’s names have no right whatever to be used, and should be ruled out as *nomina nuda*, and that we may still, with a clear conscience, use *Hirundo* for the Swallow, *Chelidon* for the House-Martin, and *Cotile* for the Sand-Martin.

The validity or otherwise of Boie’s names I leave to others to thrash out, but anyway they cannot affect the argument as regards Forster’s.

J. LEWIS BONHOPE.

P.S.—May I direct Dr. Hartert’s attention to the rules of the International Committee, *Proc. Int. Zool. Congr. Berlin*, pp. 888 and 969, *re* Latin terminations, e.g., *Ægithalus*, not *Ægithalos*; *Turdus philomelos*, etc. ?—J. L. B.

To the Editors of BRITISH BIRDS.

THE POSITIONS ASSUMED BY BIRDS IN FLIGHT.

SIRS,—I have read Mr. Beetham’s paper on “The Positions assumed by Birds in Flight” with interest. When he says (p. 167) that the “unfolding of the units of the wing seems to be sequential, starting with the humerus, and not simultaneous,” I must join issue with him. With regard to the raising of the humerus, I did not know that anyone had maintained that this extended the rest of the wing. So far we are in agreement. The region of controversy begins at the elbow-joint. When a bird’s wing is straightened at the elbow, it straightens also at the wrist—not absolutely, but nearly. This can be proved by taking a freshly-killed bird—anyone who is afraid of being labelled a laboratory theorist can take a live one instead—and bring the humerus into line with the forearm, when the hand will fall into line *nearly*. When *complete* straightening at the wrist takes place, no doubt special muscles are brought into play: it is not entirely the work of the triceps muscle

which extends the forearm. Another plan is to examine a number of photographs. I have never seen one in which a bird's wing is straightened at the elbow and at the same time bent (beyond a very little) at the wrist. Certainly there is no example of this in any of the excellent photographs with which Mr. Beetham's paper is illustrated. There is no need to point out the importance to the bird of having all the big and heavy muscles massed upon the body or near it.

F. W. HEADLEY.

To the Editors of BRITISH BIRDS.

UNEQUAL WING-STROKES IN FLIGHT.

SIRS,—Mr. Headley's explanations of his additional photographs on page 192 are not more convincing to me than those referring to the previous photographs. In both, the wings are held symmetrically. In Fig. 1, p. 192, if lines be ruled through the tips of the primaries, the edges of the longest secondaries, and through the wrists of the wings, these three lines will be found to converge to a point considerably above the bird, this being so because the camera has been held pointing down at it. The existence of this vanishing point shows that the three sets of points occur on parallel lines, and it follows that the wings are in a strictly symmetrical position.

Fig. 2 is even clearer. The Pigeon is alighting with its wings thrown back. The camera is viewing it a little from the right, and therefore it shows an almost full view of the left wing, and a fore-shortened or compressed view of the right. A book held open at an angle and a little to the right of the eye will demonstrate the correctness of the above opinion.

A. W. SEABY.

BRITISH BIRDS

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THE IRISH JAY.

Garrulus glandarius hibernicus subsp. nov.

BY

H. F. WITHERBY AND E. HARTERT.

IN the *Birds of Ireland* (1900) Mr. R. J. Ussher remarks (p. 88):—"Mr. E. Williams, who has preserved a great many examples, thinks that the Irish Jay is of a warmer colour than the English bird." Recently Mr. W. J. Williams has sent several specimens to Hartert pointing out some of the differences. Meanwhile Witherby had been for some time seeking to procure sufficient examples on which to base a satisfactory conclusion. Witherby has now examined, by the kindness of the Earl of Rosse, Sir A. Armstrong, Bart., Major B. R. Horsburgh, Dr. R. Scharff of the Dublin Museum, and Mr. R. J. Ussher, sixteen examples; while Hartert has, at present, five at his disposal—all in the Tring Museum.

That the Irish Jay is very different from the British Jay (*G. g. rufitergum*) is evident at a glance, while an examination of a series of specimens shows that the differences are constant, and any of the specimens we have examined can easily be picked out from a large series of British Jays. In the Irish Jay the sides of the head and ear-coverts are much darker and more rufous, the breast and abdomen are suffused with rufous-pink, and in consequence much darker than the pale brownish-buff breast and abdomen of the British Jay; the flanks are like the breast, and darker and more rufous than in the British Jay; the under wing-coverts and axillaries are also dark rufous-pink; the throat is more suffused with pink; the "crest" is strikingly darker than in the British Jay, the feathers of the forehead being black, fringed with reddish-buff, those of the crown edged with rufous-pink and more strongly barred with blue than in the British Jay; the nape, mantle, scapulars and back are of a much deeper shade of rufous-pink than

in the British Jay. The most striking differences are in the dark rufous colouring of the sides of the head, ear-coverts and underparts and the darker "crest."

The measurements of the examples are :—Wing, 171–186 mm. ; bill (from nostril to tip), 18–21.5 mm. The measurements are perhaps slightly smaller on the average than those of *G. g. rufitergum*.

We have therefore no hesitation in separating this bird under the name of

GARRULUS GLANDARIUS HIBERNICUS.

Type : ♂ ad., Co. Wexford, November, 1910, in the Tring Museum. Cotype : ♀ ad., Birr, King's Co., 15. xii. 1910, in H. F. Witherby's coll.

Although all the specimens we have examined are easily separable from examples of the British Jay, some are darker than others, one specimen from Co. Waterford in the Dublin Museum being remarkably dark, while in some specimens in Witherby's collection the blue on the feathers of the crown is very conspicuous. Of fifty British Jays in the Tring Museum, only one, a male, shot near Tring, November 21st, 1902, by the Hon. Walter Rothschild, approaches *G. g. hibernicus*, but even this is paler than the latter, above and below, and especially in the head. The Irish Jay has a very restricted range, and is only found in parts of the province of Leinster and the adjoining part of Munster (*Birds of Ireland*) and has recently spread into South Ulster (BRIT. BIRDS, Vol. III., p. 341).

Three Irish birds have now been found to be distinct from their British representatives—Hartert has already referred in these pages to the Irish Dipper (*supra*, p. 136), while at the December meeting of the British Ornithologists' Club Mr. W. R. Ogilvie-Grant described the Irish Coal-Titmouse as distinct.

RECAPTURING MARKED BIRDS.

BY

C. B. TICEHURST.

IN April, 1908, I commenced ringing birds with aluminium rings copied from Mr. Mortensen's pattern. These rings I made myself and stamped them with my address and a number. My object was to ascertain :—

i. Whether individuals of any species nested in their winter-haunts.

ii. Whether individuals nested in the place of their birth.

iii. Whether individuals returned to the same place to nest each year.

iv. To throw some light on the migrations of individuals.

Realizing that this last task was beyond the power of the efforts of any one individual, since the number of birds which I could ring in a year would be a mere drop in the ocean, I induced Mr. Witherby to take the matter up on a large scale through *BRITISH BIRDS*, and in 1909 the scheme was started with which the readers will be familiar.

It has, however, occurred to me that more might be done by those with sufficient time at their disposal to gather facts regarding the first three points.

It is obvious that in order to throw light on these three questions some means must be sought of taking birds alive without injuring them, and there are several ways of doing this which I have utilized with success :—

i. *The ordinary clap-net.* Any bird-catcher would make one of any size desired. It is not difficult to learn how to set up, and I have had fair success with it, but it can only be worked at times when birds will come down to food placed between the nets (unless call-birds are used), and, of course, it requires constant attention. It is a useful method of obtaining Robins, Hedge-Sparrows, Tits and Finches.

ii. *The fall.* A frame eight feet each way is covered loosely with small-meshed net. The frame is supported by a thin pole at an angle of forty-five degrees with the ground and food is put under it for some days. The frame is made to fall by pulling the supporting pole away by means of a long string. This is useful for the same birds as No. 1, and works best in sharp weather.

iii. *Catching birds at roost.* This can easily be done by hand with birds roosting in thatches, ricks and holes in trees. It may also be done with the help of a "bat fowling net" with birds which roost in bushes and hedges. This is simply a piece of small-meshed net about six feet square put on two poles. One person holds the poles up above his head and another goes along the other side of the hedge and beats it. When birds fly out into the net the two poles are brought together so as to make the net into a bag.

iv. *Wire cage-trap.* This I have found to be the simplest method of taking birds in winter and spring. The cage is made of one-inch meshed wire-netting and is six feet long, four feet broad and four feet high. At the centre at one end and on the ground is the only entrance, which is funnel-shaped and two and a half inches wide at the orifice, which is flush with the netting. The funnel made of the same netting runs inside the trap and is six to eight inches long. Food must be put inside the cage and a little constantly sprinkled at the entrance. The great advantage of this trap is that it is self-working and need only be visited every hour or so; when not being worked the entrance can be plugged. I find a butterfly-net the best thing for taking the birds out of the trap, and this is put through a join in the net at the top of the cage. Birds do not damage themselves in the cage, nor do they seem very scared, for I have taken the same Blue Tit four and five times in one day and the same one on many days during the month.

v. *Taking birds at nesting-time.* Most traps will not work at this time owing to the abundance of insect-food,

but birds which nest in holes of trees and in nesting-boxes can be easily taken at dusk when on the nest or at daytime when building. Some desert the nest, but if quickly ringed and put back I find the majority do not desert, neither do they if caught in the hole when feeding young. Those that desert quickly build again.

When it is necessary to remove a ring in order to ascertain the number, insert the tip of a small penknife at the junction of the two ends of the ring and turn the knife through a right angle. Care should be taken not to touch the leg of the bird with the knife.

In many cases the number of the ring can be ascertained by holding the ring up whilst on the leg so that the light falls on the inside of the ring.

I have already reported (Vol. III., p. 399) the case of the ringed Swallow which returned to the place the year after it was ringed, and the following records of birds which I have caught and ringed and subsequently re-captured may prove interesting:—

Starling (*S. vulgaris*).—Nestling in a hole in a tree in an orchard, ring No. 50, 22. v. 1908; caught on nest in a nest-box in same orchard, 25. iv. 1910.

Starling.—Nestling (one of eight) in a cherry tree, ring No. 72, 22. v. 1908; picked up wounded at Berck Plage, near Boulogne, France, 8. x. 1908.

Starling.—Same brood as No. 72, ring No. 76, 22. v. 1908; caught on nest in a nest-box one hundred yards from birthplace, 26. iv. 1910.

Starling.—Nestling (one of four), ring No. 241, 23. v. 1909; found dead a quarter of a mile away. 25. vi. 1909.

Starling.—Nestling, same brood as No. 241, ring No. 243, 23. v. 1909; shot in a cherry tree eight miles to the south, vii. 1909.

Blue Tit (*P. cæruleus*).—Caught in a clap-net, ring No. 53, 9. ii. 1909; re-caught in a clap-net, 14. iii. 1909; re-caught in a trap, 29. i. 10; re-caught in a trap, 28. ii. 1910.

Blue Tit (adult).—Caught in a trap, ring No. 501, 8. ii. 1910 ; re-caught in same trap nearly every day till 5. iii. 1910.

Blue Tit (adult).—Caught in a trap, ring No. 530, 20. iii. 1910 ; caught on nest, same place, 1. v. 1910.

Great Tit (*P. major*) (adult).—Caught in a trap, ring No. 481, 22. ii. 1910 ; re-caught in same trap, 4. iii. 1910.

My results, though not large, are sufficient to show that people with more time at their disposal than I have would be certain to obtain very valuable results by making use of such means as are described above.

I may add that I have never yet met with a case of any injury being done to a bird's leg by ringing.



NOTES

RECOVERY OF MARKED BIRDS.

IN our last number I appealed for subscriptions towards the expenses of the "BRITISH BIRDS' Marking Scheme," which has now grown to such large proportions, and I have to acknowledge the receipt of generous donations from the following:—Major-General V. Hatton, Mr. R. O. Blyth, Mr. H. L. Popham, Mr. H. S. Greg and Mr. H. S. Gladstone. Further subscriptions will be welcome.—H.F.W.

HEDGE-SPARROW (*Accentor modularis*).—B.B., No. A975, marked by Mr. Norman H. Joy at Bradfield, Berkshire, on July 1st, 1910, as an adult. Recovered at the same place on November 22nd, 1910.

STARLING (*Sturnus vulgaris*).—B.B., No. 11,774, marked by Mr. W. E. Suggitt at Cleethorpes, Lincolnshire, on September 10th, 1910. Recovered at Saundersfoot, Pembrokeshire, on December 10th, 1910. Reported by Mr. M. Ormond.

TEAL (*Nettion crecca*).—B.B., No. 3939, marked by Mr. Thos. Hepburn at Old Hall Marsh, Tolleshunt D'Arcy, Essex. The bird was caught up with others at Netherby, Cumberland, and was in all probability bred there. It was turned down in Essex when full grown with wing clipped. Recovered at Netherby, Cumberland, at the end of November, 1910. Reported by Sir Richard Graham, Bart. This bird has thus returned to its place of origin apparently by a cross-country journey—a most remarkable record. Another bird of the same lot was reported from the coast of Schleswig in August (*cf. antea*, p. 178).

BLACK-HEADED GULLS (*Larus ridibundus*).—B.B., No. 30,182, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 11th, 1910, as a nestling. Recovered near Le Faou, rade de Brest, Finistère, France, on December 1st, 1910. Reported by Dr. L. Veillet.

B.B., No. 9583, marked by Major H. A. F. Magrath, at Loch Spynie, near Elgin, on June 4th, 1910, as a nestling. Recovered on Sanday, Orkney Islands, on November 26th, 1910. Reported by Mr. T. Wilson.

B.B., No. 30,010, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 10th, 1910, as a nestling. Recovered at Moor Row, Cumberland, on December 6th, 1910. Reported by Mr. A. Thwaites.

B.B., No. 30,975, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 25th, 1910, as a nestling. Recovered at Backworth, Northumberland, on December 12th, 1910. Reported by Mr. James Laing.

A MARKED BLACK-HEADED GULL.

ON November 29th, 1910, I had brought me for inspection an adult Black-headed Gull (*Larus ridibundus*), on the right leg of which there was an aluminium ring. This latter I found to be one of those used by the Rossitten "Vogelwarte," No. 1201. The bird had been picked up dead near Lowestoft, Suffolk, that morning, it having been killed by flying into some telegraph-wires during a storm the previous night. On communicating with Dr. Thienemann, the director of the "Vogelwarte," he informs me that this bird was ringed as a nestling at the Rossitten gull-colony on July 16th, 1908. The ring had thus been on the bird two years and four months, and I may add that there was *no sign of any injury whatsoever* to the bird's leg.

Rossitten is 800 miles a little north of east from Lowestoft.

Another "Rossitten Gull," which was ringed on the same day as this one, was shot on Breydon Water, ten miles north of Lowestoft, on October 15th, 1909 (*vide* Vol. III., p. 220).

C. B. TICEHURST.

THE DOWN-PLUMAGE AND MOUTH-COLORATION OF SOME NESTLING BIRDS.

JACKDAW. *Corvus monedula*.

Down. Pale grey. Moderate in length.

Distribution. In addition to the humeral, ulnar, spinal and femoral tracts described by Mr. A. G. Leigh (Vol. III., p. 154), there are scanty inner supra-orbital tracts.

Coloration of the Mouth. Deep orange; flanges, pale lemon-yellow.

RING-OUZEL. *Turdus torquatus*.

Down. Yellowish. Moderately long. Very scanty outer supra-orbital tracts.

Distribution. Inner and outer supra-orbital, occipital, humeral, ulnar and spinal.

Coloration of the Mouth. Lemon-yellow. (*cf.* Vol. III., p. 325).

GREY WAGTAIL. *Motacilla melanope*.

Down. Dusky grey. Moderately long. Very scanty crural and ventral tracts.

Distribution. Inner and outer supra-orbital, occipital, humeral, ulnar, spinal, femoral, crural and ventral. There is also a distinct tract on the uropygium.

Coloration of the Mouth. Deep orange; flanges, lemon-yellow. (cf. Vol. II., p. 196).

CUCKOO. *Cuculus canorus.*

Down. Absent.

Coloration of the Mouth. Orange; flanges, lemon-yellow.

COLORATION OF THE MOUTH OF THE CARRION-CROW.

Corvus corone.

It is stated in various works on British birds that the mouth of the Carrion-Crow is flesh-coloured at all ages. For instance, Howard Saunders in his *Manual* says—"The inside of the mouth is always pale flesh-colour; whereas in the young Rook it is dark flesh-colour, soon turning livid and afterwards slate colour."

This is not a fact, for old Carrion-Crows have the whole of the interior of the mouth several shades darker than the adult Rook. I have shot several with the whole of the mouth blackish, and many in intermediate stages with the flesh-colour streaked with black. The posterior portion of the mouth is the last to turn dark. The Hooded Crow does not differ from the Carrion-Crow, undergoing a similar change.

ERIC B. DUNLOP.

LAND-BIRDS SEEN ON BOARD-SHIP BETWEEN LONDON AND PORT SAID.

THE following brief record of British land-birds which came on board or were seen from the P. & O. liner, in which I sailed for India from London on the 21st October, 1910, may be of interest to readers of BRITISH BIRDS.

We got under way from Tilbury about 2.30 p.m. The sky was overcast and there was a fresh easterly breeze blowing. The first bird-passenger noted was a male Brambling (*Fringilla montifringilla*), which appeared on the decks towards dusk just as we cleared the mouth of the Thames. This bird must have been very tired as it allowed itself to be caught without much effort. On being released, however, it fluttered about and eventually disappeared to leeward.

Next morning we were well down Channel, the wind being still in the east, and several birds were to be seen flying about the ship. These consisted principally of Chaffinches (*Fringilla cœlebs*), and Sky-larks (*Alauda arvensis*), but I also noted one or two Goldcrests (*Regulus cristatus*). Later in the

day, additions in the shape of a few Starlings (*Sturnus vulgaris*), alighted on the boat deck amidship, and towards nightfall as we were entering the Bay a Song-Thrush (*Turdus musicus*), was observed flying around.

On the morning of the 23rd October we were well in the centre of the Bay on a line between Ushant and Cape Finisterre, and the wind which was still in the east had freshened considerably during the night. I did not expect to see many birds this day as we were rather to the west of the main autumn route of migrants. What was my astonishment therefore on coming on deck to see birds on every hand flying round us out at sea and perched about on and 'tween decks. At one time there must have been well over fifty small birds on the ship. Some of these were no doubt passengers from the day before which had clung to the ship—notably the Chaffinches. One of these, a handsome cock, found his way into the saloon companion, where I fed him on crumbs.

The following species were noted during the day. Robins (*Erithacus rubecula*) several; Chaffinches, a few; Redstarts (*Ruticilla phænicurus*) several; a Blackcap (*Sylvia atricapilla*); Willow-Warblers (*Phylloscopus trochilus*) several; Wood-Warblers (*P. sibilatrix*) a few; a Reed-Warbler (*Acrocephalus streperus*); Sky-Larks, a few; Starlings, a few; a Jay (*Garrulus glandarius*). This latter was observed by a passenger, an officer in the Indian Army, who has a good knowledge of birds. These birds all alighted on the ship, taking now and then short flights to sea and returning. All seemed tired and hungry. About mid-day the wind veered round to the west and blew a strong breeze. Those birds which now took to wing found it hard to regain the ship. The Reed-Warbler allowed me to catch it. It was plainly in the last stages of exhaustion and its death could only have been a matter of a few hours at most. By sundown the birds gradually disappeared, and next morning off the coasts of Portugal I noted no birds on board. Although I did not actually see any birds die I think it probable that the majority of our feathered passengers to date perished on board or in the sea. Doubtless, in most cases it is severe exhaustion or the sensation of approaching death which compels migrants to take refuge on ships. They can rarely pick up sustenance thereon to enable them to recoup their energies and continue their journeys, and as often as not are, while clinging to the ship, carried hopelessly beyond their capacity for making the land. Besides what bird in full possession of all its activities would face the unusual (and

terrifying to it) sights, sounds and disturbances of a steamship's decks?

Next day, the 25th, only one Chaffinch was observed.

No more land-birds were observed till the 30th October with the exception of a solitary Goldfinch which flew round the ship and disappeared as we were steaming along the S.E. coast of Spain and heading for Marseilles. From Marseilles to the Straits of Messina we had a strong head wind. On the 30th when S.E. of the Straits about Lat. 36.50 N. Long. 18.27 E. the following birds were noted on board:—A Song-Thrush; a Robin; a White Wagtail (*Motacilla alba*); a Quail (*Coturnix communis*) and a young Peregrine Falcon (*Falco peregrinus*). The Peregrine was desperately hungry and did not take long to select a victim from this list. His choice rested on the Quail. I did not see the actual kill, but have no doubt that the stoop was made when the unfortunate Quail was flying round the ship. The Falcon was very shy and kept to the mast and shroud-heads. He perched with difficulty and proceeded to break up his kill on the wooden fore-cross-stay of the Marconi wires running between the masts, but the wobbling of this unsteady perch very nearly made him drop his prey, so he shifted to a steadier perch on a block near the crosstrees, where he had his meal in comfort. After this, and evidently refreshed for his onward journey to the African coast, he disappeared towards sundown.

By 10 a.m. the next morning, the 31st, we were off the S.E. corner of Crete, and during the day the following birds were noted:—A White Wagtail; a Robin (by a passenger); a Sky-Lark; a Chaffinch (by a passenger); a Song-Thrush; and a Sparrow-Hawk (*Accipiter nisus*). As in the case of the Peregrine, the Sparrow-Hawk was not long to take advantage of the food-supply to hand, and after a short rest on the davit-stays and awnings proceeded to give chase to the Sky-Lark. The quarry in this case after being chased round the ship took refuge under the feet of a lady sitting on the deck, but the Hawk was not to be denied and following close snatched up the unfortunate Lark before the lady could rescue it, and much to her indignation and that of several other ladies close by who witnessed the deed, and whose sympathies were very naturally all with the victim, the Hawk retired with and devoured its prey on the edge of the awning, where I was able to get within a yard of and watch it. Later and towards dusk I saw it stoop at another small bird near the ship, which as I subsequently learnt it also secured.

Next day, the 31st, when in the vicinity of the mouth of the Nile, I saw two Nightjars (*Caprimulgus europæus*) on the

awnings and also some Warblers, which would not settle to enable me to identify them. A Linnet was also noted by a passenger.

About mid-day we steamed into Port Said, and my subsequent observations, therefore, lie outside the scope of the present notes. H. A. F. MAGRATH.

[The importance of studying geographical races in connection with migration-observations does not yet seem to be fully realized. Major Magrath's most interesting observations would have been far more valuable had he preserved a few of the specimens which came on board, so that we might have known, for example, whether the Golderests and Song-Thrushes were of the British or Continental race.—EDS.]

REMOVAL OF *FÆCES* BY BIRDS.

REFERRING to Mr. H. W. Ford-Lindsay's notes on this subject (*supra*, p. 210), I have observed the *removal* of the *faeces* by the following birds: Swallow, Starling, and Spotted Flycatcher. Mr. R. Kearton's moving pictures of birds distinctly show that the Song-Thrush *swallows* the *faeces*, and he tells me that other films prove that the Wryneck *removes* and the Mistle-Thrush *swallows* the *faeces*.

JOHN R. B. MASEFIELD.

NOTES ON HAMPSHIRE BIRDS.

SPOONBILL (*Platalea leucorodia*).—Two out of a party of three were shot at Beaulieu on November 5th, 1906.

SHOVELER (*Spatula clypeata*).—Since the publication of the *Birds of Hampshire and the Isle of Wight* by the Rev. J. E. Kelsall and P. W. Munn, nests of this species have frequently been found at Beaulieu, and the fact that at least two pairs regularly breed there is well established.

BLACK-TAILED GODWIT (*Limosa belgica*).—In the *Birds of Hampshire* the Black-tailed Godwit is referred to as an occasional visitor to the Hampshire coast, but at Beaulieu I think we should class it as a regular autumn-migrant. I have myself seen it there almost every year. I recollect the late John Penn shooting a Black-tailed and a Bar-tailed Godwit at one shot at Beaulieu in October, 1898.

THOMAS H. C. TROUBRIDGE.

CONTINENTAL ROBINS, SONG-THRUSHES, AND GOLDCRESTS IN EAST ANGLIA, YORKSHIRE, LINCOLNSHIRE AND THE ISLE OF WIGHT.

ON September 14th, 1910, with a rush of Redstarts, Pied Flycatchers, Garden-Warblers and Blackcaps, some Continental Robins (*Erithacus r. rubecula*) arrived at Lowestoft,

Suffolk; probably also with this migration came some Blue-throats, but they (two) were not detected till the 16th. These Robins were seen up till the 16th, after which there were none till November 1st, when a few more had arrived with large numbers of the Continental Song-Thrush (*Turdus m. musicus*); in a day or so these had gone. From about October 28th to November 4th Robins were said to be plentiful in the gardens on the Yarmouth Denes, Norfolk, and specimens which I examined belonged to the continental form. In the field the paleness of the breast of this form, as compared with our birds, is quite noticeable, if one is fortunate enough to see its breast, for it is one of the most skulking and shy birds when seen on our coast—very different in habit from the resident Robins seen in the same spot.

During the last fortnight of October there were four days on which there were arrivals of Song-Thrushes, culminating in a big rush on November 1st. The great majority of these birds belonged to the continental form, and all those which I saw on the last day certainly did. They remained on the coast only a day or two. Here, again, this form is distinguishable in the field, to the practised eye, from our form by the more olivaceous coloured upper-parts.

Although both the Continental Robin and Song-Thrush doubtless occur on the coast of East Anglia every autumn, and probably have been obtained before, I do not think that there has been any previous definite record of the fact.

The advantage of studying and recognising geographical forms in connection with migration will, I think, be obvious to the greatest sceptic.

C. B. TICEHURST.

In connection with Dr. Ticehurst's note I must record that I obtained specimens of *Erithacus r. rubecula* between September 21st and 25th, 1905, at Holkham, near Wells, Norfolk; on October 27th, 1909, on the south Yorkshire coast; and on April 1st, 1906, from St. Catherine's Lighthouse, Isle of Wight, while two were taken at the same light on the night of October 23rd, 1908, and many were reported with British Robins on the night of October 31st, 1908, and a few of the continental race only on November 3rd (*Bull. B.O.C.*, Vol. XXVI. (Mig. Rep.), p. 237). I have also identified a specimen in Mr. G. H. Caton Haigh's collection, dated North Cotes, Lincolnshire, October 6th, 1898. Of *Turdus m. musicus*, I have specimens from Holkham, obtained on September 23rd, 1905, from the south Yorkshire coast on September 22nd, 1909; and from St. Catherine's Lighthouse on April 22nd and 28th, 1906, and have examined a specimen in Mr. Caton Haigh's collection dated October 19th, 1892,

North Cotes, Lincs. Of the Continental Goldcrest (*Regulus c. cristatus*), I have specimens from Holkham on September 21st and 26th, 1905, and from the south Yorkshire coast on October 27th, 1909, and have examined specimens in Mr. Caton Haigh's collection from North Cotes, Lincs, dated September 28th, 1898; October 5th, 1897; October 18th, 19th and 20th, 1892.

H. F. WITHERBY.

IMMIGRATION OF CONTINENTAL GREAT TITS IN NORFOLK, SUFFOLK, KENT AND SCILLY.

ONE of the features of the autumn-migration of 1910 on the east coast has been the great influx of Great Tits. On October 1st, I saw the first arrivals on the Lowestoft Denes; on the 12th, I shot a bird in a bush near the sea and saw others. On the 13th and 14th there was a gale from the N.E. and E. becoming less strong on the 15th and shifting to the S.E. On this latter day and on the next I picked up two Great Tits on the tide-mark and two more were also found and one brought to me. On the 17th there was a very large movement to the south of Chaffinches, Bramblings, Greenfinches and Linnets, along the Lowestoft Denes, many flocks passing between 7 and 8.30 a.m.; amongst these finches I identified Blue and Great Tits, as well as an unmixed flock of the latter birds. All these birds were in fairly compact flocks flying steadily south along the ridge of the Denes and not halting anywhere. Out of one of the flocks I secured a Great Tit. During the middle of October both Blue and Great Tits were, I am informed, unusually plentiful in the gardens round Yarmouth, and on November 1st, a flock of about twenty Great Tits was seen by Mr. Quinton, a bird-catcher, arriving over the sea from the N.E. on to the Yarmouth North Denes. On the next two days, he caught several there, and I received four from him.

On examining all these Great Tits, I find they belong to the continental form *Parus major major*. The occurrence of this sub-species in Great Britain has long been suspected and doubtless birds seen in the Shetlands (*Ann. Scot. Nat. Hist.*, 1907, p. 50) and in Caithness (*i.e.*, 1904, p. 188) belonged to this form, but, so far as I am aware, this is the first time that it has been positively proved to have occurred in the British Isles.

C. B. TICEHURST.

Mr. C. D. Borrer sent me a Great Tit for examination which had been shot at Cley, Norfolk, with others on October 10th, and this proved to be an example of the Continental form. On November 20th, Mr. T. H. Nelson wrote me that there had been a great irruption of Tits and other birds on

the Yorkshire coast, but no specimens of the Tits were forthcoming. It should be mentioned that in his *Birds of Yorkshire* (Vol. I., p. 108) Mr. Nelson states that Great and Blue Tits are frequently noted as migrants on the coast and that they have been known to alight on vessels in the North Sea. A movement of both species observed on the Yorkshire coast on October 30th, 1878, corresponded with a similar migration at Heligoland. It is most important, however, that examples of these migrants should be properly identified, and I think that Dr. C. B. Ticehurst is the first to have done so in the case of the Great Tit, while we have no actual proof, from the identification of specimens, so far as I know, of the occurrence of the Continental Blue Tit.—H.F.W.

In the *Field* of November 12th, Mr. F. W. Frohawk quoted a letter dated November 1st, 1910 from Mr. C. J. King, of St. Mary's, Isles of Scilly, that at that date St. Agnes (one of the most south-westerly islands of the group) was swarming with Great Tits and Goldcrests. In compliance with my request Mr. Frohawk very kindly procured one of these Great Tits from his correspondent, during the last week in November. The bird was accompanied by a note to the effect that the Goldcrests had left a day or two after their arrival and the Tits were then leaving. On examining this bird I find that it too belongs to the continental form.

Through the kindness of Mr. H. S. D. Byron I have also had the opportunity of examining another of these Continental Great Tits; it was shot by him at St. Peters, in Thanet (E. Kent) on October 26th, 1910, and he informs me that Great Tits were very (and unusually) plentiful in that district during the latter part of October, which corresponds fairly exactly with Dr. C. B. Ticehurst's account of the immigration on the east coast further north. It is fortunate that Mr. Byron procured one of these birds, for it was owing to his being unaware of their possible origin that he made no exact observations on their date of arrival and departure.—N.F.T.

THE BRITISH WILLOW-TIT IN SUFFOLK.

ON October 17th, 1910, I shot an example of the British Willow-Tit (*P. atricapillus kleinschmidti*) in a hedge close to the sea, near Lowestoft, Suffolk. This bird, which was with some Great Tits was the only one of its kind seen, and I believe it to have been a migrant, though how far it had travelled it is impossible to say; the nearest woods would be two or three miles distant. So far as I know this is the first time this bird has been recognised in Suffolk or in East Anglia. I am indebted to Dr. Hærtter for confirming my identification.

C. B. TICEHURST.

NUMBERS OF YOUNG IN THE BROODS OF
SWALLOWS AND HOUSE-MARTINS IN 1910.

HAVING marked nearly two hundred of these birds during the summer of 1910, perhaps the numbers in each brood may be of interest, as showing the small proportion of full broods in north Lancashire, where all these were marked; indeed all but six broods were within a mile of the town of Lancaster.

Twenty-five nests of Swallows (*Hirundo rustica*) were visited during June and July, and of these eleven were full broods of five, nine of four, and five of three. During August out of twenty broods, only four were of five, eight were of four, three of three, and no less than five of two only; while during September two broods of three were marked. One brood of four in June contained a dead young one in addition, and the same applies to two broods of three and four in August.

Small broods were, however, more noticeable in the case of House-Martins, in which I failed to find a full brood during the whole summer. Of ten nests visited during June and July, four contained four young, four contained three, and two only two; and the only two nests visited in August contained four and three respectively. In a certain cart-shed at one farm there were over a dozen Martins' nests, in all of which (except one, which contained two healthy young) the young were dead in the nest, although no old birds had been shot there, and there were plenty flying about.

Bad as the past summer was, it was far eclipsed by that of 1909, which was the worst year I ever remember. True I was not marking in June, but in July I could only find six broods of Swallows—three of four and three of three, two in August of four and three respectively, and three in September of four, three and one. House-Martins were worse off still, the only two broods I could find in July containing but two young each, and the only two in August two and three young each.

I also noticed in 1910 that the eggs took longer to deposit than usual, and I also found a number of forsaken eggs, for which I can find no reason.

H. W. ROBINSON.

ALBINISTIC VARIETY OF GREENFINCH.

ON October 15th, 1910, I shot in South Holderness, Yorkshire, an apparently pure white bird among a flock of Sparrows. On handling it, however, the whole of the plumage, with the exception of the nape and tips of the remiges, which were white, was found to be suffused with sulphur-yellow; the beak, feet and legs were pale horn-colour.

Mr. Stanley Duncan and I came to the conclusion, after careful comparison, that the bird was a variety of *Ligurinus chloris*.

The coloration of the Greenfinch is, I suppose, produced by the combination of a yellow with a darker (perhaps black) pigment, modified by the overlying structural peculiarities of the feather. One might suppose then that the loss of the darker pigment (a partial albinism), with or without modification of the feather-structure, might produce a result not unlike the specimen in question. M. WINZAR COMPTON.

NORTHERN BULLFINCH IN YORKSHIRE.

MR. T. H. NELSON informed me that in November Bullfinches were reported to him from one or two places on the Yorkshire coast, but specimens were not forthcoming. On December 4th, 1910, however, I received from a correspondent on the south Yorkshire coast a typical male of the Northern Bullfinch (*Pyrrhula p. pyrrhula*) which had been shot there on the previous day. Only two examples have been previously recorded from Yorkshire (November, 1894), but I think it probable that the immigrations noted in the *Birds of Yorkshire* (Vol. I., pp. 194, 195) under "*Pyrrhula europæa*" in various years, and notably in November, 1880, and October and November, 1884, 1886 and 1887, were referable to *P. p. pyrrhula*. No British specimen of the continental *P. p. europæa* has as yet, I believe, been identified.

H. F. WITHERBY.

THE CROSSBILL IRRUPTION.

A LARGE number of correspondents have very kindly sent information in answer to my questions on p. 186 with regard to the departure or continued presence of the Crossbills. I hope my correspondents will accept my thanks here expressed and will forgive me if I do not acknowledge their letters individually. In a future number I hope to summarize all the observations published and unpublished.—H.F.W.

CROSSBILLS NESTING IN BEDFORDSHIRE.

Mr. J. Steele Elliott records (*Zool.*, 1910, p. 472) that he found an overthrown nest, apparently belonging to a Crossbill, on May 6th, 1910, at Sutton, Bedfordshire, and that he saw recently fledged young being fed by old birds at Sandy on May 8th.

EGG-DAUBING BY THE JACKDAW.

WITH reference to the notes on this subject (*antea*, pp. 176 and 214) I may record that some twelve years ago Mr. John Palmer

of Ludlow showed me a clutch of Jackdaw's eggs taken from a hole in a tree, all of which were completely coated with mud when found in the nest. A second clutch taken from the same nest subsequently were daubed over in a similar way.

The respective dates were April 29th, 1897, and April 30th, 1898. On May 4th, 1899, Mr. Palmer found in a colony of Jackdaws, twenty miles away from the first site, two other clutches of eggs partially coated with clay. In no case were the eggs exposed to view, but were placed well within dark holes in hollow trees, whilst the nests themselves were dry. All four clutches are still in his collection. The second clutch was subsequently cleaned, when three of the four eggs were found to be of peculiar colouring, approaching in type those of the Chough.

H. E. FORREST.

HOOPOE AND SPOONBILL IN MONTGOMERYSHIRE.

ON a recent visit to Newtown I saw at the house of Mr. Ford, watchmaker, a case containing a Spoonbill (*Platalea leucorodia*) and a Hoopoe (*Upupa epops*). Both of them were obtained at Aberhafesp, near Newtown, about 1870. The Spoonbill was shot by a keeper at the edge of a large pool, and Mr. Ford remembers its being brought in the flesh to his father, who was known to take an interest in ornithology. No note was taken of the date, but from other circumstances it is known that it was a little prior to 1873. Both birds are adults in fine plumage. Neither species has been previously recorded in the county of Montgomery, though both have occurred near the western sea-board, the Spoonbill indeed being not uncommon on the Dovey Estuary (cf. *Vert. Fauna N. Wales*, pp. 203, 261).

H. E. FORREST.

ICELAND FALCONS IN SHROPSHIRE—AN EARLY RECORD.

ON a former page (BRITISH BIRDS, III., 165) I recorded two of these birds obtained near Leebotwood, Salop, in April, 1853. Recently, when turning over the pages of Pennant's *British Zoology* (1776 edition) I came across a description and plate of a species which he calls the "Spotted Falcon," but which is, without a doubt, the bird now known as the Iceland Falcon (*F. islandus*). The only discrepancy is as to the colour of the irides, which he says were pale yellow; but no importance attaches to this, as he probably had only the stuffed specimens before him, and in those days taxidermists were not careful about such trifles as colour of eyes, feet, etc. ! Pennant states that "Two of these birds have been shot near Longnor, Shropshire." No date is mentioned; but it would

be about 1770. It is indeed a singular coincidence in the case of so rare a species that the only known Shropshire examples should have been obtained in the same place (Longnor and Leebotwood are in the same parish), and that on each occasion there were two birds. H. E. FORREST.

[Although nearly all the records of this species are from maritime counties, it is interesting to note that James Pilkington, in his *View of the Present State of Derbyshire* (1789) notes the occurrence of a pair of "Spotted Falcons" at Spondon in November [1788?]. From the description of the plumage of one of these birds which was shot there is little doubt that this was also *Falco islandus*. Pilkington was evidently acquainted with Pennant's work.—F.C.R.J.]

SQUACCO HERON IN LINCOLNSHIRE.

AN immature example of the Squacco Heron (*Ardea ralloides*) was shot on the Humber Bank, in the parish of Great Cotes, on September 29th, 1910, by Mr. R. J. Pearson of Grimsby. This is, I believe, only the second occurrence of this species in the county. G. H. CATON HAIGH.

AMERICAN BLUE-WINGED TEAL IN IRELAND.

AN immature female of the American Blue-winged Teal (*Querquedula discors*) shot by Mr. B. W. Wise on the bogs at Ballycotton, co. Cork, Ireland, in September, 1910, and presented to the Dublin Museum, was exhibited by Mr. W. R. Ogilvie-Grant at the October meeting of the British Ornithologists' Club (*Bull. B.O.C.*, Vol. XXVII., p. 15). Mr. Ogilvie-Grant stated that it was quite possible that the bird had escaped from Woburn, but the Duchess of Bedford very kindly informs me that there is only the barest possibility of this, and Her Grace knows of no one else who has this species in captivity. Sir Richard Graham and Mr. W. H. St. Quintin also inform me that they do not think there are any in captivity elsewhere in England. Mr. R. J. Ussher tells me that it is extremely unlikely that such a bird had escaped from captivity in Ireland. It seems, therefore, very probable that this bird was a genuine straggler. The only records for Europe appear to be:—one in Dumfriesshire in 1858, one in Cheshire about fifty years ago, and one in Denmark in 1886. H. F. WITHERBY.

BLACK-WINGED STILT IN SUSSEX.

AT the beginning of October, 1910, a Stilt (*Himantopus candidus*) arrived in the marshes on the western outskirts of St. Leonards, locally known as "the Salts." On the

3rd it was seen by Mr. M. J. Nicoll from the top of a tram on which he was travelling from Bexhill. The bird, he told me, was feeding in a field by the roadside in company with four Lapwings, and was so close to the passing tram that he had no difficulty in identifying it and could make out that it was an immature bird. I daily expected to hear that it had been shot, but, though constantly pursued, it was not until October 9th that it finally met its inevitable fate about a mile inland from where it first appeared. It proved to be a male and, as Mr. Nicoll stated, it was a bird of the year, with a dusky stripe down the back of its neck, and yellowish legs.

It is perhaps a little surprising that the Stilt is such a rare straggler to the south-east of England, and it is hardly likely that such a striking bird would escape notice, nevertheless there appear to be only three previous records from Sussex (the last on May 6th, 1880, near Eastbourne) and only a single one from Kent.

N. F. TICEHURST.

RED-NECKED PHALAROPE IN NORFOLK.

In the last week of August, 1910, a Red-necked Phalarope (*Phalaropus hyperboreus*), presumably a female in its first plumage, frequented a duck-pond in a farm-yard at Sidestrand, near Cromer. As I was staying at the farm at the time, I had good opportunities of daily watching the bird; it was still on the pond when I left on September 1st, and I hope eventually escaped the collector's gun. The occurrence of this species in Norfolk has apparently seldom been recorded in recent years. A few remarks on its actions and habits may perhaps be of some interest.

As appears to be the case at all times of the year, this Phalarope was extremely tame, and on no occasion did it take wing when watched. Its movements when feeding—by continually picking insects off the surface of the water—were very quick and incessant as it swam about, in fact it was never still a moment; occasionally it would fly up a few inches and catch gnats on the wing.

During a very heavy rain-storm which churned up the water, the bird continued feeding unconcernedly for a few minutes, but at last apparently getting wetter than it liked, it waded ashore with evident reluctance. It then sheltered under the herbage out of sight for a few seconds, and on emerging, sat on the bank for a while and finally took to the water again; the rain still continuing, it rose from the pond, flying to a considerable height round about the farm with great

rapidity until the storm subsided. Its mode of progression on land was slow, awkward and uncertain.

Several times I saw it bathe, which it proceeded to do by swimming into shallower water, then raising itself in an upright position on the water, it rapidly and repeatedly threw its body forwards and backwards as on a pivot, and from side to side in a most ludicrous manner. The water was very green and stagnant, which perhaps accounted for the bird's frequent ablutions. Once, on an alarm being raised by sparrows and other small birds, it swam alongside a small stone in the water, where it crouched motionless beside it with one eye skywards.

S. G. CUMMINGS.

GREAT SKUA IN SUSSEX.

ON October 24th, 1910, a fine specimen of the Great Skua (*Megalestris catarrhactes*) was shot off the Sussex coast, and forwarded for preservation to Mr. Bristow, who very kindly sent it in the flesh for my examination the same day. On dissection it proved to be a male, and an adult bird.

H. W. FORD-LINDSAY.

MANX SHEARWATER IN SHROPSHIRE.

ON October 10th, 1910, an adult Manx Shearwater (*Puffinus anglorum*) was caught alive and uninjured in Ludlow. It seemed tired out, but was quite fearless and would follow its captor about fluttering along the ground and even going down two or three steps. In captivity it slept during the daytime with its head under its scapulars, but if disturbed it showed anger and bit at its owner. It did not feed well, though it picked up and swallowed some pieces of raw herring offered to it. Four days after its capture the bird was liberated and flew away. The late Mr. W. E. Beckwith wrote regarding the Shearwaters taken in Shropshire that none ever recovered the power of flight, even when they reached fresh water and were apparently uninjured. The above is the first instance to my knowledge, of one doing so.

H. E. FORREST.

INFLUX OF NORTHERN BIRDS.—An immigration of northern birds of rather unusual dimensions occurred at the end of October and the first part of November, 1910. In addition to the Northern Bullfinches reported in a previous page, a very large number of Mealy Redpolls (all those examined from the localities mentioned below being typical *L. linaria*) have been reported to me:—Yorkshire coast, between October 26th and 30th, “in larger numbers than I have ever known” (T. H. Nelson *in litt.*); large numbers in

Norfolk at Cley (C. D. Borrer *in litt.*); at Yarmouth (C. B. Ticehurst *in litt.*); at the end of October in Thanet, Kent (N.F.T. *vide* H. S. D. Byron) and two specimens obtained in Skye on November 7th by Mr. T. P. Aldworth were submitted to me for examination. Several small flocks are also reported from Ayr, Lanark and Renfrew, where the bird is little known, in the early part of November (*Glasgow Nat.*, Vol. III., pp. 34, 35).

Little Auks (*M. alle*) have also been reported in some numbers, "a great flight" appearing on the Yorkshire coast, with a strong N.E. gale, on November 19th. "Hundreds were passing at sea and going N.W." (T. H. Nelson *in litt.*); a number were also reported a little later from Norfolk (J. H. Gurney *in litt.*) and Suffolk on the 21st (C. B. Ticehurst *in litt.*), while one was picked up as far inland as Rickmansworth (Herts) on the 21st (H. R. Leach *in litt.*), another near Harpenden on the 23rd (R. Lydekker, *Field*, 3. xii. 1910, p. 1054), and one in Romney Marsh, Kent, on the 25th.

Whooper Swans (*C. musicus*) were also reported by Mr. Nelson from the Tees (Yorks) on November 19th, and about eighty arrived at Holkham (Norfolk) on the evening of the same day and departed in a west or north-west direction the next morning (J. Beddall Smith *in litt.*), while one was obtained on November 30th in the Derwent Valley (Yorks) (Sydney H. Smith *in litt.*).—H.F.W.

FEEDING-HABITS OF THE ROOK.—An important *Report* upon this subject has been prepared by Mr. W. E. Collinge and published by the Land Agents' Society. The inquiry appears to have been undertaken in a very thorough and proper manner, the stomachs of eight hundred and thirty Rooks procured throughout the year in almost every part of England and Wales having been examined.

Mr. Collinge summarizes the results as follows:—

1. That 67.5 per cent. of the food of the Rook consists of grain; if to this we add that of roots and fruits, the percentage is raised to 71 per cent.
2. The animal food content was only 29 per cent., of which quite one-third must be reckoned against the Rook.
3. There is ample evidence to show that with the present large numbers of Rooks, a grain diet is preferred.
4. So far as the evidence of this inquiry shows, the Rook is not a particularly beneficial bird to the agriculturist, although its usefulness might be considerably increased were it fewer in numbers.

Mr. Collinge concludes that we have too many Rooks and that their numbers should be reduced and kept in check.

GREAT SPOTTED WOODPECKERS IN SCOTLAND.—Mr. J. Paterson saw a specimen of *Dendrocopus major* on April 17th, 1910, near Glasgow, where he had previously seen borings of Woodpeckers. The same writer states that a bird of this species was identified on January 25th, 1910, in the Girvan Valley, Ayrshire (*Glasgow Nat.*, Vol. II., p. 142). Mr. J. A. Harvie-Brown states that the bird has been heard "this season" at Dunipace, Stirlingshire (*Ann. S.N.H.*, 1910, p. 249). Mr. J. G. Millais informs me (*in litt.*) that he saw one near Dunkeld, Perthshire, on August 20th, 1910.—H.F.W.

NESTING OF THE GADWALL AND WIGEON IN "FORTH."—Mr. W. Evans (*Ann. S.N.H.*, 1910, p. 249) records that he found on June 14th, 1910, a nest with ten eggs of *Anas strepera* at a loch in south-east Scotland, where he had suspected them of breeding in 1908 (*cf. antea*, Vol. II., p. 245). This is at the same loch as the nests found by the Misses Rintoul and Baxter in 1909 (Vol. III., p. 131). Mr. Evans also records that there were at least half-a-dozen pairs of *Mareca penelope* breeding on this loch in 1910.

THE AMERICAN WIGEON RECORDED FROM ANGLESEY.—With reference to Mr. C. Oldham's note (*antea*, p. 87) on an American Wigeon which he saw in Anglesey in June, 1910, the probability of its having been an "escape" was not at the time taken into serious consideration. I have recently heard from the Duchess of Bedford that American Wigeon breed every year at Woburn and that the young can go where they like. Under these circumstances I do not think, and Mr. Oldham agrees with me, that we can regard the Anglesey record as referring to an undoubted wild bird. I had thought that the bird might have escaped from Netherby, but Sir Richard Graham writes me that he has no full-winged American Wigeon.—H.F.W.

SOCIABLE PLOVERS IN SUSSEX.—At the November meeting of the British Ornithologists' Club, Mr. A. F. Griffith exhibited a male and female example of *Chettusia gregaria*, which had been obtained with two others between Rye and Winchelsea between May 25th and 27th, 1910. These two specimens had been presented to the Booth Museum, Brighton, by Messrs. J. E. Hall and E. Robinson, and they had been examined in the flesh by Mr. R. Butterfield and Mr. L. C. Edwards. The two others shot at the same time are in the collection of Mr. J. B. Nichols. A fifth is said to have escaped (*cf. Bull. B.O.C.*, Vol. XXVII., p. 28).



REVIEWS

Ornithological Notes from a South London Suburb, 1874-1909.

By F. D. Power, M.R.C.S. 60 pages, 5 illustrations from photographs and a chart. Henry J. Glaisher. 3s. 6d. net.

In this unpretentious little volume of less than sixty pages the author has summarized the results of thirty-five years' observations on the birds of some of the South London suburbs—Dulwich, Brixton, Herne Hill, Sydenham, etc.

It might perhaps be considered that observations in such apparently uncongenial localities would hardly be worth pursuing, still less recording, but it must be at once admitted that the author has fully justified his labours by the surprisingly valuable nature of his notes, and his book stands out as an object lesson to all "Nature Students," and it is safe to say that it is crammed full of first-hand records, without doubt those of a careful and accurate observer.

In suburban districts change is constantly going on; the neighbouring country districts are gradually invaded by the builder and certain species must inevitably disappear, and it is such records as Mr. Power here gives us that in years to come will be especially valuable to the naturalist-historian.

Omitting the six casual occurrences of birds that have without doubt escaped from captivity, the author enumerates 119 species as found in his district, and divides them into 29 residents, 22 summer-visitors, of which 13 breed regularly and 4 others have been known to do so, 18 winter-migrants and 24 occasional and 26 accidental visitors, of which 15 occur in summer and 35 in autumn and winter. In the main part of the little book the species are considered under these various heads, and it is perhaps a matter of opinion whether this arrangement is the best that could have been used. It is not easy here to pick out any particular items from the mass of records, but amongst the most interesting are those of the breeding of genuine wild Tufted Ducks (*F. cristata*) in Dulwich Park from 1901 to 1904; the recent discovery of the breeding of the Wood-Wren (*P. sibilatrix*); the abundance of the Hawfinch (*C. vulgaris*); the facts that the Carrion-Crow (*C. corone*) still breeds in the district; the diminution of such species as the Jay (*G. glandarius*), Nut-hatch (*S. cæsia*) and Lesser Spotted Woodpecker (*D. minor*), House-Martin (*C. urbica*), Swallow (*H. rustica*), and Swift (*C. apus*) as breeding species; the great increase of the Wood-Pigeon (*C. palumbus*), which now breeds regularly in Brixton

Road and other thoroughfares; the nesting of the Sedge-Warbler (*A. phragmitis*) in Dulwich Park in 1901; the fact that the Reed-Warbler (*A. streperus*) nested regularly up till 1894 in Battersea Park, and the occurrence of the White Wagtail (*M. alba*), Raven (*C. corax*), Nutcracker (*N. caryocatactes*), and Quail (*C. communis*), besides several unexpected species amongst the ducks and waders. The omission of all scientific names is, we think, a mistake, as it tends to uncertainty; in this connection we presume that the author intends "*Anthus cervinus*" by his "Red-breasted Pipit" on p. 34. If this is the case, we must say that we regard this record with suspicion. Several mistakes have been made in the identification of *Anthus cervinus*, and March 25th is probably far too early for this species to occur in England, while at the same time it is about the time that the bright-coloured migratory Meadow-Pipits do occur.

The subject of migration is (or has been) usually seriously neglected in the majority of local faunas, so that the prominent place given to it in the present volume calls for special mention and commendation. No one would presumably choose a suburban garden as a place for observing these phenomena, yet it must be admitted that many a better place might be chosen and made less use of by anyone less gifted with powers of observation than the author. The amount of information he has gathered together is surprising, and his records of the autumn-movements of such species as the Sky-Lark, Chaffinch, Starling, Rook, Brambling and Tree-Sparrow compare very favourably with those of the best of the east-coast observers, and are particularly valuable as showing that the east to west movements of these species are continued in a straight line across the country after reaching the east coast. The last five pages of the book are devoted to a summarization of the author's migration-records and certain deductions that he draws from them; they are too long to quote here, but they are so important that they cannot be neglected by anyone interested in the study of this important subject. The chart at the end of the book gives the direction and force of the wind and the relative amounts of visible migration on every day in twenty-five successive Octobers from 1885 to 1909. This very usefully supplements the *data* in the rest of the book, and shows the solid facts on which the author bases his deductions.

In spite of its small size and the fact that its title might lead one to expect merely trivial observations, Mr. Power's book is really one of solid worth. N.F.T.

IX. *Jahresbericht (1909) der Vogelwarte Rossitten der Deutschen Ornithologischen Gesellschaft.* By Dr. J. Thienemann. Reprint from the *Journal für Ornithologie*, July, 1910, pp. 522-676.

THE present issue of this report is another valuable contribution to our knowledge of bird-migration. As hitherto, practically all the species dealt with have a place in the British avifauna, but now for the first time the report includes records which directly concern our area. Previously no inter-migration between East Prussia and the British Isles was definitely known to exist, and the new development is naturally of great interest to ornithologists in this country.

As usual the Report opens with a "General" section, and this includes some interesting remarks on the classic island of Heligoland, to which Dr. Thienemann paid a short visit in the autumn of 1909. We may briefly note his comparison of the two localities. Both Rossitten and Heligoland lie in important migration-routes, but while the former is an "oasis" gladly sought by migrants of all sorts because it affords abundant cover, etc., of a very varied character, the latter is an island resorted to only of necessity, owing to the absence of cover and the great scarcity of food. We wish all success to Dr. Thienemann's proposal that Heligoland should be restored to its former position by the establishment of a permanent "Vogelwarte." As he points out, this would not be such a great undertaking seeing that there is already a large Biological (marine) Station, not to mention the museum with many of Gatke's treasures.

Many pages are taken up with the year's records, classified according to species. Of special interest are the notes on the irruption of Crossbills (*L. curvirostra*) and on a similar exceptional migration of Great Spotted Woodpeckers (*D. major*) such as had been previously observed in 1903. Two sections are devoted to the detailed observations made during brief spring and autumn residences in the observation hut at Ulmenhorst, where the Kurische Nehrung is extremely narrow. The hut had not previously been used in spring.

Most interesting to us is the section which deals with the records obtained by the ringing method. To the Hooded Crow (*C. cornix*) inquiry little has been added, but many new Stork (*C. alba*) records have come to hand. All the Stork records up-to-date, however, are shortly to be discussed by Dr. Thienemann in a special paper, and we may leave the subject in the meantime. The Black-headed Gulls (*L. ridibundus*) marked as young birds on the Rossitten "Gull-

pond" have afforded several interesting records. Of those that took the westward route (*cf.* BRITISH BIRDS, Vol. III., pp. 207-220), two were recorded from Norfolk and the Isle of Wight respectively, as already noted in these pages (III., pp. 220-399), and one reached the Balearic Isles. Those that went south overland seem to have gone less far than in former winters; more definite information of this sort would be of undoubted value, and it is quite within the possibilities of the method. An interesting record also, has just been discovered in a Russian paper, of a Gull hatched and marked at Rossitten in 1905 and shot at a colony near Libau (Russia)—95 English miles away in a northerly direction—on June 20th, 1907.

Several hundred Herring-Gulls (*L. argentatus*) were marked in 1909 on the great protected colony on the Memmert on the North Sea coast. Owing to the great amount of shore-shooting in that region the terrible proportion of 10.6 per cent. was recovered in the first winter. Of the 71 birds, one had travelled 128 miles, one 100, and the rest 73 or less; no evidence of real migration.

Of the others, the Dunlins (*T. alpina*) marked on passage at Rossitten in early autumn, have proved of special interest. The Essex record has already been noted in BRITISH BIRDS (III., p. 293); it extended the route already marked by several records (*cf.* II., p. 367) westwards along the south coast of the Baltic. A still further extension is to the mouth of the Gironde on the west coast of France, and again (since publication of the report) to near the mouth of the Rhone on the south coast. The theory that these points trace out a route is based on the assumption that there *is* a single, fixed, and definite route. This may seem unsatisfactory, but of course it is merely a provisional hypothesis which remains to be contradicted or confirmed and elaborated by later records.

Lastly, Dr. Thienemann gives an account of a very elaborate series of observations made in the autumn of 1909, on the velocity of migratory flight. Direction and strength of wind, and inclination to line of flight, and all such factors, have been duly taken into consideration. We can quote only the average results for the various species, approximately calculated to English miles per hour:—Hooded Crow, $31\frac{1}{4}$; Rook, $32\frac{1}{2}$; Jackdaw, $38\frac{1}{2}$; Starling, $46\frac{1}{3}$; Sparrow-Hawk, $25\frac{7}{8}$; Peregrine Falcon, 37; Lesser Black-backed Gull, 31; Great Black-backed Gull, $31\frac{1}{4}$; Chaffinches and Bramblings, $32\frac{3}{4}$; Siskins and Linnets, $34\frac{3}{4}$; and Crossbills, $37\frac{1}{3}$.

A.L.T.

LETTERS

To the Editors of BRITISH BIRDS.

UNEQUAL WING-STROKES IN FLIGHT.

SIRS,—I have given up all hope of convincing Mr. Seaby, and he, no doubt, considers me past praying for. But I would ask readers of *BRITISH BIRDS* to refer to the two figures in the November number (p. 192), and judge for themselves.

F. W. HEADLEY.

SIRS,—If photographs are necessary to prove to ornithologists that a bird's two wings do not always have to move with mechanical equality, I beg to submit a photograph (here reproduced) of a Barn-Owl hastily



leaving a dove-cote. The picture, while technically imperfect, is at least convincing of the point in question, which I must agree with Mr. Seaby (*antea*, p. 156) can hardly be said of all the photographs published by Mr. Headley (*antea*, pp. 115, 116, 192).

CLINTON G. ABBOTT.

To the Editors of BRITISH BIRDS.

THE GENERIC NAMES OF OUR SWALLOWS.

SIRS,—In the last number of *BRITISH BIRDS* (pp. 230-1) Mr. Bonhote has criticized my nomenclature of the Swallows. Unfortunately, the International Code of Zoological Nomenclature, which I follow, is very little known in England, and still less so is the interpretation of several of its rules, which have for years been carefully considered by the International Commission on Zoological Nomenclature. Even Mr. Bonhote is not well acquainted with the history and work of this Commission.

The Commission was appointed in 1895, in 1898 it was made a permanent body, and increased to fifteen members, but a code of nomenclature adopted by the International Congress, as the result of the labours of the Commission, was first published in the Proceedings of the Berlin Congress, 1901. At the same time a rule was adopted that no amendment to the Code should be presented to any Congress for vote unless the said amendment had been in the hands of the Commission at least one year prior to the meeting of the Congress to which it was proposed to present the amendment, and the Commission decided to report to the Congresses only those propositions upon which the vote in Committee was unanimous. These details may seem uninteresting, but I have gone into them at such length in order to show that the International Code is based upon no fanciful or arbitrary opinion, but is the result of many years of labour, much correspondence, numerous meetings and deliberations by a Committee chosen and augmented by International Congresses of the zoologists of the world, and adopted by those Congresses.

It has become most desirable rigidly to follow these rules, and every ornithologist who wishes to consider scientific nomenclature should give up his individual tastes and follow these rules implicitly. In order to do this one must make oneself acquainted with these rules. Mr. Bonhote has not done this. He says that the Committee "unfortunately committed a rather serious mistake by first agreeing to take the twelfth edition of Linnæus's *Systema Naturæ*, published in 1766, as the basis, and subsequently altering that decision and going back to the tenth edition, published in 1758." This is by no means the case. Probably Mr. Bonhote is thinking of the "Stricklandian Code," first promulgated by the British Association in 1842, and in the main, followed by British ornithologists of the nineteenth century. This "code" did much to bring zoological nomenclature to some degree of stability, and was admirably conceived, nevertheless it had its faults, and one of these was that it had fixed the date of the starting-point of nomenclature at 1766, instead of 1758, when binomial nomenclature began. That this code cannot in all its paragraphs be followed any longer has been admitted by all Congresses and all scientific bodies who have seriously studied and decided upon questions of nomenclature. No excuse exists therefore for a small number of British ornithologists to adhere to it any longer. Never has there been any question at the International Congresses or in any of the Commission's published works about the year when nomenclature began to be valid.

After this mistake, Mr. Bonhote states that I have been "much criticized" for my "innovations," though admitting that they are due to my following the strict letter of the rules to which "*we must submit.*" I cannot quite agree to this statement. I know that many of my friends do not like my "innovations," and that some even go so far as not to adopt them, even when they know that they are absolutely correct, but I have seen very little criticism, unless disagreement with one's views and a disregard of one's labours be called criticism.

The interpretation of the International Rules is another matter, and it has been seriously considered, and a number of "opinions" rendered by the International Commission (up to this date twenty-nine have been published) deal with this.

It is quite true that there have been different views about the adaptation of generic names published without a diagnosis, but if Mr. Bonhote were acquainted with ornithological nomenclature he would know that numerous generally-adopted names for common birds, especially those of Boie, Forster, Gray, Tunstall, Bonaparte, Reichenbach, and many others, were published without a diagnosis. Nor do the International Rules demand this. Article 25 (a) says :—"The valid name of a genus or species can be only that name under which it was first designated, on the condition that this name was published and accompanied by an indication, or a definition, or a description." If Mr. Bonhote had published a list in which occurred "*Accentor horterti*, British Hedge Sparrow," as he suggests, of course his name would be a *nomen nudum* and not available, because "Opinion 1" has specially decided that the word "*indication*" is not to be construed as including vernacular names! In the case of Forster's generic names for the Swallows the case is, however, quite different, because "the citation of a type-species" is held to make a generic name available. This has always been the opinion of ornithologists, and to alter it would mean the alteration of hundreds of the best known generic names. And, indeed, many generic names are ten times clearer when a type-species is cited to establish their meaning than when only a diagnosis is given, because diagnoses for genera are difficult to make when one knows only a few of the species belonging to the said genera, and they alter with the increase of species in a genus, or when a larger genus of ancient authors is divided into smaller modern groups.

The statement that two wrongs do not make a right is quite correct, but the opposite was never my opinion, and if Mr. Bonhote says we may still, with a clear conscience, use *Hirundo* for the Swallows, *Chelidon* for the House-Martin, and *Cotile* for the Sand-Martin, he does just what he deprecates, *i.e.*, he adopts a name (*Chelidon* of Boie) which is published without a diagnosis, while he rejects Forster's earlier name! Mr. Bonhote might have looked up recent literature to find the name *Riparia* frequently used, instead of charging me with "supporting my statement by a single reference." Looking at my book, it is clear to anyone that I, in order to save space, have not quoted any recent literature, but only the first name given to the forms described in my work. Suffice it to say that the name *Riparia* is universally used in America, and almost so in Germany, since it has been adopted in Reichenow's list of the birds of Germany, and the same author's somewhat important work on the Birds of Africa.

Mr. Bonhote's kindness in calling my attention to pages 888 and 969 in the *Proc. Inst. Zool. Congr., Berlin*, is fully appreciated by me, but I had seen them before, and there is nothing in those pages which prevents me from preserving the original spelling of the names *Ægithalos*,

philomelos, etc., although one might also use the Latin ending *us*, instead of the Greek *os*, as zoological names are supposed to be latinized. These names, however, were purposely spelled in this way by their authors, and there is no evident error of transcription, *lapsus calami*, or typographical error in them. What Mr. Bonhote found on page 969 are not "rules," but "recommendations," and I follow them when making new names, and that is the meaning of the recommendations, which are not the same as the "rules."

ERNST HARTERT.

BRITISH BIRDS

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

ASSISTED BY

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THE TRADESCANT MUSEUM.

BY

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

IN these days, when every town of any importance in this country boasts of a more or less well-equipped museum, it seems somewhat strange that the first English museum of which we have any knowledge or account was formed less than two hundred and seventy years ago, and that it owed its inception, not to a native of these islands, but to the enterprise of a Hollander and his son who had settled in this country.

This was the famous Tradescant Museum, an account of which was published in 1656 entitled :—

Musæum Tradescantianum : / or, / a Collection / of / Rarities./
Preserved / at South-Lambeth near London / By / John
Tradescant./

This small duodecimo work has now become very scarce owing to the fact that “Prefixed to it were prints of both father and son, which from the circumstance of being engraved by Hollar, has unfortunately rendered the book well known to collectors of prints,* by whom most of the copies have been plundered of the impressions.” Of the two Tradescants but little is known, and that partly conjectural. John Tradescant the elder was, according to Anthony Wood, a Dutchman by birth, and seems to have settled in this country during the reign of James I. As a young man he is said to have travelled and collected in Europe and Asia, and to have accompanied a fleet which sailed against the Algerines in 1620, and some few years after this we find him settled at South Lambeth, where he had “a Physic Garden of the greatest extent.” In 1629 he obtained the appointment of gardener to Charles I., and seems to have died about 1650. He left a son of the same name, who inherited his father’s tastes, voyaged to Virginia, returned

* Facsimile reproductions of the title page and the two Hollar prints accompany this article.

Musæum Tradescantianum :
OR,
A COLLECTION
OF
RARITIES.
PRESERVED
At *South-Lambeth* near *London*
By
JOHN TRADESCANT.



L O N D O N,
Printed by *John Grismond*, and are to be sold by
Nathanael Broske at the *Angel* in *Cornhill*,
M. DC. LVI.

thence with a large collection of seeds and plants, and published the Catalogue of the Museum. As he informs us in an address "To the Ingenious Reader":—

"About three yeares agoe (by the perswasion of some friends) I was resolved to take a Catalogue of those Rarities and Curiosities which my Father has scedulously collected, and my-self with continued diligence have augmented, and hitherto preserved together: they then pressed me with that Argument, that the enumeration of these Rarities, (being more for variety than any one place known in Europe could afford) would be an honour to our Nation, and a benefit to such ingenious persons as would become further enquirers into the various modes of Natures admirable workes, and the curious Imitators thereof: I readily yielded to the thing so urged and with the assistance of two worthy friends (well acquainted with my design) we then began it, and many examinations of the materials themselves, & their agreements with severall Authors. . . ."

The book itself is a source of never-ending interest and amusement to the curious reader. As the late Professor Newton said in his address to the Museums Association in 1891, "Did time permit, I would gladly go over this little book page by page, for I believe there is hardly a leaf but would furnish the text for a sermon."

We must here content ourselves with some account of Tradescant's list of birds with which he occupies the first four pages of the book, and which he heads, "Some kindes of Birds, their Egges, Beaks, Feathers, Clawes, and Spurres."

Amongst the "Egges" in the museum he enumerates "Crocodiles, Estridges, Soland goose or Squeedes from Scotland. Divers sorts of Egges from Turkie: one given for a Dragons egge," and "Easter Egges of the Patriarchs of Jerusalem," while the "beaks or heads" include those of the "Griffin, Pellican, Shoveller, and thirty other severall forrain sorts, not found in any Author, and sixteen several strange beaks of Birds from the East India's," but it was amongst the "Feathers and Clawes" that the chief treasures of the collection reposed—here were "Two feathers of the Phoenix tayle" and

“The clawe of the bird Rock; who, as Authors report, is able to trusse an Elephant.”

Beside these marvels, the “Legge and claw of the Cassawary or Emeu that dyed at S. James’s, Westminster,” is but commonplace, while among the “whole birds enumerated” space forbids us to mention more than “The Bustard as big as a Turkey, usually taken by Greyhounds on Newmarket-heath” and “The Dodar, from the Island of Maritius, it is not able to flie being so big.” Of this last-mentioned bird, the famous Dodo, it may be interesting to give a short account. The specimen mentioned by Tradescant is thought by Strickland (*The Dodo and its Kindred*. London, 1848. pp. 22, 23) to be identical with that which Lestrange saw alive in 1638. O how it stirs the blood of the modern ornithologist to think of the good old days when live Dodos were exhibited in the London streets! Lestrange’s account (Sloane MSS., 1839, 5, p. 9) is as follows:—

“About 1638, as I walked London streets, I saw the picture of a strange fowle hong out upon a cloth, and myselfe with one or two more then in company went in to see it. It was kept in a chamber, and was a great fowle somewhat bigger than the largest Turkey Cock, and so legged and footed; . . . coloured before like the breast of a young cock fesan, and on the back of dunn or deare colour. The keeper called it a Dodo. . . .”

Be this as it may, the sad and future history of Tradescant’s Dodo—which, by the way, the famous Francis Willughby inspected, “We have seen this Bird [*i.e.*, the Dodo] dried, or its skin stuf in Tradescant’s Cabinet” (*The Ornithology*, 1678, p. 154)—was as follows:—When Tradescant’s collection was bequeathed to Elias Ashmole the Dodo with other specimens passed into the Ashmolean Museum at Oxford. Here it remained entire till 1755, “when the Vice-Chancellor and the other Trustees, to whose guardianship the worthy Ashmole had confided his treasures, came in an unlucky hour to make their annual visitation of the museum . . . when this unhappy specimen, then at least a century old . . .



Iohannes Tradescantus Pater rerum selectarum
inligens intellectum in Recordibus Lambethi ad
piscem Londinum etiamnum visentia procer
tantum et locupletavit.

JOHN TRADESCANT, THE ELDER.

(After the engraving by W. HOLLAR.)



Iohannes Tradescantus Filius genij ingenijq;
patris veri heres, relictum tibi rerum vndiq;
congestarum thesaurum ipse plurimum adauxit
et in Museo Lambethano amaris visendum exhibet.

H. Solter del. J. Smith sculp.

JOHN TRADESCANT, THE YOUNGER.

(After the engraving by W. HOLLAR.)

decayed by time and neglect was ordered to be removed." Fortunately, however, "a small portion of this last descendant of an ancient race escaped the clutches of the destroyer. The head and one of the feet were saved from the flames, and are still preserved in the Ashmolean Museum" (Strickland, p. 32).

We have no space to deal with the remainder of Tradescant's book here; it contains in all one hundred and seventy-eight pages of catalogue, of which by far the larger portion is devoted to his botanical collection, and ends with a list of "Principall Benefactors to the precedent Collection"—beginning with King Charles, and Queen Mary, and enumerating many of the most famous men of the day, including Elias Ashmole, with whom the younger Tradescant became acquainted in 1650, through his lodging at Tradescant's house. John Tradescant the younger died in 1662, and bequeathed his collection to his friend, to whom it passed in 1677 after the death of Tradescant's widow, and it then became incorporated in the famous Ashmolean Museum. Tradescant's Museum, or "Ark" as it was generally called, "attracted the curiosity of the age, and was much frequented by the great," and it is therefore not surprising to find that the ever-indefatigable Evelyn knew it well. Under date of September 17th, 1657, he notes:—

"To see Sir Robert Needham at Lambeth, a relation of mine; and thence to John Tradescant's musæum, in which the chiefest rarities were, in my opinion, the ancient Roman, Indian, and other nations' armour, shields and weapons: some habits of curiously-colour'd and wrought feathers, one from y' phoenix wing as tradition goes. Other innumerable things there were, printed in his Catalogue by Mr. Ashmole, to whom after the death of the widow they are bequeath'd and by him design'd as a gift to Oxford."

And, again, on July 23rd, he records: "Went to see Mr. Elias Ashmole's library and Curiosities at Lambeth. . . . The famous John Tradescant bequeathed his Repository to this gentleman, who has given them to the University of Oxford,

. . ." (*Diary of John Evelyn.* By H. B. Wheatley. Vol. II. pp. 94, 336.)

The Tradescants, father and son, lie buried in Lambeth Churchyard, under the family monument, which was erected in 1662 and repaired in 1770 by public subscription from drawings of the original in the Pepysian Library. To them "as the parents of British Musæology" our debt of gratitude is great, and may their memories long flourish.

FURTHER OBSERVATIONS ON THE SONG-PERIODS OF BIRDS.

BY

C. J. AND H. G. ALEXANDER.

IN our previous article on this subject (Vol. I., p. 367) we gave the song-periods of most of the recognized songsters as observed in Kent and Sussex. We have not noticed any distinct differences in a year's observations at Reading and Cambridge, so that we may assume that these periods, with the corrections given at the end of this article, hold good for the south-east of England generally, except in so far as some species pass the winter in some parts and not in others.

The songs of some of the species with which we deal in the present article are not always recognized as such; in some it is difficult to say which notes really constitute song. We have not attempted a definition of song, but have discussed the notes of the various species in detail below.

THE TITMICE AND NUTHATCH.

The songs of the species of this group are nearly all repetitions of separate notes; several species have more than one song. A song is recorded for the Long-tailed Tit in various works, but we have not heard it.

GREAT TIT (*Parus m. newtoni**).—The songs consist of one, two or three notes repeated in rapid succession; those of two and three notes generally ending with a single note. *Period.* From the middle of August to the middle of June; the period during which it sings regularly is from the end of December or early January to the beginning of June; only occasionally during the rest of the period, except in September and early October, when in some years it sings frequently.

COAL-TIT (*P. a. britannicus**).—Two notes repeated rapidly, the emphasis on the second. *Period.* Similar to that of the Great Tit, but it generally sings more in autumn, and may sing occasionally during most of the summer months.

MARSH-TIT (*P. p. dresseri**).—The songs are described in Vol. IV., p. 147. *Period.* Occasionally in November and December; frequently from early January to the end of March or early May. We have also recorded it in June, July and October.

* We assume that the birds observed by us are of the British form.

WILLOW-TIT (*P. a. kleinschmidti**).—See Vol. IV., p. 147.

BLUE TIT (*P. c. obscurus**).—There are two varieties of the song :—(1) A shrill note, repeated three times and followed by a trill ; (2) the same shrill note two or three times, followed by a lower note twice. *Period.* Almost the same as that of the Great Tit, but it sings rather more in August and less in September and October than that species.

NUTHATCH (*Sitta e. britannica**).—The song is a very loud bubbling note, repeated rapidly so as to form a trill. *Period.* Rarely in August and September ; frequently from the end of January to the beginning of May. We have also records during mild spells in the other winter months.

STARLING, JAY AND MAGPIE.

STARLING (*Sturnus vulgaris*).—*Period.* Occasionally in the second half of July, regularly from early August to the beginning of May, and occasionally on to early June.

JAY (*Garrulus g. rufitergum**).—A low warble, only audible at a short distance.

MAGPIE (*Pica rustica*).—A confused chattering. We have not enough observations to state the period for either of these species.

NON-PASSERINE ORDERS.

Of the remaining orders of birds which breed in our neighbourhood we know of no songs among the Owls, Hawks, Herons or Gulls.

Probably the screech of the Swift and the “churr” of the Nightjar must be considered as songs ; with the possible exception of the Magpie, the Swift is the only species we know which makes any attempt at singing in concert. The Swift and the Nightjar both sing almost throughout their stay at their nesting-places, unless the weather is unfavourable.

WOODPECKERS.

The Wryneck and all three Woodpeckers have a cry composed of a single note repeated a number of times, but it does not seem to have the same function in all these species. In the WRYNECK (*Iynx torquilla*) there is no doubt that it is a song ; it is uttered from the arrival of the bird to early June, and occasionally to the middle of July ; after the young are out a harsh rattle is often made. The corresponding note of the LESSER SPOTTED WOODPECKER (*Dendrocopus m. comminutus**) is perhaps now used as a call simply, being replaced as a song by the drumming, but we have not heard

the call during the late summer, when the birds are presumably moulting.

The GREAT SPOTTED WOODPECKER (*D. m. anglicus**) apparently makes a similar call only very rarely; its song is the drumming noise, and its ordinary call a single sharp note. We have not heard either of these species drum in the autumn.

The GREEN WOODPECKER (*Gecinus viridis*) makes a number of different notes; the full laughing cry, which we take to be the song, is, we believe, only uttered from January to late summer, and not in autumn; this species also drums, but apparently not often.

CUCKOO (*Cuculus canorus*).—*Period.* From arrival to late June, generally stopping within a few days of the 20th; a few sometimes continue till the first week in July.

PIGEONS.

All the three Pigeons make a “coo,” which seems to constitute the song; as far as we know none of them makes any other note:—

WOOD-PIGEON (*Columba palumbus*).—Occasionally in January and February, and regularly from March to the beginning of October.

STOCK-DOVE (*C. œnas*).—It sings later in the autumn than the Wood-Pigeon, and possibly less in the summer.

TURTLE-DOVE (*Turtur communis*).—Irregularly for a week after arrival, and then regularly to the beginning of August. We have a record as late as the 23rd of August, 1910 (Reading).

RAILS.

The call of the CORN-CRAKE (*Crex pratensis*) seems to be a song, as it is uttered regularly only up to about the end of June. The “sharming” of the WATER-RAIL (*Rallus aquaticus*) seems to be made chiefly in March and April. We know of no song in the case of the Moor-hen or Coot.

WADERS.

Of the waders breeding in our district the Lapwing, Snipe and Redshank have definite songs.

LAPWING (*Vanellus vulgaris*).—The earliest record we have is on January 13th, 1910 (Tunbridge Wells); occasionally in February, regularly from the middle of March to the middle of May, and occasionally to the close of the month.

SNIPE (*Gallinago caelestis*) (drumming).—Chiefly in April; we have records as early as February 24th, 1908 (Tunbridge Wells), and as late as July 24th, 1910 (Tunbridge Wells).

GREBES.

We have never heard the Great Crested Grebe utter any song; the bi-sexual display is generally performed in silence. The DABCHICK (*Podiceps fluviatilis*) has a loud song, uttered by both sexes†; it sings chiefly in March, April and May, but also up to August and in many of the winter months.

We have a few additions to make to the list of Passerine birds given in the previous article; these, we believe, complete the species singing in our district.

WHINCHAT (*Pratincola rubetra*).—From arrival to the end of June.

DARTFORD WARBLER (*Sylvia u. dartfordiensis**).—Our observations on this species are not sufficient for us to state its period with precision; we have heard it in late autumn as well as in spring.

GRASSHOPPER-WARBLER (*Locustella naevia*).—From arrival to the middle of July.

GREY WAGTAIL (*Motacilla melanope*).—We have heard it in April at its nesting-station at Tunbridge Wells, and in October at Reading and Cambridge.

SPOTTED FLYCATCHER (*Muscicapa grisola*).—From soon after its arrival to the middle of June, but never regularly.

HAWFINCH (*Coccothraustes vulgaris*).—March, April and May.

HOUSE-SPARROW (*Passer domesticus*).—We presume that the more lively chirps of this species constitute a song, but we have no notes as to its period.‡

TREE-SPARROW (*P. montanus*).—Local in our district, and we have only isolated observations.

LESSER REDPOLL (*Linota rufescens*).—The breeding individuals sing from their arrival in March to the middle of August, and again from the middle of September to their departure in early October; sometimes when the winter birds are numerous they sing a little in December and January.

BULLFINCH (*Pyrrhula e. pileata**).—Appears to sing most in spring; we have also heard it in June, July, August and December.

CROSSBILL (*Loxia c. curvirostra*).—In 1910 we heard it from the middle of March to the latter part of April.

We have also a few corrections to make to the song-periods given in the article in Vol. I.

† See E. Selous, *Bird-life Glimpses*.

‡ See F. J. Stubbs, Vol. III., p. 155.

It may be well to state that in all cases the periods are those of the most persistent singers ; there is a great deal of individual variation, but we have not yet made any records of this.

SONG-THRUSH (p. 369).—Occasionally sings on into early August.

BLACKBIRD (p. 369).—Occasionally continues its autumn song into October.

STONECHAT (p. 372).—We have recorded it up to the first week in July.

GARDEN-WARBLER (p. 371).—Records about the middle of August in 1909 (East Kent) suggest an occasional autumn-singing between moulting and departure (*cf.* Lesser White-throat).

REED-WARBLER (p. 371).—Has a distinct autumn song in early September.

TREE-CREEPER (p. 370).—May sing right through August, like the Wren.

MEADOW-PIPIT (p. 370).—Sometimes goes on into the beginning of September.

MARTIN (p. 372).—Continues right on to nearly the end of September.

GOLDFINCH (p. 372).—We have heard it in every month except January, so it probably sings all the year, except when moulting.

GREENFINCH (p. 370).—Sings regularly to the end of August. We have twice recorded it in autumn, viz., October 11th, 1908 (East Kent), and November 6th, 1909 (Cambridge).

COMMON BUNTING (p. 372).—Where it is resident it apparently sings during all the winter months. It is silent all through September.

YELLOW BUNTING (p. 370).—Occasionally continues just into September. We have recorded an autumn song as follows :—October 10th, 13th, and 15th, 1908 (Tunbridge Wells) ; October 4th and 8th, 1910 (Reading).

CIRL BUNTING (p. 372).—Sings up to early September, and all through the winter, but we do not know quite when it recommences in autumn.

SKYLARK (p. 370).—May sing occasionally up to early December and again at the end of the month.

NOTES

RECOVERY OF MARKED BIRDS.

IN addition to those already acknowledged, I have received subscriptions towards the expenses of the "marking scheme" from Major H. Trevelyan, Mr. Norman H. Joy (second subscription), Mr. W. C. Tait, Mr. W. I. Beaumont, and Mr. T. C. Hobbs. H.F.W.

PIED WAGTAIL (*Motacilla lugubris*).—B.B., No. A858, marked by Mr. H. W. Ford-Lindsay at Pett, Sussex, on June 19th, 1910, as a nestling. Recovered at Gonçallo, Guarda, Beira, Portugal, on December 15th, 1910. The recovery was reported in the *Actualidade* of Guarda, and full details were very kindly supplied by the Editor of that paper.

STARLING (*Sturnus vulgaris*).—B.B., No. 11,772, marked by Mr. W. E. Suggitt at Cleethorpes, Lincolnshire, on September 10th, 1910. Recovered between Malton and Great Driffield, Yorkshire, on December 31st, 1910. Reported by the Rev. E. M. Cole.

RINGED PLOVER (*Aegialitis hiaticola*).—B.B., No. A691, marked by Mr. Howard Bentham, at Ravenglass, Cumberland, on June 14th, 1910, as a nestling. Recovered between Bangor and Donaghadee, co. Down, on January 19th, 1911. Reported by Mr. Jas. Gorman.

COMMON TERN (*Sterna fluvialis*).—B.B., No. 20,399, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on July 23rd, 1910, as a nestling. Recovered at St. Bees, Cumberland, on August 28th, 1910. Reported by Miss M. Garnett.

BLACK-HEADED GULLS (*Larus ridibundus*).—B.B., No. 30,101, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 11th, 1910, as a nestling. Recovered at Blackpool, Lancashire, on December 28th, 1910. Reported by Mr. W. Coates.

B.B., No. 30906, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 13th, 1910, as a nestling. Recovered in the rade de Lorient, Brittany, France, on January 2nd, 1911. Reported by M. C. Angevin, officier-marinier de la flotte Lorient.

B.B., No. 3775, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 10th, 1910, as a nestling. Recovered at Lancaster on January 2nd, 1911. Reported by Mr. C. Griffiths.

LESSER BLACK-BACKED GULL (*Larus fuscus*).—B.B., No. 9811, marked by Mr. W. I. Beaumont at Black Isle, Lynn of Lorn, Argyllshire, on July 4th, 1910. Recovered nine miles from Aveiro, Portugal, on December 15th, 1910. Mr. Beaumont took great trouble in identifying (by marking down the parent-birds) this and other nestlings ringed at the same time, but as both Herring- and Lesser Black-backed Gulls were breeding on the same island he could not be positively certain of his identification, although he thinks he made no mistake. Reported by Mr. W. C. Tait and Mr. J. D. Pereira da Graca. We are most grateful to Mr. W. C. Tait for the great trouble he has taken in making the ringing scheme as widely known as possible in Portugal, and for the great help he has given us in securing full details of this and other Portuguese records.

WOODCOCK (*Scolopax rusticula*).—A Woodcock with a ring marked A. Cong, 10, was reported by Mr. W. C. Tait as having been shot in the parish of Covide, about forty miles north of Oporto, Portugal, on December 28th, 1910. Lord Ardilaun informs me that this bird was hatched in the woods at Cong, co. Galway, in the spring of 1910, and was ringed just as it was about to fly.

A MARKED TEAL.

ON the evening of December 20th, 1910, when "fighting" I shot a Teal (*Nettion crecca*) drake at Glenorchard, near Glasgow, which had on its left leg a ring inscribed "H. Chr. C. Mortensen. Viborg. Danmark. 1045 Y." I wrote to Dr. C. B. Ticehurst, who has now kindly informed me that the Teal was ringed by Herr Mortensen on October 19th, 1909, at Isle Fanö, south-west Denmark. It was caught in the duck-decoy there that morning, and liberated the same evening at 8 p.m.

JAMES BARTHOLOMEW.

[Another of these Teal, marked at the same place as the above on October 18th, 1909, was reported as having been shot on a branch of Milford Haven on December 2nd, 1910 (*Field*, 24. xii. 1910, p. 1214). For previous records see Vol. III., pp. 251, 252.—EDS.]

NOTES ON "RINGING" SMALLER BIRDS.

HAVING ringed over seven hundred birds of forty-three species, of which only about thirty individuals required the large-sized ring, I have probably had more practice, as far as the smaller birds are concerned, than most people in this fascinating pastime, and I therefore venture to put on record a few of my experiences—in the hope that they may be of some help to others this year.

The medium-sized rings exactly fit Blackbirds, Thrushes and Starlings. They can therefore be put on and simply pinched up with the fingers as soon as it is found that they cannot slip over the foot of the nestling—in the case of young Blackbirds and Thrushes when they are about half-fledged, and some time before they attempt to fly from the nest, and in young Starlings when they are still almost naked. Fully-fledged nestling Starlings readily scramble back into their nesting-holes, but it is very difficult to induce nearly full-fledged birds in open nests to remain in the nest when once frightened from it. That they always come to grief when disturbed too soon is certainly not the case, as the Thrush recorded from Norfolk (*supra*, p. 208) was one of five, hardly able to fly, which refused to stay in their nest after being marked. When I think that the nestlings which I am about to mark are likely to fly from the nest, I very cautiously put my hand over all of them at once, and contrive to pick them up *en masse* and put them in my pocket. Having ringed them I again manage to get them all together in my hand and thus replace them in the nest, holding my hand over them for a short time before quietly removing it. There is almost always one particularly active and vociferous member of the brood, and this one I try to get well under the others, because should it get a chance it will fly out and disturb all the rest. Nestling Wrens and Finches are easily frightened, and insist on leaving the nest when only partially fledged and long before they can fly, so they should be marked early. Different broods of Robins vary very much in this respect.

The smallest-sized ring fits very few of the smaller birds exactly. Instead of making the lumen smaller by pinching it into an oval shape, as suggested with the instructions sent with the rings, I find it more convenient (and I think it safer for the bird, because it fits the leg better) slightly to overlap the ends of the ring. Great care must be taken, as suggested in the instructions, to see that the ring cannot

slip over the foot of each bird, and quite a moderate amount of force must be used in testing this.

I have marked most of the young in three broods of Goldcrests, and in one case had the satisfaction of seeing the young birds about for several days quite unencumbered by their shining bracelets. When one looks into a nest containing nearly full-fledged Goldcrests, it appears at first sight to be empty. The young birds are found to be clinging tightly to the lining of feathers all round the interior of the nest.

What has become of all the marked nestlings in the neighbourhood of Bradfield, Berks, where I ringed so many birds? I marked about one hundred and seventy Blackbirds and Thrushes within a mile of my house, yet since July, when some were recovered in fruit-nets, in spite of careful watch, I have seen only one of these birds, viz., a Blackbird, on January 4th, 1911. I have also seen or caught besides those already recorded the following birds:—

GREAT TIT (*Parus major*).—Nestling in nest-box, ringed May 31st, 1910, seen at cocoanut close by on December 11th, 1910. I recognized this bird by the fact that it was one of the only brood in which I pinched up the ring without overlapping the ends.

BLACKBIRD (*Turdus merula*).—Adult male caught in fruit-net and ringed (No. 11,236) July 25th, 1910. Seen on several occasions close by and captured alive December 29th, 1910.

STARLING (*Sturnus vulgaris*).—Nestling in nest-box, ringed (No. 7462) May 15th, 1910, caught in wire cage-trap about two hundred yards away January 13th, 1911.

STARLING.—Nestling in nest-box, ringed (No. 10,062), June 1st, 1910, caught in wire cage-trap about two hundred yards away January 13th, 1911.

It is interesting to note that the Blackbird above mentioned and the Hedge-Sparrow recorded in this volume on page 8 were almost the only adult birds I marked during last summer. The Starlings were taken in a cage-trap made as described by Dr. Ticehurst (*ante*, p. 237). This trap has proved to be most useful. I have taken over one hundred and twenty Starlings in four days, although I only visited it twice a day. About six per cent. of the Starlings are caught a second time, but when the trap is baited for Tits one finds it is necessary to set free two or even three ringed Blue Tits whenever it is visited. I have found it necessary to add a door to mine, so that I can enter the trap and catch the Starlings with my hands, as it takes too long to catch over thirty birds in a butterfly-net.

N. H. JOY.

THE IRISH COAL-TIT.

At the December meeting of the British Ornithologists' Club Mr. W. R. Ogilvie-Grant exhibited some specimens of Coal-Tits from Ireland, and described the bird as a new species under the name of *Parus hibernicus* (*Bull. B.O.C.*, Vol. XXVII., pp. 36 and 37).^{*} This interesting bird differs from *Parus ater britannicus* chiefly in having the light patches covering the sides of the head and neck, and the occipital spot yellow, the breast and belly yellow, in marked contrast to the buff of the flanks, and the mantle and back more strongly washed with olive-buff. These characters are much more marked in some individuals than in others. Mr. Ogilvie-Grant has examined examples from the following counties:—Dublin, Wexford, Waterford, West Meath and Sligo; those from the last-named county, which were sent to him by Mr. Collingwood Ingram, being the first he had seen.

For the present I am inclined to regard the bird as a geographical form rather than a species, as Mr. Grant considers it, but a full knowledge of its distribution must be obtained before this can be determined, and Mr. Grant informs me that he will shortly be in possession of further details on this point. At present, examples from co. Down present a somewhat puzzling problem, since of some specimens obtained at Clondeboye in January, 1904, by Mr. Grant himself, all except one are indistinguishable from *P. a. britannicus*. This one, however, is distinctly tinged with yellow on the cheeks, and has the upper parts as strongly washed with olive-buff as any of the typical specimens of *P. hibernicus*. A specimen obtained on January 19th, 1911, at Hillsborough, co. Down, and kindly sent to me by Mr. N. H. Foster, has a slight tinge of pale yellow on the lower part of the belly, but is otherwise like *P. a. britannicus*. A closer study of the Irish Coal-Tit will, I think, show that it is a somewhat variable geographical form, and that while some examples are strikingly distinct, others are barely distinguishable, or perhaps indistinguishable, from *P. a. britannicus*.

H. F. WITHERBY.

^{*} It is most regrettable that before the publication of the *Bulletin* a note appeared, on the authority of Sir William Ingram, in the *Daily Mail* (December 28, 1910. No. 4593, p. 3), which, although inaccurate in many particulars, contains a sufficient description and the Latin name "*Parus hibernicus*" to allow it to stand as the first description of the bird according to the present rules of zoological nomenclature.

BRITISH WILLOW-TIT IN WEST SCOTLAND.

IN RENFREWSHIRE.

ON December 19th, 1910, I obtained a Tit at Giffnock, Renfrewshire, which, on being submitted to Mr. H. F. Witherby, was identified as a Willow-Tit (*Parus atricapillus kleinschmidti*).

The "Marsh" Tits have rather a curious distribution in the west of Scotland, and until this has been worked out it is impossible to say whether both *P. palustris dresseri* and *P. a. kleinschmidti* are represented or only the latter.

ROBERT W. S. WILSON.

IN KIRKCUDBRIGHTSHIRE.

MY experience of the Willow-Tit in the stewartry of Kirkcudbright is very limited. I only know of it in one valley, where it is fairly plentiful.

I have at different times obtained two specimens for the Royal Scottish Museum, one of which was sent to Dr. Hartert for examination, and both were identified as *Parus atricapillus kleinschmidti*.

I have never met with the Marsh-Tit in Scotland.

M. BEDFORD.

[In view of the fact that all the "Marsh" Tits examined from the Forth and Moray areas have been proved to be Willow-Tits (*cf. supra*, p. 159), and that, so far as I know, no Scottish-taken example of any form of *Parus palustris* is in existence, the above interesting notes are most significant. It would seem that we are on the way to prove that the Marsh-Tit is entirely replaced in Scotland by the Willow-Tit, and it will be extremely interesting to follow this up by discovering at which point the breeding distribution of *Parus palustris dresseri* begins.—H.F.W.]

BRITISH WILLOW-TIT IN LINCOLNSHIRE.

AMONGST some birds kindly sent to me for examination by Mr. G. H. Caton Haigh were seven "Marsh-Tits," procured near Grainsby, Lincolnshire. These birds all proved to be British Willow-Tits (*Parus atricapillus kleinschmidti*), and Mr. Caton Haigh has never procured a Marsh-Tit (*P. palustris dresseri*) in his district. He tells me that the Willow-Tit, as it now proves to be, is a rare bird in Lincolnshire, and he seldom sees it. Those examples which he has seen have always been single birds in company with other Tits, except on one occasion, when he saw three of these birds together.

The dates of the specimens are as follow:—October 5th, 1896; December 3rd, 1894; December 28th, 1899; January 10th, 1897; January 22nd, 1895; January 25th, 1895; February 5th, 1895.

Dr. Hartert has very kindly confirmed my identification of the specimens.

H. F. WITHERBY.

AMERICAN WATER-PIPIT AT ST. KILDA.

MR. W. EAGLE CLARKE announces (*Ann. S.N.H.*, 1911, p. 52) that during his visit to St. Kilda in the autumn of 1910 (September 1st to October 8th) he “met with quite unlooked-for success.” Fifty-four species on passage came under his notice, and of these thirty-five were new to the avifauna of the island. Among them was an example of the American Water-Pipit (*Anthus spinoletta rubescens*), which Mr. Clarke pronounces to be new to the British list. Howard Saunders (*Manual*, p. 142) rejected previously recorded occurrences, and Professor Newton argues (*Yarrell*, ed. IV., Vol. I, p. 590, footnote) that Macgillivray’s first description (*Man. Brit. Birds*, p. 169) of specimens obtained in 1824 near Edinburgh refers to *A. s. rupestris*, while his more elaborate description on pp. 170 and 171 refers to *A. s. rubescens* (= *ludovicianus*; *pennsylvanicus*) and that of the female to *A. s. rupestris*!

The bird appears to have been first named by Tunstall (*Orn. Brit.*, p. 2), who called it *Alauda rubescens* from the Red Lark of Pennant (*Brit. Zool. Birds*, II., p. 239), who took his description from Edwards (*Gleanings*, pl. 297), where a bird from Pennsylvania is figured. Edwards said he also found this bird near London.

In the *Check-List of North American Birds* (1910, p. 328), the bird is said to breed in the Arctic zone from north-eastern Siberia, northern Alaska, northern Mackenzie, on both sides of Davis Strait south to the Great Slave Lake, northern Quebec and Newfoundland, and from the Aleutian Islands to Prince William Sound, as well as on high mountains south to California and mid Mexico. It winters from the Southern States to Guatemala.

Two examples are recorded by Gätke from Heligoland, one on November 6th, 1857, and another on May 17th, 1858 (*Heligoland*, p. 344).

The American Water-Pipit is much like the typical form, but may be distinguished by its larger size, the more tawny colouring of the underparts, and by the penultimate pair of tail-feathers being white to the tip on the outer web. H.F.W.

LESSER REDPOLL NESTING IN ESSEX.

ON July 16th, 1910, I found a nest of the Lesser Redpoll (*Linota rufescens*) with three young, about seven feet from the ground in the top of a straggling gorse bush on the Golf Links, Woodford Green. Both birds were attending the young. On visiting the nest on the 20th I found it torn out. One or two pairs of Redpolls have been seen in the immediate neighbourhood for the last three seasons, but I have not been able to find a nest before. C. L. COLLENETTE.

THE NORTHERN GREAT SPOTTED WOODPECKER
AS A BRITISH BIRD.

ALTHOUGH there is much circumstantial evidence to show that the Northern Great Spotted Woodpecker (*Dendrocopus major major*) frequently occurs in Great Britain, and especially in Scotland, I do not think that any English specimens have been recorded as having been examined since Dr. Hartert described the British bird as distinct in 1900. It is advisable therefore to put on record that a specimen kindly lent to me by Mr. Caton Haigh, who picked it up dead on the sea-bank at North Cotes on October 12th, 1898, has been pronounced by Dr. Hartert to be *D. m. major*, as has a young male obtained by myself on the south Yorkshire coast on September 14th, 1909. Dr. Hartert also informs me that there is a specimen of the northern form in the Tring Museum, labelled Irchester (presumably in Northamptonshire), December 13th, 1889, from the Rev. H. H. Slater's collection. It is noteworthy that a great irruption was recorded in the autumn of 1889.

With regard to Scotland, in the *Annals of Scottish Natural History* (1908, pp. 217, 218) Mr. W. Evans showed that those Scottish breeding-birds which had been examined were of the British race and not of Scandinavian origin, as had been thought possible. In the course of his investigations, however, he examined a bird shot in west Berwickshire in March, 1906, which was undoubtedly *D. m. major*. In the same journal (1908, pp. 209-16, and map, cf. BRITISH BIRDS, II., p. 238) Mr. Harvie-Brown published a paper, in which he summarized the advance of the Great Spotted Woodpecker in Scotland, and wrote briefly of the autumn and winter immigrations of birds which are no doubt of the northern form. They seem to be annual immigrants in small numbers, and are recorded every seven or eight to twelve or fifteen years in great numbers, recalling the "irruptions" of Crossbills. Mr. Harvie-Brown states that normally the migrants are mostly recorded from localities south of the Grampians, but in years of irruptions the whole of the east

side of Scotland from the most northerly islands is visited. Through the kindness of Mr. J. H. Gurney, who is in possession of the specimen, I have been able to submit to Dr. Hartert for examination that curious albescent example of a Great Spotted Woodpecker which is referred to at some length by the late Professor Newton in *Yarrell* (ed. IV., Vol. II., p. 484), and was at one time erroneously thought to be a specimen of *D. leuconotus*. This bird was obtained in Unst (Shetland) by Saxby in September, 1861, which is the year of the first irruption mentioned by Mr. Harvie-Brown in the paper above quoted, and it is very satisfactory to know from Dr. Hartert that it is an undoubted example of *D. m. major*.

The immigrations of this bird undoubtedly extend to the east coast of England, and it is recorded (*Yarrell*, II., p. 473) that the 1861 visitation referred to above was traced from the Shetlands to the Isle of Wight. Selby wrote in 1833 that in Northumberland scarcely a year passed without some of these birds being obtained in October and November. Mr. Abel Chapman refers to these "migrants from Northern Europe" at irregular intervals in Northumberland and Durham (*Bird-Life of the Borders*, 2nd ed., pp. 132, 133), and Mr. T. H. Nelson writes (*Birds of Yorks*, Vol. I., p. 275) that, "on the seaboard during the autumn migration this Woodpecker is of almost annual occurrence, and is observed from September to November," and adds that in some years they are numerous. Mr. Nelson also states (I think on the authority of the late J. Cordeaux, *Naturalist*, 1890, p. 7) that the irruption in October, 1889, was coincident with a great migration of this bird observed by H. Gätke in Heligoland. In Norfolk it has long been known as an immigrant, and it probably reaches the shores of Kent (*cf. Hist. Birds of Kent*, p. 234). *Dendrocopus major major* may therefore be considered, like the Crossbill, as a regular immigrant in autumn to the east coast of Great Britain in small numbers, and at irregular intervals in large numbers. It is very advisable, however, that more specimens should be critically examined, and I shall be very glad to compare any specimens sent to me for the purpose. It seems very likely that the Irish examples are of the northern form.

H. F. WITHERBY.

LITTLE OWL IN WARWICKSHIRE.

ON November 29th, 1910, an adult male Little Owl (*Athene noctua*), the fourth Warwickshire specimen, was shot at Stratford-on-Avon; it was preserved by Messrs. Spicer and Sons, Suffolk Street, Birmingham, at whose shop I examined it when set up.

A. GEOFFREY LEIGH.

WHITE-TAILED EAGLE IN CARNARVONSHIRE.

A PARAGRAPH has been going the round of the newspapers to the effect that a "Golden Eagle," which had been raiding the sheep on the mountains of Lleyn during the latter half of November, had at length been shot in the wing and captured alive. The Eagle is in the possession of Mr. Godfrey Fitzhugh, Wrexham, who is endeavouring to heal the injury to the wing. He informs me that it is an immature *Haliaeetus albicilla*, as I had anticipated. It was taken near Abersoch on November 29th, 1910. This is the first authenticated occurrence of the species in Carnarvonshire (*cf. Vert. Fauna N. Wales*, p. 228).

H. E. FORREST.

PINTAILS IN STAFFORDSHIRE.

THE following are the recent records of Pintails (*Dafla acuta*) in Staffordshire, as far as I have been able to ascertain them:—An immature male at Barlaston in November, 1885; five on Gailey Pool, October 22nd, 1890, and three there December 3rd, 1895; four shot at Leigh in 1895; one at Bloxwich in February, 1898; a male shot at Hilderstone February 4th, 1901; and the further records in December

JOHN R. B. MASEFIELD.

GOOSANDERS AND CORMORANT IN BEDFORDSHIRE.

ON December 26th, 1910, I noticed for the first time two female Goosanders (*M. merganser*) on the Woburn Park ponds, and the birds are still here (January 27th, 1911).

On December 31st I also saw a Cormorant (*Phalacrocorax carbo*) on another pond in the park. As I believe these birds have seldom been recorded from Bedfordshire, these occurrences may be worth noting.

HARRY LEWIS.

LITTLE STINTS IN ANGLESEY.

IT may be worth while adding another instance of the occurrence of Little Stints (*Tringa minuta*) in Anglesey to the few "meagre records" which are contained in the *Vertebrate Fauna of North Wales*. On the shore at Rhosneigr, on May 23rd, 1907, I watched from very close quarters with my glasses a party of fifteen of these pretty little waders, and when ultimately I approached them they permitted me to come to within a distance of five yards before taking wing.

R. W. JONES.

FORK-TAILED PETREL IN SHROPSHIRE.

ON the 24th December, 1910, I had brought to me for identification a bird which had killed itself against the telegraph-wires outside Shrewsbury Station. It was a Fork-tailed Petrel (*Oceanodroma leucorhoa*), and is the eighth example recorded in Shropshire within the last thirty years. Two days earlier a bird resembling a Swift in size and general appearance had been seen flying over the house-tops in the middle of the town, and this may possibly have been the Petrel.

H. E. FORREST.

SCOTTISH ORNITHOLOGY FOR 1909.—The usual "Report" which appears annually in the *Annals of Scottish Natural History* is this year undertaken jointly by Miss E. V. Baxter and Miss L. J. Rintoul, Mr. J. Paterson, who had previously provided these Reports for some years, having retired from this activity. The new authors, who are well known for their most useful work on the Isle of May, have done their task well, giving a most useful introduction (*Ann. S.N.H.*, 1910, pp. 132–148) and a carefully compiled list of records under specific headings (pp. 193–211). One serious omission must, however, be noted—there is no indication in the majority of the records as to whether the information is new or has been previously published. In some cases references are given, but in a large number of records which have already been published no indication of the fact is given, and this will indubitably lead to confusion and duplication. The following records do not appear to have been noticed previously in these pages, and it will be seen that the majority hail from Fair Isle, and many are given with insufficient data, to which practice we must again express strong objection. All the dates are for the year 1909.

MISTLE-THRUSH (*T. viscivorus*).—One at Fair Isle April 21st.

BLACK REDSTART (*R. titys*).—A female at Fair Isle October 14th.

RED-SPOTTED BLUETHROAT (*C. suecica*).—At Fair Isle "spring and autumn."

LESSER WHITETHROAT (*S. curruca*).—Single birds at Fair Isle April 23rd and May 4th, and small numbers from August 25th to October 2nd.

BARRED WARBLER (*S. nisoria*).—A female at Fair Isle in "autumn."

YELLOW-BROWED WARBLER (*P. superciliosus*).—Four at Fair Isle between September 28th and October 4th.

SIBERIAN CHIFFCHAFF (*P. tristis*).—One at Fair Isle in "autumn."

WOOD-WREN (*P. sibilatrix*).—One at Fair Isle May 5th.

REED-WARBLER (*A. streperus*).—One at Fair Isle in “autumn.”

GREY-HEADED WAGTAIL (*M. flava borealis*).—Fair Isle, “reported both in spring and autumn.”

YELLOW WAGTAIL (*M. raii*).—One at Fair Isle April 23rd.

RICHARD’S PIPIT (*A. richardi*).—One observed at Fair Isle in “autumn.”

GOLDEN ORIOLE (*O. galbula*).—One seen on Fair Isle on May 26th.

RED-BACKED SHRIKE (*L. collurio*).—A bird of the year found dead on the Flannans September 14th—the first record for the Outer Hebrides.

GREAT GREY SHRIKE (*L. excubitor*).—One at Fair Isle on October 18th.

HAWFINCH (*C. vulgaris*).—One at Fair Isle May 8th.

SISKIN (*C. spinus*).—A few at Loch Awe November 25th. Apparently only one previous record for Argyll. Two at Fair Isle April 23rd, and remarkable numbers between September 22nd and October 18th.

ORTOLAN BUNTING (*E. hortulana*).—At Fair Isle on “spring and autumn passages.”

RUSTIC BUNTING (*E. rustica*).—A male at Fair Isle in “autumn”—third record for Scotland.

LITTLE BUNTING (*E. pusilla*).—One at Fair Isle in “autumn.”

LAPLAND BUNTING (*C. lapponicus*).—Single birds at Fair Isle in “spring and autumn.”

WOOD-LARK (*A. arborea*).—Four at Fair Isle in January.

WRYNECK (*I. torquilla*).—Single birds at Fair Isle on May 8th and 12th.

GREENLAND FALCON (*F. candicans*). Single birds at the Flannans on December 1st, 2nd, and 14th, previously recorded as one only (*cf. supra*, p. 31); one on the Butt of Lewis December 4th.

TURTLE-DOVE (*T. communis*).—Single birds at Fair Isle on May 20th and 27th and July 7th; at Syre (Sutherland) on July 1st; at Dunrossness (Shetland) and the Flannans on September 10th.

GREY PHALAROPE (*P. fulicarius*).—At Fair Isle twice in January and once in October (*cf. supra*, p. 32). Birds probably of this species at Sule Skerry in January and September.

GREAT SNIPE (*G. major*).—One at Fair Isle in September.

BIRDS AT FAIR ISLE.—Among the birds recorded from Fair Isle in 1910 by Mr. W. E. Clarke (*Ann. S.N.H.*, 1911, p. 53), besides those mentioned elsewhere in our pages, are:—

Bewick's Swan (*C. bewicki*), King-Eider (*S. spectabilis*), Red-necked Phalarope (*P. hyperboreus*) and the Yellowshank (*Totanus flavipes*)—all being new to the avifauna of Fair Isle, and the last-named to that of Scotland.

CONTINENTAL SONG-THRUSHES, GOLDCRESTS, AND GREAT TITS AT THE ISLE OF MAY.—In connection with the notes which appeared in our last number (pp. 245-8) on these birds, it is very interesting to compare the following records from the Isle of May by those excellent observers, Miss E. V. Baxter and Miss L. J. Rintoul (*Ann. S.N.H.*, 1911):—*Turdus m. musicus*—the birds procured from the "rushes" of Song-Thrushes in September and October, 1910, all proved to be of the British race, but several of those obtained in the autumn of 1909 were of the continental form (p. 2). *Regulus c. cristatus*—eight specimens procured on various dates between September 10th and October 17th, 1910, were all of the continental form, except one taken on September 15th, which was of the British race. Goldcrests came in great numbers (p. 3). *Parus m. major*—one was obtained on October 15th, 1910 (p. 3). Robins and Hedge-Sparrows were very plentiful, but were all apparently of the British race, except one Hedge-Sparrow taken on October 6th, which was a doubtful *A. m. modularis*.

MARSH-WARBLER AT ST. KILDA.—Mr. W. E. Clarke mentions (*Ann. S.N.H.*, 1911, p. 52), as one of the results of his visit to St. Kilda from September 1st to October 8th, 1910 (see above, p. 285), the capture of an example of *Acrocephalus palustris*, which is new to the avifauna of Scotland.

HAWFINCH NESTING IN SCOTLAND.—As has been several times noted in these pages, *Coccothraustes vulgaris* is becoming a frequent nester in south-east Scotland. Mr. W. McConachie now records (*Ann. S.N.H.*, 1911, p. 53) the nesting in 1910 of a pair at Lauder (Berwickshire), where the destruction of peas caused by these birds had been noticed for three years.

HOLBÖLL'S REDPOLL IN SCOTLAND AND ENGLAND.—With reference to the records (*supra*, p. 254) on the influx of Mealy Redpolls in October and November, 1910, it is interesting to note that vast numbers were observed in Scotland, and that among them several specimens of the rather doubtful race *L. linaria holboelli* were detected. One is recorded from the Isle of May, on October 23rd, 1910, by Miss E. V. Baxter and Miss L. J. Rintoul (*Ann. S.N.H.*, 1911, p. 4). The bird is recorded also by Mr. W. E. Clarke from Fair Isle with no data (*t.c.*, p. 53), and in "some numbers" (*t.c.*, p. 54),

from the mainland, presumably, but unfortunately no data are given.

Mr. W. Evans kindly informs me (*in litt.*) that he obtained a specimen of this form near Dunbar (Haddington) on October 29th, 1910, and submitted it to Dr. Hartert, who confirmed the identification. Holböll's Redpoll has very seldom been recorded from the British Islands (*cf.* Vol. I., p. 182), and never before so far as I know from Scotland, though it has doubtless occurred and has escaped detection.

Mr. F. W. Frohawk has very kindly shown me a male specimen of this form which was caught at Cambridge on December 12th, 1910, and identified by him.

I have referred above to this form being a doubtful one. It differs from the typical bird only by its larger bill and longer wing, but it is well known that the measurements vary, and some birds with large bills have short wings and vice versa. Moreover in Russian Lapland in 1899 I found both forms with nests on the same breeding-grounds, and shot both forms out of the same little family-parties. At the same time until the question is finally decided, specimens with the characters of *L. l. holboelli* should be carefully recorded.—H.F.W.

COUES'S REDPOLL AT FAIR ISLE.—Coues's Redpoll (*L. hornemanni exilipes*) is also recorded by Mr. W. E. Clarke (*t.c.*, p. 53) from Fair Isle, but no data are given. This Redpoll has previously only been known from Yorkshire (*cf.* Vol. I., p. 183).

NORTHERN BULLFINCHES IN SCOTLAND.—With reference to the notes (*supra*, pp. 211 and 250) on the occurrence of *P. p. pyrrhula* in Shetland and Yorkshire, several are recorded from the Isle of May (October 22nd, 1910, two; October 26th, two; November 2nd, one) by Miss E. V. Baxter and Miss L. J. Rintoul (*Ann. S.N.H.*, 1911, p. 4), and others were reported from Unst (Shetland) and Fair Isle to Mr. W. Eagle Clarke, who remarks that they seem to have been first noticed on October 24th, and that in some localities as many as ten were seen on single days (*t.c.*, p. 54). We could have wished for more details of these interesting occurrences.

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GREAT SPOTTED WOODPECKERS BREEDING IN SCOTLAND.—With reference to the note on this subject on page 256 and Mr. Millais's observations in Perthshire, Mr. J. B. Dobbie writes me that the bird has to his certain knowledge nested in the neighbourhood of Dunkeld since 1907 and probably before. Mr. Dobbie also informs me that Mr. George Black-

wood is convinced that not less than twenty pairs nest annually in that district. This observation should be compared with other Perthshire nesting-records in 1907 (Vol. I., p. 281); while Mr. Harvie-Brown has already shown that the bird had reached Dunkeld in 1908 (*Ann. S.N.H.*, 1908, p. 212).—H.F.W.

SUPPOSED LESSER KESTREL IN LINCOLNSHIRE.—In the *Naturalist* (1910, p. 345) Mr. C. S. Carter recorded that an immature female *Falco cenchris* had been shot at Grainthorpe on October 9th, 1909. Mr. G. H. Caton Haigh has, however, examined the specimen and finds it to be a common Kestrel in rather worn and faded plumage.

GLOSSY IBIS IN THE OUTER HEBRIDES.—A Glossy Ibis (*Plegadis falcinellus*) is recorded by Mr. H. Newton (*Field*, 10. xii. 1910, p. 1094) as having been shot in South Uist "last month" (*i.e.*, November, 1910).

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THE LATE CHARLES KINGSLEY SIDDALL.—It is with much regret that we record the death, which took place on November 16th, 1910, of Charles Kingsley Siddall, at the age of thirty-two years. Mr. Siddall was a contributor of useful notes to our pages, and we have received an interesting little memorial tribute from his parents in the shape of an illustrated booklet containing some of his observations, and entitled *Bird-Life in a Suburban Garden*.



REVIEWS

Report on the Immigrations of Summer Residents in the Spring of 1909; also Notes on the Migratory Movements and Records received from Lighthouses and Light-vessels during the Autumn of 1908. By the Committee appointed by the British Ornithologists' Club. (Forming Vol. XXVI., Bull. B.O.C. Edited by W. R. Ogilvie-Grant.) 25 Maps. Witherby & Co. 6s.

THIS, the Fifth Report of the B.O.C. Migration Committee, will be welcomed by all students of migration. It is in the same form as the previous volume, but is considerably more bulky, chiefly by reason of a great increase in the records for the autumn of 1908, and in the separate chronological accounts of the movements at the Lights in the spring of 1909 and in the autumn of 1908. There seems to us little benefit to be derived from these separate accounts of the movements at the Lights, since all the information is contained in other parts of the reports, and pages 191-221 and 279-331 might, perhaps, have been omitted. We are glad to see in this report that the Committee have widened the scope of the inquiry to include records published in current literature. It is unfortunate that the Scottish spring-records are not available for the purposes of these B.O.C. Reports. In the spring of 1909, for example, single Redstarts (*R. phoenicurus*) were seen at extraordinarily early dates in Scotland, at Fair Isle on March 22nd, and at Lerwick (Shetland) on March 28th, while the first mainland Scottish record came from Carmichael on April 19th (*Ann. S.N.H.*, 1909, p. 195); but in the *Migration Report* now under review the bird is first recorded on April 4th (Hants), and in the extreme north of England not until April 21st, two days after the Scottish mainland record. On the other hand, the Garden-Warbler (*S. hortensis*) is first recorded from Scotland on May 10th (*Ann. S.N.H.*, 1910, p. 196), although it had reached Westmorland on April 27th. The Tree-Pipit (*A. trivialis*) was noted on Fair Isle on April 6th, a few days after its first appearance in the south of England. The House-Martin (*C. urbica*) was seen in Scotland before it was noted in the north of England, and it is evident that a careful comparison of the two sets of records would well repay the labour involved, could some arrangement be made by the Migration Committee to have access to the Scottish reports in time.

Turning now to interesting items which may be particularized, we have the first Blackcap (*S. atricapilla*) recorded from Lancashire on March 12th, the second from Northumberland on March 15th, and the third from Hampshire on March 17th, and the next not until April 2nd. It seems clear that these three early individuals had wintered not far away. A Chiffchaff, another bird which occasionally winters here (*cf.* Vol. II., p. 247; Vol. IV., p. 30), was observed in Cornwall on February 3rd, and these winter Chiffchaffs, as suggested above on page 30, may possibly be *P. tristis*. A Common Sandpiper (*T. hypoleucos*) in Lancashire on March 21st may also refer to a bird which had wintered in our islands. Fieldfares (*T. pilaris*) are recorded up to May 19th in Cumberland and Cheshire, and to May 23rd (in flocks) in Northamptonshire. Reed-Warblers (*A. streperus*) were seen in Buckinghamshire on April 5th—an early date. A Wryneck (*I. torquilla*) is recorded from Durham on May 13th and one from Cornwall on May 9th. Cuckoos (*C. canorus*) are recorded in March from Sussex on the 27th, in Cornwall on the 29th, in Surrey and Yorkshire on the 31st. The Land-Rail (*C. pratensis*) was again very scarce in the south-eastern counties. A Bluethroat (*C. succica*) is recorded from the Shipwash Light-vessel (Suffolk) on the night of March 22nd. Black Redstarts (*R. titys*) were seen in Kent on April 15th, and in Yorkshire on the 24th. A Great Grey Shrike (*L. excubitor*) was seen at Monachty (Cardigan) on May 8th, and a Golden Oriole (*O. galbula*) at Penrhyndeudraeth (Merioneth) on May 8th. A good many Honey-Buzzards (*P. apivorus*) are recorded for September and October, 1908. Two Garganeys (*Q. ciria*) were seen near the Land's End on May 5th. Two Scoters (*E. nigra*) were seen at Northwood (Middlesex) on April 24th. A Grey Phalarope (*P. fulicarius*) was killed and "many" were seen at the Smalls Light (Pembrokeshire) on the night of October 23rd, 1908.

H.F.W.



LETTERS



To the Editors of BRITISH BIRDS.

THE "IRISH JAY."

SIRS,—The first reference to the coloration of Irish specimens of the common English Jay is in a MS. note of the late Mr. A. G. More in his own interleaved copy in my possession of his *List of Irish Birds contained in the Science and Art Museum, Dublin, 1885*. It runs thus:—"The Irish Jay is of a warmer and richer colour than the English bird. E.W." "E.W." stands for Edward Williams, whose practical knowledge of Irish birds was extensive and reliable. The inference of doubt due to the word "thinks" in the quotation in BRITISH BIRDS, Vol. IV., p. 234, is absent.

In the second edition of the same list, 1890, which contains the first published mention of the distinction, it is referred to thus:—"Mr. Edward Williams has noticed that the Irish Jay is of a warmer and richer colour than the English bird."

Thus it will be seen that Williams drew our attention nearly thirty years ago to a distinction which we were since all familiar with, and which is now made responsible for yet another trinomial in the British bird list. The perplexity and confusion which have resulted from the never-ending multiplication of varieties were, I suppose, inevitable, but it will end in a common English name being the best method of identification.

RICHD. M. BARRINGTON.

Fassaroe, Bray,

To the Editors of BRITISH BIRDS.

WARBLER WITH DOUBLE-BARRED WING IN SUSSEX.

SIRS,—On December 31st, 1910, in the company of Midshipman Charles V. Jack, H.M.S. "Agamemnon"—a very competent and careful field-naturalist—I was walking along the road between Seaford and Litlington, Sussex, when my attention was drawn to a small, warbler-like bird which was feeding in some low brambles quite close to the roadside. It invariably tried to take its prey on the wing, but the day was cold and raw, with a southerly wind, so that an occasional gnat was its only chance.

We watched it for nearly fifteen minutes. The whole of the plumage was olive or greenish, including the breast, which, however, paled off towards the belly. There was a very distinct white band over the eye, and two bands on the wing, and the bird was in size midway between a Goldcrest and a Willow-Wren, but was short and squat.

I took it to be a Yellow-browed Warbler, except that the breast was so dark. Perhaps a correspondent can help me? I tried to secure it next day, but it was nowhere to be found.

I may say in conclusion that the Black Redstart is quite abundant here this winter.

NORMAN GILROY.

Seaford, Sussex.

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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ON THE DEVELOPMENT OF A YOUNG KESTREL.

BY

A. GEOFFREY LEIGH.

As up to the present little seems to be recorded regarding the development and habits of nestlings and young birds, perhaps a few notes on two young Kestrels (*Falco tinnunculus*), which I reared last year, may be of interest to readers of BRITISH BIRDS.

On May 23rd one of the keepers in the district where I live showed me a nest of this species containing five eggs, incubation having already commenced; these I examined occasionally during the next month, but it was not until June 20th that I found any young, the nest on that date containing two chicks and two addled eggs, the fifth having disappeared. One of the nestlings had its eyes well opened, and was covered with thick white down, with the exception of a small naked patch on the breast; from subsequent observations I concluded that it was seven days old. The other chick had evidently only been out of the shell a few hours, the down being much sparser and the eyes closed; from the fact of this bird being only just hatched, it is evident that in this case incubation lasted about twenty-eight days.

Both adults being unfortunately killed, I took the two chicks, and placed them in a box filled with sticks, with a slight covering of dead grass, and for some time I fed them on liver and bird-meat; I had to have the elder killed, owing to its breaking a leg, but the other, of which I knew the exact age, I reared successfully, making careful notes on the development of its plumage, which was as follows:

Between the ages of seven and ten days the colour of the down completely changed from white to warm light brown. As the birds were in the nest during this time I could not make very minute examinations, but I am convinced that this was a change in colour only and not a fresh growth of down. During the same period the

blood-quills appeared on the tail and wings, the former bursting on the twelfth day, the latter on the thirteenth. Up to this age the area beneath the eye, and extending from the beak to behind the orbit, had been devoid of down, but on the sixteenth day pin-feathers appeared



FIG. 1. KESTREL. TWENTY-SEVEN DAYS OLD.

here, bursting the following day; the scapulars also appeared on the sixteenth day, the feathers of the rump following a day later. At the age of eighteen days the feathers of the flanks, thighs, breast and crown of the head appeared, the tail and wing-coverts and mantle-feathers being apparent on the nineteenth day. I noticed that at this age the down and feather-scale pulled

off during preening was frequently swallowed ; perhaps this was to accustom the digestive organs to the throwing-up of pellets at a later date. By the time the bird had reached the age of twenty-six days feathers had appeared on all the tracts of the body, although still plentifully mixed with down (see Fig. 1). This down disappeared rapidly during the next week, and at the age of thirty-three days remained only on the crown of the



FIG. 2. KESTREL. THIRTY-THREE DAYS OLD.

head, scapulars, rump, and at the bases of the flight-feathers (see Fig. 2), although with the older bird (which I had to have killed) it continued on the forehead and not the crown. The down on the head was very obstinate, and was not altogether gone until the forty-ninth day, although that on the body was gone at the age of forty-one days.

Between the ages of thirty-three and forty-seven days the bird grew very rapidly in size, the flight-feathers

and tail lengthening considerably, especially the former ; this can be well seen by noticing the comparative lengths of the wings and tail shown in Fig. 2 (thirty-three days old) and Fig. 3 (forty-seven days old). In the latter two or three small tufts of down are still adhering to the feathers of the crown.

With regard to the gradual acquisition of the full powers of the adult Kestrel I made the following notes.



FIG. 3. KESTREL. FORTY-SEVEN DAYS OLD.

The meat upon which the chicks were at first fed was held in the beak while the tongue was thrust out beneath it, and then quickly withdrawn, so that the tongue-spurs, catching in front of the meat, dragged it into the mouth. It may be noted that the coloration of the tongue was very interesting, being salmon-pink with black spurs, and a transverse black bar between them and the tip.

As soon as the chick could stand up, at the age of sixteen days, the muscles of the legs must have developed

very rapidly, for on the following day it was able to stand on a plucked bird, previously cut open, and tear it to pieces. After this I had very little trouble with it, for six days later it ate an entire bird with only the larger feathers removed. By this time it threw up castings, composed of the bones and feathers of the birds I gave it, and also of the wing-cases of beetles which it must have captured itself.

Its method of eating a bird was always precisely the same, the head being attacked and eaten first, after which the body was plucked leisurely, the youngster regaling itself from time to time with small pieces of meat from the breast and neck. The whole of the body being plucked almost clean, the wings were torn off and swallowed, followed by the legs, claws and all, then the breast, and, finally, the abdomen. Several times I noticed it deliberately swallow a flight- or tail-feather, as though under the impression that it was necessary for its well-being to do so—perhaps to bind together the castings. The beaks of strong-billed birds were carefully separated from the skull and rejected, as were also the sternum and cranium of any large bird, though these only after they had been “nibbled” clean of meat.

With regard to the acquirement of the power of flight, the wings were exercised freely from the sixteenth day onwards, the bird eventually succeeding in raising itself by them for a few seconds and, at the age of thirty-two days, flying to the top of its deserted pen, a height of about three and a half feet. The following day it made several flights, one of at least fifty yards, and from that time it flew round the garden constantly, in possession of its full liberty.

The way in which the art of hovering was acquired was interesting, the bird spreading its wings, either while perching or on the ground, and as soon as a gust of wind came rising two or three inches and beating the wings vigorously, supported by the wind. In this way it eventually learnt to hover at will, and was seen to drop

on prey from a height of about thirty feet at the age of forty-three days.

I have elsewhere referred to the fact that the Kestrel captured beetles, and these with worms formed its food when first I stopped feeding it regularly. When captured the beetle was held in one foot and the head nipped off, the wing-cases being then removed and sometimes eaten, and the body following last. Worms were simply held while being pulled into pieces small enough to swallow conveniently. When not hungry the bird frequently played with its prey like a kitten, tapping it with its clenched foot, running round it as it crawled away, and jerking the head back, exactly as does the domestic cat. When beetles or worms were not forthcoming, a stone or piece of wood served its purpose equally well.

The Kestrel always showed great interest in birds of all species, and especially Swallows and Martins; it made several unsuccessful attempts to capture these, but apparently concluding that they were too quick, it turned its attention to birds of less powerful flight, and at the age of forty-nine days succeeded in killing two—a Robin and a Warbler. From this age it fed itself entirely, and eventually disappeared on August 12th, being then fifty-four days old.

THE WOOD-PIGEON DIPHTHERIA: 1909-10.—III.

BY

C. B. TICEHURST, M.A., M.R.C.S., L.R.C.P., M.B.O.U.

DURING the winter of 1909-10 the readers of *BRITISH BIRDS* were asked to make notes of the occurrence of Wood-Pigeon Diphtheria, and send in their results on the schedules provided. Of fifty communications sent in thirty gave positive evidence of the disease, while the remainder were negative. I must here thank those who have so kindly assisted by sending in schedules.

During 1908-9 there was evidence only from eight localities of this disease whereas in 1907-8 there was a marked epidemic.* During 1909-10 the numbers of Wood-Pigeons affected did not come up to those of 1907-8, though there were considerably more than in 1908-9.

GEOGRAPHICAL DISTRIBUTION.—As in 1907-8 most of the records of any numbers of Wood-Pigeons suffering from disease came from the south-eastern counties, though the distribution was not so markedly confined to the neighbourhood of the Thames Valley as it was then. The chief centre seemed again to be in the following counties: Buckinghamshire, Berkshire, Oxfordshire, Hampshire and Wiltshire, and numbers of diseased birds were noted at two places in Kent and Sussex, and some in Surrey, Bedfordshire and Hertfordshire. Further west there were records of a fair number in Dorset and Devonshire, and many at one place in Gloucestershire. Further north sporadic cases were reported from Northamptonshire, Warwickshire, and from several places in Norfolk, a few in Cheshire, while fair numbers were reported from one place in southern Westmoreland. From Scotland and Ireland only (very few) negative reports were received.

GENERAL REMARKS.—Out of fifty reports received, only eight indicated that Wood-Pigeons were more

* For the results of the first enquiry see Vol. II., pp. 69-77; and for the second Vol. III., pp. 213-214.

numerous than in past years ; in three of these places, in northern Lincolnshire, south-west Surrey and eastern Morayshire—there was no evidence of disease ; in the remaining five localities—in Dorset, Gloucestershire, Norfolk, Berkshire and Hertfordshire—fair numbers of diseased birds were noted, except in Norfolk.

The counties from which reports were received indicating a high percentage of disease were Hertfordshire, Berkshire, Buckinghamshire, Hampshire, Devonshire, Dorset, Gloucestershire, Sussex, Kent, and Westmoreland, but the numbers in these counties did not seem to approach those noted in 1907-8. Most observers agreed that the numbers of *immigrant* Wood-Pigeons were much fewer than usual, and in some places none came at all ; and it seems clear from the evidence of two observers, that in at least two localities the disease broke out in native birds, though in a few other cases it was remarked that there was no disease until migrants from elsewhere appeared. Though some occurrences were recorded in November and December, the majority of cases seemed to have occurred in January and February. Both old and young birds were noted to be affected, and one observer found a nestling in November with the disease.

The supply of acorns and beech-mast seems in most places to have been an average one, but in parts of Devonshire and Norfolk acorns were apparently more plentiful than usual, and the same applies to the beech-mast in parts of Hampshire, Gloucestershire and Devonshire.

There was no evidence in the reports received of transmission of the disease, and no record of any other species being found dead of this disease ; and two observers stated that where the disease was noted, although numbers of game and other birds abounded, no birds except Wood-Pigeons were found affected.

NOTES

“ BRITISH BIRDS ” MARKING SCHEME.

IN addition to those already acknowledged, I have received subscriptions towards the expenses of the “ Marking Scheme ” from the Hon. N. Charles Rothschild, Mr. W. Mayall (third subscription), Mr. Howard Bentham, Mr. M. Portal, Mr. W. Davies, Mr. C. F. Archibald and Miss M. Garnett.

I am very glad to be able to report that the response to my appeal for funds towards the expenses of the Marking Scheme has been sufficiently encouraging to enable me to decide to issue whatever rings may be required for the coming season. I should mention, however, that the amount received does not yet cover the costs incurred last year, so that more subscriptions will be most welcome.

By the advice of several experienced “ ringers,” I am making certain alterations in last year’s arrangements.

1st. A list of birds with the size of ring suitable for each will be issued.

2nd. The sizes will be designated by numbers, and new sizes will be introduced as follows :—

No. 1 size = former “ small ” size.

No. 2 size = former “ medium ” size.

No. 3 size is a new size for Black-headed Gulls, etc.

No. 4 size = former “ large ” size.

No. 5 size is a new size for Gannets, Cormorants, etc.

3rd. The “ instructions ” on the back of the schedules have been revised, and should be carefully read.

All those who are willing to assist in the ringing this year should apply for a list of the birds, so that they can determine how many rings of each size they will require. Those who have rings and schedules left over from last year should use these before applying for new ones. H.F.W.

REMOVAL OF *FÆCES* BY BIRDS.

IN reference to the notes that have appeared on this subject, it may interest readers of *BRITISH BIRDS* to know that my experience is that it is only the female birds that swallow the *fæces*. The female Song-Thrush nearly always swallows them, and I am inclined to think that these form her chief food-supply during the time of feeding the young. My bioscope pictures clearly show how she will wait at the nest

after feeding and ravenously snatch up the *faeces*, while the male bird carries them away. This also applies to the Black-bird. The female Chaffinch will swallow them; the male picks them up and drops them some distance away from the nest. Also the Linnet. All the Warblers that I have watched seem to carry them away.

OLIVER G. PIKE.

[There is evidently considerable individual variation in this habit. In 1897 when I first observed the habit in the Mistle-Thrush I noted that *both* parent-birds undoubtedly swallowed the *faeces* of the young in the nest I watched, and I suggested that the habit might save the time of the parent-birds in procuring food for themselves, since there was likely to be nourishment in the *faeces* (cf. *Knowledge*, 1898, p. 66). Writing of a pair of Blackbirds, which he watched incessantly for a whole day, T. D. Weir states (MacGillivray, *British Birds*, II., p. 96), "except in one or two instances, the Blackbirds *swallowed all the droppings of their brood.*" He makes the same observation concerning the Mistle-Thrush (p. 124) and the Song-Thrush (p. 138), and it is clear that in all three cases *both* parent-birds are referred to.—H.F.W.]

EXTRAORDINARY NEST-BUILDING.

ON April 22nd, 1906, I was walking along a hedge near Croydon when I came across a couple of Hedge-Sparrows (*Accentor modularis*) in a very excited state and vociferating loudly. I watched for a time to see what was the cause of it, thinking that some enemy was near. I found, however, that each bird was building a separate nest in the hedge, and so close together that the nests were touching. The birds were not quarrelling, and from their actions I should judge them to be a pair. The photograph here reproduced shows the nests, which, however, were never finished, nor were eggs laid in them.

Another case of extraordinary nest-building came under my notice at a farm in Hampshire in the spring of 1905. In this case a pair of Chaffinches (*Fringilla coelebs*) made no less than nineteen attempts at nest-building, two of which resulted in finished nests. In one of these a brood of young was hatched, and afterwards deserted owing to the nest being inspected by one of the men on the farm.

The nests were built in an open cowshed, along the front of which ran a beam supporting the rafters which held the roof. The nests were placed on this beam in between the rafters. Those at either end of the beam were mere foundations about an inch high, but as the middle of the beam was

reached the nests on either side became larger and more finished, the two central ones being quite finished. These were not secured to the beam in any way, and could be taken out and replaced without injury. C. W. COLTHRUP.



TWO NESTS BUILT SIDE BY SIDE BY ONE PAIR OF
HEDGE-SPARROWS.

(Photographed by C. W. Colthrup.)

ARRIVAL OF THE REDSTART IN 1909.

WITH regard to the remarks on the date of the arrival of the Redstart (*Ruticilla phœnicurus*) in the spring of 1909, in the review of the last *B.O.C. Migration Report* (*supra* p. 294), it may be worth noting that I saw one at East Dulwich on March 28th in that year.

C. W. COLTHRUP

BLACK REDSTART IN CARNARVONSHIRE.

ON December 27th, 1910, I was sauntering on the Great Orme's Head, North Wales, and at a spot locally known as Pentrwyn I glanced from the walled road, which encircles the headland, downward at the sea, and simultaneously a

female Black Redstart (*Ruticilla titys*) flew from a heap of stones near the base of the seaward side of the wall, but alighted a few yards further along the cliff. Though the bird was not a moment at rest, I had three or four excellent views of it through my binoculars before it disappeared.

A Black Redstart was seen on Traeth Mawr in 1888 (*cf. Vert. Fauna N. Wales*, p. 82), but, as I am unable to tell whether it was on the Carnarvonshire or the Merionethshire side of the estuary, I cannot readily say whether the present record is the first or second for the county. Perhaps Mr. Haigh will place the matter beyond dispute?

R. W. JONES.

[Mr. Caton Haigh informs us that this bird was got on the Merionethshire side.—EDS.]

BLACK REDSTART IN WIGTOWNSHIRE.

I HAVE to record an occurrence of the Black Redstart (*Ruticilla titys*)—the first, I believe, for Wigtownshire. On January 15th, 1911, while walking over a piece of rocky waste-ground near the sea, about a mile to the south of the little village of Port Patrick, I flushed the bird, and before it disappeared over a hillock I caught a glimpse of the reddish colouring of its tail. I followed and when it rose again, distinctly saw the reddish tail. As the bird was rather shy I approached again cautiously, and watched within a few yards for several moments before it flew off. It was very nearly as large as a Rock-Pipit, the back, wings and head being of a brownish grey. When it flew off again, I saw quite plainly the reddish-chestnut outer tail-feathers, the rump being of the same colour. I saw the bird once more at close-quarters before it flew down to the rocky slopes at the base of the cliff, but, although I climbed down after it, I did not find it again.

JOHN N. KENNEDY.

SONG-PERIOD OF DARTFORD WARBLER.

WITH reference to the Messrs. Alexander's interesting article on the song-period of birds (pp. 274-8), the following notes regarding the Dartford Warbler (*Sylvia undata*), which are based on four years' observation in Surrey, will perhaps be of interest.

The bird sings occasionally during the latter half of March, under favourable weather-conditions; regularly from early April to the middle of July, especially towards evening; less frequently during the last two weeks of July, and casually in the first few days of August.

I have heard the song on a few occasions during September, but further observations are necessary before I can publish a decisive statement as to the period of autumnal singing.

HOWARD BENTHAM.

CHIFFCHAFF IN KENT IN WINTER.

ON December 19th, 1910, near Tunbridge Wells, I saw a Chiffchaff (*Phylloscopus rufus*) which seemed to be quite vigorous and in good plumage. It was uttering the usual call-notes (not the song) frequently, and I noticed that it was distinctly yellowish on the breast; these two facts seem sufficient proof that it was not *Phylloscopus tristis*. I also saw the dark legs, and so knew that the bird was not a Willow-Wren. A few days later I saw what I suppose to have been the same bird quite half-a-mile from the original spot, but on January 1st it was at exactly the same spot as on December 19th. Since then it seems to have disappeared.

H. G. ALEXANDER.

BROWN-BACKED WARBLERS, NOT GREY-BACKED WARBLERS, IN SUSSEX AND KENT.

AT the meeting of the British Ornithologists' Club held on November 16th, 1910, Mr. A. F. Griffith exhibited a specimen of a Warbler which he identified as the Grey-backed Warbler (*Aedon familiaris*, Ménétr.) The bird was an adult male, and had been shot at Ninfield, Sussex, on May 13th, 1910. It was examined in the flesh by Mr. L. C. Edwards at the shop of Mr. Bristow, taxidermist, St. Leonards, and had subsequently been purchased by Mr. Griffith and presented by him to the Booth Museum at Brighton (cf. *Bull. B.O.C.*, XXVII., p. 29). Dr. Hartert has examined this specimen and finds that it is undoubtedly of the race called *A. galactodes syriacus* (Hempr. and Ehr.), which is distributed from Herzegovina and southern Dalmatia throughout Greece to Asia Minor and northern Syria. *A. g. familiaris*, which is decidedly greyer and less brown on the upper-parts than *A. g. syriacus*, has a more eastern range, being found in the south Caucasus, Persia, Mesopotamia, Transcaspia, Turkestan, Afghanistan and Baluchistan. The Rufous Warbler (*A. g. galactodes*) is very much more rufous on the upper-parts than either of the forms mentioned above, and is found in Portugal, southern Spain and north-west Africa. *A. g. syriacus*, the new bird to the British list, may perhaps be called the Brown-backed Warbler.

It will be remembered that Mr. J. B. Nichols recorded and figured in our first volume (p. 257) the first British specimen of a bird identified as the Grey-backed Warbler (*A. g.*

familiaris). This bird was shot at Hythe, Kent, on July 15th, 1907, and Mr. Nichols has very kindly allowed me to examine it and compare it with specimens of *A. g. syriacus*, kindly lent to me by Dr. Hartert. I find that this bird also is clearly of this form, and is much browner and darker than specimens of *A. g. familiaris* from Persia in my collection. The Grey-backed Warbler must thus come off the British list and be replaced by the Brown-backed Warbler (*A. g. syriacus*) represented by these two specimens. H. F. WITHERBY.

ON THE NESTING OF THE TREE-SPARROW.

IN February, 1910, I had some nesting-boxes made—designedly for the use of Tits—and put them up in an orchard, about eight miles from Norwich. The commonness of the Tree-Sparrow (*Passer montanus*) in this particular district caused me some misgivings as to their ultimate success, so far as the encouragement of Tits went; and these misgivings were fully justified. Out of seven boxes, one remained empty, one was successfully occupied by a pair of Nuthatches, whilst Tree-Sparrows obtained possession of the remaining five.

As the observations made upon these five boxes are not, I think, without some slight points of interest as regards the nesting-habits of this bird, I am venturing to give them in diary-form. The points of interest to which I allude are:—

1. The long interval of time between the building of the nest and the laying of the eggs.
2. The fact, which I have never myself seen *definitely* stated, of the light-coloured egg in the clutch being the last egg laid.
3. The success displayed in ejecting other birds from their selected nesting-site.

Box 1. *March* 16th.—Half-finished Tree-Sparrow's nest in box. *March* 26th.—Nest added to. *April* 6th.—Apparently finished; copious lining of feathers. *April* 21st.—Nest empty; perhaps still more feathers added. *April* 26th—*May* 9th.—No change; still empty. *May* 20th.—Three eggs (ordinary type). *May* 21st.—Four eggs (ordinary type). *May* 22nd.—Five eggs (one light one).

Box 2. *April* 6th.—Empty. *April* 26th.—Half-built Tree-Sparrow's nest. *May* 3rd.—Nest finished; large quantity of feathers. *May* 9th–15th.—Unchanged; nest empty. *May* 20th.—Four eggs (ordinary type). *May* 22nd.—Five eggs (one light one).

Box 3. *March* 16th.—Half-built Tree-Sparrow's nest. *March* 26th.—Nest apparently almost finished. *April* 6th.—Nest finished; plenty of feathers. *April* 21st.—Nest still

empty. *April* 26th.—Nest pulled out by my orders. *May* 3rd.—A Blue Tit's nest in the box, containing two eggs. *May* 9th.—Blue Tit dead and squashed flat in the nest on top of four eggs, and a Tree-Sparrow's nest built over it. *May* 15th.—Tree-Sparrow's nest contains one egg (ordinary dark type). *May* 20th.—Five eggs (one light one).

Box 4. *April* 21st.—Pair of Great Tits building. *May* 3rd.—Great Tit's nest finished. *May* 9th.—Nest still empty, and some loose pieces of dry grass added to it, not worked into the nest but laid upon the top of it. *May* 15th.—A Tree-Sparrow sitting upon the box, and inside a nearly finished nest built on top of the Great Tit's nest. *May* 20th.—Nest apparently finished, but no eggs.

Box 5. *March* 16th.—Half-finished Tree-Sparrow's nest. *April* 6th.—Nest apparently finished; plenty of feathers. *April* 21st—*May* 3rd.—No change. *May* 9th.—I pulled out the nest. *May* 15th.—House-Sparrow's nest, with four eggs.

In this last case it may be thought that the original nest was the work of the House-Sparrows, but I had frequently seen a pair of Tree-Sparrows about this box, and think the early nest belonged to them. In this particular district the Tree-Sparrow is well named, all the nests I have found being in holes in trees, whilst the tiles of the buildings are monopolized by House-Sparrows. The tenant of the orchard wherein my nesting-boxes were hung, took from under the tiles of his house eighty House-Sparrows' eggs on *May* 20th, and one hundred on *June* 3rd.

As regards the time of nesting of the Tree-Sparrow, Howard Saunders in his *Manual* writes:—"Two and even three broods are reared in the season, the first being hatched about the middle of *April*." I have never found Tree-Sparrows' eggs in Norfolk earlier than *May* 20th, though I have looked for them in their usual nesting-haunts from the beginning of *April* onwards. Seeing the birds busily building at the latter end of *March*, one might easily be led to the conclusion that they were early layers, but that this conclusion would not necessarily be a correct one the above notes, I think, go to show.

B. B. RIVIERE.

[Mr. Riviere's note is of considerable interest, as it appears to explain an apparent discrepancy in the accounts of the breeding-habits of this species. I have always found it to be rather a late breeder, like the House-Sparrow (except under artificial conditions, such as in steam-heated engine-sheds). The first eggs are generally laid about mid-*May* in the south of

England, but in the Midlands mostly towards the end of May, and in the Shetlands and S. Kilda not till the third week in June. Yet Mr. J. W. Fawcett, writing in the *Naturalist* for 1890 (p. 353), states that in Durham the nesting-season begins at the end of February or in March, if the weather be favourable; but if backward, not till the end of March or the beginning of April! In all probability nest-building is carried on at these periods, but the eggs are not laid till considerably later. The period during which the nest remains empty appears to be very variable (from two to six weeks in the cases quoted by Mr. Riviere), and further observations on this point would be useful, as well as with regard to the question as to whether the light-coloured egg is *always* the last to be laid. Mr. Riviere is, however, not the first to make this assertion, for the late Dr. Rey states in his work on the *Eggs of Middle-European Birds* that the light-coloured eggs of both Tree and House-Sparrow are without exception the last laid eggs in the clutch (p. 305 and 308).—F.C.R.J.]

HOODED CROWS IN CARNARVONSHIRE.

SINCE the visitations of the Hooded Crow (*Corvus cornix*) not only to Carnarvonshire but also to the other most northerly counties in Wales are so exceptional, the fact that a pair were seen on December 31st, 1910, on the Carnarvonshire side of the Rhos-on-Sea golf-links (through which the county boundary runs) will doubtless prove of interest to many ornithologists. They were observed by Mr. T. A. Goodfellow, of Gloddaeth, for the accuracy of whose identification I can vouch. On January 7th, 1911, he saw a single "hoodie" at the same place, but he prefers to think that it was one of the pair which were seen just a week earlier.

R. W. JONES.

EGGS OF THE CUCKOO.

IN Vol. 2 p. 424) I gave some notes on Cuckoos' eggs found in 1908.

On June 14th, 1909, I visited the locality in Surrey where I found the eggs numbered 2 and 5, and again discovered a Cuckoo's egg in the nest of a Tree-Pipit the exact counterpart of Nos. 2 and 5; and as the eggs are of a type not commonly seen, I think it fair to assume that the same bird visited the locality again in 1909.

In the New Forest, Hampshire, on June 7th, 1909, I found a Tree-Pipit's nest containing three eggs of the red-spotted form and a Cuckoo's egg. I removed the latter and one of the former, and on returning to the place later in the day found the Tree-Pipit still on the nest. On visiting the nest the next

day, both the remaining eggs were sucked. On the same day I found another Tree-Pipit's nest, containing three eggs of the grey-blotched type, and a rather small Cuckoo's egg with a pale cream ground-colour, sprinkled all over with small dark spots, usually only sparingly present on Cuckoos' eggs.

That Cuckoos do not always remove one or two of the eggs of the foster-parents, I think is proved by the fact that at the end of June, 1910, I found in Sussex a nest containing seven eggs of the Tree-Pipit and one Cuckoo's egg, all of which were well incubated.

On June 21st, 1910, in Surrey, I found a Pied Wagtail's nest containing three rather small eggs and two Cuckoos' eggs. One of the latter was large and similar to a Skylark's egg, with a zone of darker brown markings round the larger end and a few small dark spots characteristic of Cuckoos' eggs. The other Cuckoo's egg was smaller, with the ground-colour similar to that of a Pied Wagtail's egg, with large blotches on the larger end. The top of the egg was capped with a patch of violet-grey markings, and a few small dark spots were also distributed sparingly over the egg. A friend of mine in Sussex gave me a clutch of four Red-backed Shrike's eggs and a Cuckoo's egg taken from the nest on June 4th, 1910. The Cuckoo's egg is very striking: the ground-colour is a pale pink and the usual markings of a rich red-brown, very like those on some Kestrels' eggs; the usual characteristic small spots are also of an intense red-brown.

C. W. COLTHRUP.

THE DIURNAL FLIGHT OF THE BARN-OWL.

THE Barn-Owl (*Strix flammea*) has been regarded by many as a purely night-flying bird, having been given the reputation of being utterly unable to see its way about by the light of day; a few notes on its diurnal flight may therefore be of interest.

The period at which this species may be most often seen abroad whilst the sun is yet high in the heavens, is when there are young to provide for. At such a time I have frequently known the Barn-Owl to make flights far from home throughout a summer's day, obviously not in the least incommoded by the brilliant sunshine. Indeed, its vision must be very acute, for it may be seen to pounce and secure some luckless rodent from amongst the herbage, where its presence cannot possibly be an easy matter to detect. I have also known it convey food to its sitting mate (before any of the eggs had hatched) during the daytime.

Exceptionally, I have known this Owl behave in a similar manner during the winter months. On January 28th, 1910, there was a very heavy fall of snow accompanied by a strong wind; many large drifts were formed. On the 29th, at 3 p.m., a Barn-Owl was noted hunting over the fields, and the following day at the same hour a bird of this species was behaving in a similar manner in another locality. No doubt these birds had been prevented by the storm from securing sufficient food at night, and so were impelled by hunger to come out in the light of day.

When a Barn-Owl is suddenly disturbed from its dark retreat during the hours of daylight, it naturally cannot see distinctly until the iris has become adapted to the stronger light, and so it blunders in its flight; this, no doubt, has given rise to the idea that this species cannot see except between sunset and sunrise.

ERIC B. DUNLOP.

[Waterton wrote (*Nat. Hist. Essays*, p. 274. Ed. N. Moore): "I have repeatedly seen it catch mice in the daytime, even when the sun shone bright."—EDS.]

MONTAGU'S HARRIER IN NORFOLK.

A MALE Montagu's Harrier (*Circus cineraceus*), in immature plumage, was found dead at Weeting Hall, near Brandon, Norfolk, last autumn, having hit a telegraph-wire. Possibly this was one of those which were protected at great cost on one of the Broads last year, and were successfully reared.

W. PORTAL.

ROUGH-LEGGED BUZZARD IN NORTHUMBERLAND.

ON November 14th, 1910, an immature male Rough-legged Buzzard (*Buteo lagopus*) was shot at Seaton-Delaval, Northumberland. The bird was a very dark specimen, and had been observed in the neighbourhood for a fortnight.

J. M. CHARLTON.

SHAG IN SUFFOLK.

ON January 23rd, 1911, an immature Shag (*Phalacrocorax graculus*) was sent to me by post with a request to name it, and the following account of its capture:—"My son was riding his bicycle home the other evening about 7.30, and the bird seemed dazzled by the lamp, and flew up against it. He jumped off and caught it, and the next morning I cut the wing-feathers and turned it into a very large pond which I have in front of my house. Unfortunately this was partially frozen over, and the bird dived and got under the ice, and was drowned." This occurred near Lavenham in west Suffolk about thirty-two miles from the sea.

JULIAN G. TUCK.

GADWALL IN SURREY.

ON August 14th, 1910, and again on the 28th, I noticed four Gadwall (*Anas strepera*) amongst a large flock of Mallard frequenting a pond in the neighbourhood of Lingfield. The two species, although consorting with one another when on the water, usually kept strictly apart whilst circling rapidly overhead, the actions of the Gadwall on the wing very closely resembling those of the Mallard.

Although liable to be overlooked, unless seen in flight, when the white wing-spot is a prominent feature, the Gadwall is certainly a very infrequent visitor to Surrey at the present day.

HOWARD BENTHAM.

RED-CRESTED POCHARDS IN SUSSEX.

TOWARDS the end of January, 1911, a flock of Red-crested Pochards (*Netta rufina*), consisting of fourteen or sixteen birds, settled on the Marsh near Boreham Bridge, Sussex. A duck and drake were shot on January 17th, and another drake on February 5th. As far as I know at present these are the only three that have been shot, and they were preserved by Mr. Bristow, who kindly gave me an opportunity of seeing them.

H. W. FORD-LINDSAY.

THREE EGGS IN A WOOD-PIGEON'S NEST.

AT Brighton, Sussex, on May 13th, 1909, I flushed a Wood-Pigeon (*Columba palumbus*) off a nest containing three eggs slightly incubated.

C. W. COLTHRUP.

[Records of three and four eggs in the nests of Wood-Pigeons were given on p. 155 of this volume.—Eds.]

STOCK-DOVE CHASING A JACKDAW.

ON April 21st, 1904, when visiting some rocks in which both Stock-Doves (*C. aenas*) and Jackdaws (*C. monedula*) breed, I was witness of rather an unusual incident.

One of the Stock-Doves was seen to chase a Jackdaw for some distance; another Jackdaw joined the birds, and subsequently several more. A Jackdaw struck the Stock-Dove, knocking a number of feathers out of it; the latter bird then flew off. Whether the Jackdaw which was pursued had made an attempt upon the Stock-Dove's eggs, I am unable to say, but it seems probable that the Stock-Dove acted in this unusual manner in defence of its nest.

A somewhat similar case of a Wood-Pigeon swooping at a Peregrine is recorded by Mr. G. F. Mathew in the *Zoologist* for 1876.

ERIC B. DUNLOP.

ZONE-MARKED EGG OF BLACK-HEADED GULL.

WHEN at Ravensglass gully, Cumberland, during June, 1910, I examined a clutch of three Black-headed Gull's (*Larus ridibundus*) eggs of the olive-brown type, one of which, as will be seen from the accompanying photograph, was quite abnormal in appearance, being encircled by a pale greenish-blue band of about a quarter of an inch in breadth, the light portion of the shell showing no markings with the exception of a few faint lilac spots.

Judging from their uniformity of size and shape, all three eggs were the product of the same bird, and in the case of the



abnormal specimen it would appear that some accident before the egg was deposited, prevented the olive colouring matter from extending over the entire surface of the shell.

HOWARD BENTHAM.

[An explanation of such cases, which are well known to occur occasionally in the eggs of both Waders and Gulls, was suggested on page 220 (December number) of this volume.—F.C.R.J.]

OYSTER-CATCHERS FOLLOWING THE PLOUGH.

At the end of December, 1910, I witnessed the, to me, unusual sight of about fifteen Oyster-Catchers (*Hæmatopus ostralegus*) following in the wake of a man ploughing, and feeding on the organisms thereby unearthed. They were in company with numerous Lapwings and Gulls (Black-headed and Herring), and all were acting in the same manner. The field in which this was observed was at St. John's Point, co. Down, Ireland, and was situated some three hundred yards from the shore.

NEVIN H. FOSTER.

EARLY "DRUMMING" OF SNIPE.

ON February 7th, 1911, a delightfully spring-like day, a Snipe (*Gallinago caelestis*) was heard "drumming" close to my home at Whiston. This is a very exceptional date—at any rate for North Staffordshire—and I can only account for it when I take into consideration the prevalence of unusually mild weather for the time of year. We never expect to hear Snipe "drumming" before mid-March, although previous to that date they go through similar aerial movements without producing a sound which is audible to anyone standing beneath them. I might add that although Snipe have commenced to "drum" so early, Skylarks, which generally are in full song by Candlemas, have not yet begun to sing (Feb. 9th).

TOM SMITH.

RARE BIRDS AT THE ISLE OF MAY.—Miss E. V. Baxter and Miss L. J. Rintoul, whose good work we have frequently had cause to mention, again visited the Isle of May in the autumn of 1910, and made a number of interesting observations (*Ann. S.N.H.*, 1911, pp. 1-6). The following interesting birds are recorded, all being in 1910:—Greenland Wheatear (*Saxicola æ. leucorhoa*)—almost daily from September 6th to October 12th. Lesser Whitethroat (*Sylvia curruca*)—one September 13th. Siberian Chiffchaff (*Phylloscopus r. tristis*)—a single example of this very rare visitor was secured on October 16th. Scarlet Grosbeak (*Pyrrhula erythrina*)—one was obtained on September 7th. Ortolan Bunting (*Emberiza hortulana*)—twice seen. Lapland Bunting (*Calcarius lapponicus*)—a young female on October 4th. Wood-Lark (*Alauda arborea*)—one on October 16th. Hoopoe (*Upupa epops*)—one on October 1st. Sooty Shearwater (*Puffinus griseus*)—one was watched on October 16th.

WHITE WAGTAIL BREEDING AT FAIR ISLE.—In the course of some interesting notes on the birds observed in north-east Iceland, the Duchess of Bedford mentions (*Ibis*, 1911, p. 1) that during a flying visit to Fair Isle in the beginning of July, 1910, some White Wagtails "which were evidently breeding there again," were noticed. A pair of *Motacilla alba* bred in Fair Isle in 1909 (*vide supra*, p. 30), and it should be noted that it is doubtful if *M. lugubris* breeds in the Shetlands, although it does so in the Orkneys.

EARLY BREEDING OF THE KINGFISHER AND DIPPER IN DERBYSHIRE IN 1910.—In the "Zoological Record for Derbyshire, 1910" (*Derby Arch. and Nat. Hist. Soc. Journal*, 1911, p. 215) the Rev. F. C. R. Jourdain records the nest of a King-

fisher (*Alcedo ispida*) with at least three eggs, which was accidentally cut into on March 31st, near Ashburne. This is an extraordinarily early date for eggs, as the usual time for this district is about the last week of April or the beginning of May. A nest of a Dipper (*Cinclus aquaticus*) is also reported with five eggs on the River Dove on February 10th (p. 213).

SUPPOSED SPOONBILL IN CO. DONEGAL.—A bird shot at Inch on November 12th, 1910, and at first thought to be a Flamingo, is judged by Mr. D. C. Campbell from a sketch and description to be a Spoonbill (*Irish Nat.*, 1911, p. 40).

SUPPOSED OCCURRENCE OF THE SPOTTED SANDPIPER IN YORKSHIRE.—In the *Naturalist* (1911, pp. 100–101) Mr. W. Greaves gives some details regarding a specimen of *Totanus macularius* which is supposed to have been shot at Hebden Bridge about 1899, but the history of the specimen is so confused and uncertain that it seems inadvisable to accept the record as fully authenticated. There is only one authentic record of the occurrence of this species in Yorkshire, viz., the bird obtained at Whitby on March 29th, 1849 (*Birds of Yorks.*, p. 628).

WOOD-SANDPIPER IN CO. DONEGAL.—Mr. D. C. Campbell records (*Irish Nat.*, 1911, p. 39) that a specimen of *Totanus glareola* was shot on August 17th, 1910, at Brenagh, Upper Lough Swilly. The Wood-Sandpiper has only occurred six times previously in Ireland.

REVIEW.

The British Warblers—A History, with Problems of their Lives.

By H. Eliot Howard, F.Z.S., M.B.O.U. Part V. Coloured and Photogravure plates. (R. H. Porter.) 21s. net. per Part. THIS fifth Part of Mr. Howard's interesting work* is chiefly concerned with the habits of the Reed-Warbler, but it also contains a description and brief details of the distribution of the Melodious Warbler. There are a number of plates of different species, both in colour and in black and white, executed by Mr. Grönvold in the excellent style which has characterized all his drawings in this work. Mr. Howard finds the Reed-Warbler rather unemotional compared to the subjects he has previously written about, and its actions during sexual excitement do not call for much notice. With regard to nesting-habits, Mr. Howard has much of interest to say. He asks how is the nest begun, and whether it is more frequently attached to new or old reeds, and whether the new reeds, as they grow up, push up the nest or slip through it. In one case the author found a nest attached to both old and new reeds, and he suggests that there was danger of its being overturned by the new reeds growing up, because the joints of the reeds in any case would eventually push the nest up. The depth of the nest he considers absolutely necessary for the safety of the young, although not for the eggs. Incubation appears to commence after the laying of the fourth or fifth egg, and lasts fourteen days after the last egg is laid. The male takes its full share in incubating, but does not seem to brood the young, although it feeds them diligently. The *faeces* of the young are both swallowed and carried away. At the age of ten days the young climb about the reeds and return to the nest, but on the eleventh day they are fully fledged.

In this Part Mr. Howard devotes many pages to a discussion of his theory of the necessity for possession of a "territory" by a bird in the breeding-season. He brings forward some strong arguments to show that birds fight for their "territory" rather than for the females, and that the possession of it is so vital a necessity that it provides the cause for the hurrying forward in the spring of the males in advance of the females, amongst warblers for example, as well as for the driving away of the young by such birds as Faleons and Moor-hens. In the struggle for "territory" the author also gives an explanation for the extension of the range of species, and we strongly advise our readers to study Mr. Howard's arguments concerning his interesting theory.—H.F.W.

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

BRITISH BIRDS

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ON THE PLUMAGE OF THE NESTLING BARN-OWL.

BY

W. P. PYCRAFT, A.L.S., M.B.O.U.

IN 1907 I described, in the pages of BRITISH BIRDS (Vol. I., pp. 162-167) the nestling-down of the Tawny and Barn Owls, and in the present communication I desire to make a few comments on that paper, made necessary by the discovery of new facts gleaned from fresh material.

For the sake of those readers who may not have read my earlier papers on the subject of nestling-down, I may remark that I have shown that in many birds two generations of nestling-down are successively developed before the typical or *teleoptyle* plumage appears. These two generations, constituting the *protoptyle* and *mesoptyle* plumages, apparently answer to degenerate, ancestral, *teleoptyle* plumages. In a large number of species the earliest of these, the *protoptyle* down-plumage—which is the most degenerate, being formed of umbelliform feathers—has been entirely suppressed, while in some cases a like fate has overtaken the *mesoptyle* dress, when the young remain naked till the “contour” or *teleoptyle* feathers appear. When only one generation of nestling-down is developed, we may conclude, with certainty, that this is the *mesoptyle* generation, and that the earlier one has disappeared.

This *mesoptyle* dress presents a most interesting series of grades of development, being most perfect—least degenerate—in the Martineta Tinamou (*Calodromus elegans*), which I described in the *Ibis* (1895, p. 1) from specimens sent me by Dr. P. L. Selater. In this bird each feather has a well-marked scapus, or stem, bearing a series of rami and radii which bear a close approximation to those of the later “contour” or *teleoptyle* feathers. In no other birds have I yet seen quite such perfect *mesoptyles*. Probably, however, the newly-hatched

Megapodes will be found to present the same peculiarity. After these, the best developed, or shall we say the least degenerate, *mesoptyles* are those of the Tawny Owl (*Syrnium aluco*) in which a large, though loose, "vane" is present, and this is faintly barred, thus presenting a striking contrast with the earlier *protoptyle* plumage on the one hand, and the "contour" or *teleoptyle* feathers on the other. This *mesoptyle* dress is worn for some weeks after hatching, long after the wing- and tail-quills have completed their growth, but it is not, as I imagined, worn "until the autumn moult." Rather, it is gradually replaced by the contour-feathers, which are worn till the following year. This much I gather from a specimen killed on June 28th, 1910. In this the head and upper-parts are fully feathered, while contour-feathers are appearing on the fore-breast and flanks, the rest of the under-parts being still clad in the *mesoptyle*, barred down. Thus the under-parts would not probably be completely feathered till, say, the middle of July.

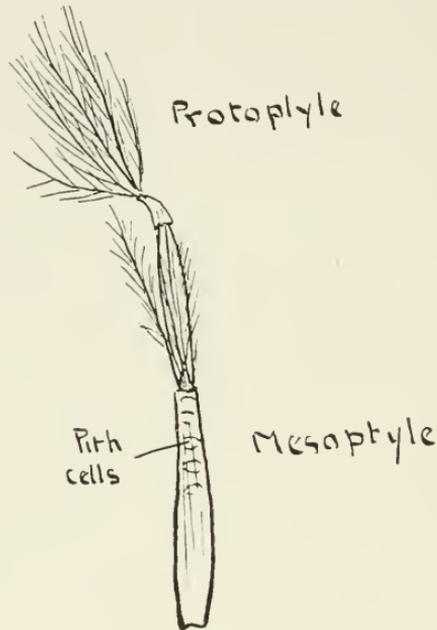
And now as to the Barn-Owl (*Strix flammea*): The white, woolly down which clothes the nestling Barn-Owl, I concluded, in the paper to which I have already referred, was a degenerate form of the semi-plumous type of down seen in the Tawny and other Owls, and hence a degenerate *mesoptyle* dress. I then believed, however, that the earlier *protoptyle* dress, or down of the first generation, had been suppressed, but I suspected that traces, at any rate, of this vanished covering would be found when younger specimens could be examined.

Until June, 1910, I had not sufficient evidence at my command to settle this point, but I am now happily able to set all doubt at rest, having been furnished with two nestlings which retain unmistakable remains of the *protoptyle* dress. These remains, on the *mesoptyles* of the trunk, are mere vestiges, recalling those which I recently described in Dr. F. D. Godman's *Monograph of the Petrels* (p. xvii). On the peripheral disc feathers, however, they are quite distinct and possess a short stem,

though this merges at its base with the distal ends of the rami of the *mesoptyle* by which it is thrust out.

In the down-feathers of the trunk, being somewhat older and more advanced, the *protoptyles*, have been split up. During this process many of the rami have been lost, but many remain attached to the *mesoptyle* rami.

The *protoptyles* are much smaller feathers than those of the succeeding generation, but structurally do not appear to differ in any important particulars. Both generations indeed are in a degenerate condition.



SEMI-DIAGRAMMATIC FIGURE OF THE FIRST AND SECOND GENERATIONS OF NESTLING DOWN IN THE BARN-OWL.

My contention is proved, however, that the long down-feathers borne out on the ends of the contour-feathers (*teleoptyles*) are down-feathers of the second generation (*mesoptyles*).

The Owls, unlike the Accipitres, have no down-feathers when adult, hence there are no pre-plumulae.

But in addition to the foregoing structural details I am able to carry the matter a stage further. Mentioning the facts just set forth to my friend Mr. J. L. Bonhote, he kindly sent me a few, but most interesting, notes which he had already made on this same theme. After the appearance of my paper on the Tawny Owl, already referred to, he made a point of settling the down-sequence of the Barn-Owl for himself, and succeeded, by the help of some birds bred by himself in 1909. In a letter to me in the early part of 1911, he writes : " When first hatched, the young Barn-Owl is covered with a very short, close, white down. At about eight or ten days old this down is cast, and the long, white down figured in your book (*A History of Birds*) makes its appearance. This second down differs from the second plumage of the Tawny Owl, in that it is pure down and not *mesoptyle*." In this last particular, Mr. Bonhote is mistaken, having understood my term "*mesoptyle*" to indicate a feather intermediate in *structure* between a down-feather and a contour-feather. This is *not* the meaning of the word. The term *mesoptyle* denotes *sequence*, not structure. Mr. Bonhote continues : " The second down-plumage is, however, soon cast, at about the age of eight weeks, and when the young leave the nest they are practically fully-feathered."

THE 1909 IRRUPTION OF THE CROSSBILL AS
OBSERVED IN THE BRITISH ISLES.

BY

H. F. WITHERBY AND C. J. ALEXANDER.

THE arrival and early progress of the Crossbills * in the British Isles was shown in a series of maps, prepared by Commander Lynes and published in Vol. III. (Pl. xii., p. 228) ; it will therefore only be necessary here to give a brief summary of that part of the movement.

The first record was from Fair Isle on June 23rd, 1909 ; this was followed by others from the Shetlands, Orkneys, and Outer Hebrides, and from Durham and Merionethshire before the end of the month.

During July, Crossbills were observed in all parts of England except the extreme south-west, in a number of places in Wales, and in a few widely-separated places in Ireland.

How long actual arrivals from oversea were taking place cannot be determined for certain ; the latest record of their being seen at sea was from off the Shetlands about August 10th. The records from off Scarborough, Yorkshire, at the end of June, from off the Farne Islands, Northumberland, on July 9th, the Outer Dowsing light-vessel (off the Wash), in July, and from a ship making for Hamburg from Hull on August 1st, show that arrivals took place on the east coast of England as well as further north ; so that it is probable that the rather later appearance of the first invaders in the south of England was due primarily to the southern part of the west-moving wave being behind the northern part, and not to these first southern birds having landed in the north of Scotland and afterwards worked their way southwards, though some may have taken this course.

* All the examples taken in England and examined were of the typical form *Loxia curvirostra curvirostra*, but Mr. W. Eagle Clarke has remarked that those obtained in the Scottish Isles and examined by him (eleven specimens) had finer bills than any collected in England which he had examined, and he suggests that these birds may have had a different origin (*cf. Ann. Scot. Nat. Hist.*, 1910, p. 67).

During the latter part of July, when Crossbills were so much in evidence in England, their numbers were already decreasing in the Scottish Islands, most of the birds leaving by the end of August, and probably moving southwards, though a few lingered on to the end of September or early October. In England they apparently continued to increase well into August, but they were so constantly moving about locally that any larger movements passed unobserved. In some places, however, they passed on again at once, presumably not finding suitable feeding-grounds, while coastal movements were noted even so late as the end of September and the beginning of October. The only record from the Isle of Man was on August 14th. From this time onwards, Crossbills seem to have been plentiful in nearly all the pine-wood regions visited by observers; while many smaller coniferous plantations and isolated trees were visited from time to time. Records of the presence of the birds at some time through the winter were received from all the English counties except Cumberland, Nottinghamshire, Huntingdonshire, Cambridgeshire, Dorsetshire, Devonshire, and Cornwall; and in Wales from Denbighshire, Merionethshire, Montgomeryshire, and Breconshire.

It seems probable that the absence of records from Cornwall and the fewness of those from Wales, were really due to scarcity of Crossbills in the western parts of the country, and not only to lack of observers; it should be noted that the only record from Devonshire was of a single bird, killed while the immigration was proceeding, and that one of the records from Merionethshire was of a flock at the same period; the records from Denbighshire and Montgomeryshire are from places not far from the English border; the locality for the Breconshire record is not given; so that only the records from Denbighshire (H. E. Forrest, III., 259, and T. Ruddy, III., 409) and the remaining record from Merionethshire (H. E. Forrest, III., 259) give evidence of the presence of the birds far into Wales.

From the country lying to the south and east of a line drawn from the Wash to Portland Bill, i.e., on the Cretaceous and Tertiary strata (leaving out the wolds of Lincolnshire and Yorkshire), records are far more numerous than elsewhere; the chief counties from which there are a number of records outside this area are Shropshire and Staffordshire. Probably one reason for this abundance of records is that the Cretaceous and Tertiary systems include a number of beds giving rise to sandy soils much planted with pine trees. Such are the Lower Greensand in Bedfordshire; drift over the Chalk in western Suffolk and Norfolk; the Bagshot beds of eastern Berkshire, north-eastern Hampshire and western Surrey; the Lower Greensand of south-western Surrey, and the same formation across Kent; the Tertiary beds of the New Forest; and the sandy members of the Hastings beds in Sussex and Kent, Tilgate and Ashdown Forests. It should, however, also be borne in mind that this part of England probably contains more observers of birds than elsewhere.

NESTING.

The earliest recorded nest was one found on January 12th, 1910, near Thetford, Norfolk, with three nestlings (H. Noble, III., 302); the latest were on May 25th, on which date one with two eggs was recorded in St. Leonard's Forest, Sussex (J. Walpole-Bond, IV., 49-50), and one with five eggs near Ashford, Kent (H. R. Tutt, IV., 82). More were found in March and April than in February or May. The time of nesting, positions of the nests, and number of eggs (most often four, less so three and five) seem to have shown no unusual features (compare, for instance, the account in Newton's "Yarrell," Vol. II., pp. 197 and 198). Two nests are recorded in spruce (N. Tracy, IV., 22, and J. Beddall Smith, IV., 187), and two in larch (W. J. Kempe, IV., 121, and J. Beddall Smith, IV., 187); in all other cases where the kind of tree in which the nests were built is stated, it is Scotch pine.

The male birds were noted singing by various observers, from the end of February to the end of April. The majority of the records of nesting are from the south-eastern district already defined, but some few are from further west.

Nests were found in the following counties:—Kent (many), Sussex (many), Surrey (many), Hampshire (many), Berkshire (several), Essex (two), Suffolk (many), Norfolk (many), Somersetshire (one), Gloucestershire (several), and Staffordshire (one), while in Lincolnshire a bird was seen carrying nesting-material, and in Bedfordshire young birds were observed being fed.

It appears that generally only a small proportion of those present in any district nested, the others remaining in flocks throughout the spring.

DEPARTURE.

The Crossbills departed from different districts at various dates; in some cases all had gone by the end of 1909; in other cases, they showed little or no diminution till well into the summer of 1910; the majority of the records, however, speak of the main departure as being either in February or in April and May.

The main departures recorded took place as follows:—

- 1909. Dec.—Hertfordshire, Hitchin.
- 1910. Jan.—Cheshire, Alderley Edge; Oxfordshire (N.W.), Cornwell.
- 1910. Feb.—Kent (S.W.), Edenbridge; Hampshire (N.), Basingstoke; Suffolk, Bury St. Edmunds; Shropshire, Dowles; Northumberland, Stocksfield - on - Tyne; Surrey, south-east; Denbighshire (S.E.), Llangollen.
- 1910. Mar.—Surrey (N.), Banstead; Surrey (S.W.), Farnham; Shropshire (centre), Wenlock.
- 1910. April—Kent (S.), Tenterden; Surrey (S.E.), Oxted; Berkshire (S.E.), Crowthorne; Berkshire, Reading; Hert-

- fordshire (W. and N.W.), Watford, Berkhamstead, Tring; Norfolk, Norwich; Suffolk (N.W.), Brandon; Northamptonshire (centre), Kettering; Staffordshire (N.); Breconshire.
1910. May —Kent (S.W.), Hever; Sussex (east centre), Uckfield; Surrey (no locality); Essex (N.W.), Bardfield; Bedfordshire (W.), Woburn; Gloucestershire (N.W.), Mitcheldean; Westmorland (W.), Windermere.
1910. June —Kent, Maidstone; Sussex (N.), St. Leonard's Forest; Hampshire (N.W.), Whitechurch; Lincolnshire, Lincoln; Norfolk (west centre), Swaffham.
1910. July —Sussex (N.), Horsham; Hampshire (N.E.), Aldershot.
1910. Aug. —Hampshire (S.E.), Wickham; Staffordshire (west centre), Stretton.
1910. Sept. —Sussex (N.E.), Tunbridge Wells; Suffolk (N.W.), gradually from September to November.
1910. Oct. —Suffolk (east coast), Aldeburgh.

In most cases odd birds or small parties were seen after the majority had left; one or two observers found a few still staying on right into the winter (e.g., Hampshire—New Forest; Kent and Sussex—Tunbridge Wells).

The only record of actual departure seems to be that from the Shetlands on February 27th, 1910 (III., 373); but an increase in Perthshire in March and April (IV., 122), and the presence of passing flocks in various localities in England in April, May, and June, all confirm the records given above, showing that, taking the country as a whole, the departure was going on from February to June.

What was probably a fresh immigration on a small scale was noted in Fair Isle, the Shetlands and Outer Hebrides from the end of June to September (*Ann. Scot. Nat. Hist.*,

1910, p. 245; 1911, p. 54), although it is just possible that the appearance of these birds was due to movements northward from England.

REFERENCES.

BRITISH BIRDS : Vol. III., pp. 82-83, 123-125, 162-163, 190-194, 226-228 (and maps), 258-261, 302-306, 331-333, 371-375, 400-410; Vol. IV., pp. 20-22, 47-53, 81-83, 121-122, 185-187, 211-213, 250.

We are also greatly indebted to a number of correspondents, who have very kindly given us valuable information concerning the departure of Crossbills from their districts, and this has been incorporated with that derived from published records, under the heading "Departure," above.

THE CROSSBILL AS A BRITISH BIRD.

BY

H. F. WITHERBY.

SINCE the recent irruption of the Common Crossbill (*Loxia curvirostra curvirostra*) I have been at some pains to make out the true status of the Crossbill as a British bird, and for this purpose I have made a somewhat careful digest of the records of nesting and of the remarks on occurrences of the bird in the various local faunas, as well as in standard works, and the conclusions I have reached are set out below.

With regard to the records of nesting, it must always be borne in mind that the Crossbill migrates in its juvenile plumage and in family-parties, and I know of places where it appears in such parties regularly in June and July ; but these birds do not breed in these localities, and are as certainly migrants as are the Fieldfares and Redwings which appear a few months later. The migration of these birds in their juvenile plumage is contrary to our experience of other Passerine birds, and this fact has seldom been recognized by those who have considered the presence of Crossbills in family-parties to be good evidence of their having bred in the neighbourhood. Such birds may very well have crossed the North Sea, and so long as they can fly well and can feed themselves, their presence in a neighbourhood is no proof that they were bred there.

Nor is the mere presence of adult birds in the breeding-season a sure sign that they are nesting in a locality, because they undoubtedly frequently stay throughout the year in a place without breeding ; and it also must be remembered that they have been known to nest in every month of the year, and that their times of migrating are in consequence rather uncertain.

It is, therefore, most necessary to obtain actual proof when Crossbills are suspected of nesting in a locality, either by the discovery of the nest or by watching the

birds collecting nesting-material, or by observing the young being fed by the parents, or by obtaining examples so young that it may be quite certain that they were unequal to a prolonged flight.

The status of the Common Crossbill as a British bird may be summarized thus :—

ENGLAND AND WALES.—An early autumn-immigrant arriving from mid-June to August; regular in its appearance in some districts but irregular in most, and especially so in north-western and south-western England and in Wales. Periodically (every three to ten years) it arrives in great numbers and becomes much more generally distributed, and frequently stays over the following spring and into the summer, but authentic records of nesting are few and far between. The facts that most of the nesting-records refer to springs immediately following an “irruption,” and that up till now no authentic case has been recorded of the bird breeding in two successive years in the same district, show that it cannot be classed as a resident, but only as a migrant, breeding sporadically.* It has nested in the following counties, the dates within square brackets referring to probable but not positive records :—Devon, 1839, 1894. Somerset, 1910. Hants., 1839, 1858, 1877, 1892, 1910. Berks., 1882, 1889, [1898], 1899, 1910. Sussex, 1791, 1840, 1910. Surrey, [1899], 1910. Kent, [1833], [1839], [1894], 1910. Gloucester, 1839, 1910. Oxon., [1839]. Leicester, 1839. Staffs., 1910. Hereford, [1895]. Salop., 1880, [1895], [1896]. Northants., 1892, 1904. Beds., [1899] 1910. Essex, 1910. Suffolk, 1815, 1822, 1885, 1889, 1910. Norfolk, 1829, [1887], 1889, 1910. Lincs., [1910]. Yorks., 1829, 1840, [1855], 1872, 1876, 1902. Durham, 1838, 1856. Cumberland, 1839, 1856, [1865]. Northum-

* Since writing the above I have received the interesting news from Mr. P. F. Bunyard, Mr. B. B. Riviere and Mr. Meiklejohn and the Rev. J. R. Hale and Mr. C. D. Borrer, that they have found a few Crossbills nesting this spring in localities where they were breeding last year. These cases of nesting are undoubtedly due to the great irruption of 1909, and do not affect my argument that the bird only nests sporadically.

berland, [1821], 1838, 1869. Cheviot Hills, 1898. Carnarvon, 1890 or 1891. Merioneth, [1897]. Montgomery, 1880.

SCOTLAND.—An early autumn-immigrant as in England, but apparently not so regular; subject to similar irruptions, when it appears in numbers in the far northern and western isles. Breeds sporadically and rarely in southern Scotland, and may also do so in the territory of *Loxia c. scotica*, but proof is so far wanting. The Common Crossbill seems to have nested in the following counties:—Ayr, 1864, [1884]. Dumfries, [1838–9], 1888. Kincardine, 1903. Linlithgow, 1839. Stirling, 1839.

IRELAND.—Now resident, but not indigenous. Apparently only migrates to Ireland in years of “irruptions.” Following the irruption of 1838, it bred in co. Tipperary, in 1867 in co. Kildare; since 1868 it has settled down in Fermanagh; since 1881 in King’s county; between 1883 and 1895 in Westmeath. Following the irruption of 1887–8, it increased and bred more widely, and is now established (with fluctuations) in large plantations of conifers in each province (*cf.* R. J. Ussher, *Birds of Ireland*).

THE SCOTTISH CROSSBILL, *Loxia curvirostra scotica*, Hart.

The published information with regard to the distribution and immigrations of the Scottish Crossbill, which is confined as a breeding-bird to Scotland, is very scanty, and much more observation must be made concerning it before we can give at all a complete account of its status. From the information available this appears to be as follows:—Resident in northern Scotland, where it breeds from south-eastern Sutherland, throughout the Moray Basin southwards to Dunkeld (Perth), westward to Loch Maree (western Ross), and eastwards to Huntley (Banff). Has occurred sporadically in winter in very small numbers in the following southern counties of Scotland, but does not appear to be a regular migrant from the data at present available:—Dumfries, Kirkeudbright, Fife.

NOTES

RECOVERY OF MARKED BIRDS.

IN addition to those already acknowledged, I have received subscriptions towards the expenses of the "marking scheme" from Mrs. Patteson, Mr. Arthur Bankes (second subscription), Mr. R. L. Russell, Mr. Jas. Bartholomew (second subscription), Mr. W. T. Blackwood, Mr. J. M. Goodall, Mr. J. R. B. Masefield, Mr. D. Sibbering Jones, and Mr. E. Arnold Wallis. H. F. W.

BLACKBIRD (*Turdus merula*).—B.B. No. 10448, marked by Mr. J. Hutton (Gamekeeper to Mr. J. Bartholomew) at Torrance, near Glasgow, on June 6th, 1910, as a nestling. Recovered at Mathry, Letterston, Pembrokeshire, on January 28th, 1911. Reported by Mr. T. Griffiths.

REDBREASTS (*Erithacus rubecula*).—B.B. No. 4937, marked by Mr. N. H. Joy at Bradfield, Berkshire, on April 28th, 1910, as a nestling. Recovered two miles from the place where ringed on February 1st, 1911.

B.B. No. 5809, marked by Mr. H. W. Ford-Lindsay at Pett, Sussex, on May 29th, 1910, as a nestling. Recovered at Guestling, Sussex, on January 15th, 1911.

B.B. No. 11322, marked by H. W. Ford-Lindsay at Pett, Sussex, on July 10th, 1910, as a nestling. Recovered at Fairlight, Sussex, on February 2nd, 1911.

STARLINGS (*Sturnus vulgaris*).—B.B. No. 784, marked by Col. R. H. Rattray at Tonbridge, Kent, on November 24th, 1909, as an adult. Recovered at Southborough, Tunbridge Wells, Kent, on February 15th, 1911. Reported by Mr. J. Wright.

B.B. No. C234, marked by Mr. N. H. Joy at Bradfield, Berkshire, on February 1st, 1911. Recovered at Gillingham, Kent, on February 20th, 1911. Reported by Mr. A. Tuson.

B.B. No. 11121, marked by Mr. W. E. Suggitt at Clee-thorpes, Lincolnshire, on October 15th, 1910. Recovered at Great Grimsby, Lincolnshire, on March 20th, 1911. Reported by Mr. F. Horton.

JAY (*Garrulus glandarius*).—B.B. No. 8219, marked by Mr. N. H. Joy at Bradfield, Berkshire, on June, 1st, 1910, as a nestling. Recovered two miles from the place where ringed on February 28th, 1911.

LAPWING (*Vanellus vulqaris*).—B.B. No. 10761, marked by Mr. J. Hutton at Torrance, near Glasgow, on June 15th, 1910, as a nestling. Recovered at Gouran, co. Kilkenny, Ireland, on February, 28th, 1911. Reported by Mr. P. O'Malley.

COMMON TERN (*Sterna fluvialis*).—B.B. No. 20265, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on July 23rd, 1910, as a nestling. Recovered on Lawkland Moor, Clapham, Yorkshire, in September, 1910. Reported by Mr. William Fox.

BLACK-HEADED GULLS (*Larus ridibundus*).—B.B. No. 9469, marked by Mr. J. Murray (Gamekeeper to Mr. H. S. Gladstone), at Durisdeer, Dumfriesshire, on June 26th, 1910, as a nestling. Recovered at Croft Spa, near Darlington, Durham, on February 7th, 1911. Found by Mr. T. Wall, and reported by Mr. J. H. Hutchinson.

B.B. No. 9489, marked by Mr. J. Murray, at Durisdeer, Dumfriesshire, on June 29th, 1910, as a nestling. Recovered near Perth on August 1st, 1910. Reported by Mr. Geo. Willinks.

B.B. No. 30462, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 13th, 1910, as a nestling. Recovered at Fraserburgh, Aberdeenshire, on February 20th, 1911. Reported by Mr. Jas. Young.

B.B. No. 30545, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 13th, 1910, as a nestling. Recovered at Morecambe Bay, near Ulverston, Lancashire, in October, 1910. Reported by Mr. H. B. Journey.

BLACK REDSTART IN ESSEX.

As the Black Redstart (*Ruticilla titys*) is not of frequent occurrence in Essex, it may be worth while recording that a male, in dull, worn-looking plumage, was about my garden (at Bradfield, near Manningtree) and the vicinity during the afternoon of March 22nd, 1911. WALTER B. NICHOLS.

CONTINENTAL GOLDCRESTS IN KENT, SUSSEX, AND HAMPSHIRE.

It would appear from the Migration Reports of the B.O.C. Committee that large migrations of Goldcrests do not occur every year. The autumn of 1910, however, proved to be one of these years, and I therefore kept a special look-out for birds of the Continental race. Mr. H. S. D. Byron, whom I had asked to procure specimens of migrating Goldcrests, kindly

sent me a series of fifteen from Thanct (East Kent), shot on October 14th, 15th and 19th ; all of these, with two exceptions, were of the Continental form (*Regulus c. cristatus*). On October 24th I shot a male, also of this race, in a pile of faggots on the sea-shore near Pevensay, Sussex, and as this was in the afternoon, it is quite possible that it was a straggler from a small flock that had already passed on. On October 30th and November 4th, others were taken at St. Catherine's Lighthouse, Isle of Wight. Prior to this, the last "Golderest year" was 1908, and through the kindness of Mr. A. McL. Marshall I have lately re-examined the series that he obtained in that autumn from St. Catherine's Lighthouse. Out of a dozen specimens, two males, killed on November 1st, are Continental birds.

N. F. TICEHURST.

WILLOW-TIT IN LANCASHIRE.

I RECENTLY examined two "Marsh" Tits in the Warrington Museum, and suspecting that they were Willow-Tits (*Parus atricapillus kleinschmidti*), obtained permission to submit them to Mr. H. F. Witherby, who confirmed my opinion. One of these birds, Mr. Madeley informs me, was killed at Padgate, near Warrington, in 1890, but the locality and date of the other specimen, which has been in the museum about forty years, cannot be traced. In both birds the brown-black caps, the graduated tail, and pale edges to the secondaries, are very distinct, and the flanks of the Padgate bird are well marked with buff. I have not, up to the present, identified the Willow-Tit in Cheshire ; black-capped Tits which I have examined in other museums, and those which I have been able to watch closely in the field, have all been Marsh-Tits.

T. A. COWARD.

GREAT GREY SHRIKE IN SUSSEX.

ALTHOUGH not an unusual visitor to us, I think it of sufficient interest to record a male shot on the marshes at Pett, on January 18th, 1911.

H. W. FORD-LINDSAY.

THE BRITISH GREAT SPOTTED WOODPECKER.

DR. HARTERT, who first differentiated *Dendrocopus major anglicus* (*Nov. Zool.*, 1900, 528), gave as its distinguishing characters the slender, narrow bill, the relatively short wing, and the usually more rusty colour of the under-parts. When examining a series of Great Spotted Woodpeckers lately, I was struck by a further characteristic, viz., the relative shortness of the first primary. This is best brought out by measuring

the distance between the tip of the longest primary-covert and the tip of the first primary. In six specimens each of the two races *D. major major* and *D. major anglicus*, I found this measurement to be as follows :—

<i>D. major major.</i>	<i>D. major anglicus.</i>
8 mm. female	0 male
8·5 „ male	0 female
9·5 „ „	2 mm. female
11·5 „ „	3 „ male
12·5 „ „	5 „ male
12·5 „ „	5·5 „ ? sex

I must here note that these specimens were easily distinguishable, apart from this characteristic, by the characters defined by Dr. Hartert. I found the length of the wings to vary in the British race from 126·5 mm. to 132 mm., and in the northern race from 132 to 142. The difference in the bills in the two races is seen best by putting the two together and looking down from above, when the narrowness of the bill of the British bird is most striking; this difference can even be seen in birds of the two races just out of the nest.

CLAUD B. TICEHURST.

HOOPOE IN CHESHIRE IN WINTER.

I THINK it will interest the readers of BRITISH BIRDS to hear that a Hoopoe (*Upupa epops*) has been located on some private grounds near Macclesfield, Cheshire, recently. It was first observed on December 20th, 1910, and was continually viewed from the house, generally feeding on the ground, turning over leaves or small dead branches broken off by the winds, until January 28th, 1911.

As the bird is such a rare visitor to Cheshire and is sometimes caged, I have been waiting for news of one having been lost, but with no results, and I have enquired from the keeper of Lord Newton's aviaries, a few miles away, but no such bird has escaped from there.

It is possible that the cold snap of weather about the date January 28th made the bird move on. I do not think it was shot, at all events in this neighbourhood. The land surrounding the wooded grounds where it took up its temporary residence is farmed by an intelligent man who was keen on its preservation.

RICHARD E. KNOWLES.

[The Hoopoe is a very rare visitor to Cheshire, having been recorded four times only (*Vert. Fauna of Cheshire*, Vol. I., p 267). Its occurrence anywhere in the British Islands in winter is exceptional, but not unprecedented, examples having been

recorded in November from Scotland, Hampshire, and Surrey ; in December from Lincolnshire, Suffolk, Devon, and Ireland ; in January from Yorkshire, Kent, and Ireland ; and in February from Ireland.

The possibility, however, of the bird recorded above by Mr. Knowles being an escape from captivity should not be overlooked, although Mr. D. Seth-Smith informs us that the Hoopoe is not often kept in captivity. Should any of our readers know of a Hoopoe having recently escaped we should like to be informed.—EDS.]

THE DIURNAL FLIGHT OF THE BARN-OWL.

WITH reference to Mr. Eric B. Dunlop's note (*supra*, p. 314) regarding the diurnal flight of the Barn-Owl (*Strix flammea*), I may say that here in the extreme north of Lancashire we see the Barn-Owls flying all day during the winter-months, and I am inclined to attribute this purely to lack of a sufficient food-supply ; and anyone who has kept Owls in confinement will agree with me, that they need a greater amount of food than other birds, such as Hawks and Falcons.

F. W. SMALLEY.

SHAG NOT CORMORANT IN BEDFORDSHIRE.

IN the February number of BRITISH BIRDS (p. 288) I reported the occurrence of a Cormorant at Woburn. The bird remained here over a week and then died. I found it some time afterwards near the pond, and have ascertained that it is a Shag (*Phalacrocorax graculus*) and not a Cormorant.

It did not occur to us when we saw it alive, that it was likely to be a Shag so far inland—more than sixty miles from the sea.

HARRY LEWIS.

LONG-TAILED DUCK IN KENT.

A FINE specimen of the Long-tailed Duck (*Harelda glacialis*) was obtained at Jury Gap, near Rye, on March 4th, 1911. It was an adult male in perfect condition.

I examined it at Mr. Bristow's, who had the bird for preservation.

H. W. FORD-LINDSAY.

COMMON EIDER IN SUSSEX.

ALTHOUGH Borrer (*Birds of Sussex*, p. 358) describes the Eider (*Somateria mollissima*) as a regular autumn and winter visitor to the Channel off the Sussex coast, and quotes Booth, who states that he had frequently recognized these birds there, they probably keep so far out to sea that they are seldom seen,

and still less frequently shot or recorded—in fact, I can only call to mind a single example being shot during the last fifteen years. It is, therefore, perhaps worth recording that a small flock of eight or ten have spent this last winter off the east Sussex coast between Hastings and Pevensey Bay. They appear to have arrived about the middle of November, 1910, and have been seen by several people, sometimes close in-shore. Six of them have been killed at different times; a fine adult male was shot on November 23rd, and, with a female obtained on January 15th, 1911, has been acquired for the Hastings Museum. Two more adult males were shot, on December 31st and January 19th; an immature male, having only a few white feathers on its neck, on January 2nd, and a second female on January 29th, 1911.

N. F. TICEHURST.

SNIFE PURSUED BY FALCONS.

ON March 5th, 1911, on returning from a walk up the Itchen Valley (Hants), and while passing the edge of a wood through which the road ran, a bird suddenly came at a great pace straight through the branches and ivy leaves overhead, and settled on the road. I saw it was a Snipe (*Gallinago caelestis*) and it immediately ran up into some bushes near the road. A moment after I heard screams above and saw two "hawks" hovering, and parrying at one another. For a few seconds they continued, then separated and flew off in different directions. I then went up to the Snipe and had almost touched it when it rose in a flutter and flew slowly away, almost touching the ground, and alighted some thirty yards off up the road, where it squatted flat.

Shortly afterwards I saw one of the "hawks" wheeling round some distance off, and descend some thirty feet nearer the earth; then it came flying slowly over, and I distinctly saw that it was a Peregrine (*Falco peregrinus*). It passed on and disappeared. In about three minutes the Snipe also rose and flew swiftly away. The Falcon had evidently stooped at it, and its companion had probably done so also, and so had caused both to miss it.

There were as many as fifty or sixty Snipe in the flooded meadow by the river, and they were flushed in flocks of from fifteen to twenty birds in each. I observed one "drumming" and giving its call, and I think this was the bird stooped at by the Falcon, as it was the only one which had remained flying about.

J. M. CHARLTON.

EARLY "DRUMMING" OF SNIFE.

WITH reference to Mr. Tom Smith's note *re* the "drumming"

of Snipe, I may say that Snipe "drum" during every month of the year. Mild weather has nothing to do with it. Many times when waiting at "flight" during the winter-months I have heard Snipe "drum," in fact it seems a common practice with Snipe every evening when they "come in" at "flight," especially so if the evening be calm. F. W. SMALLEY.

IN reference to the note by Mr. Tom Smith on the early "Drumming" of Snipe (*supra*, p. 318), I may mention that in 1906 I heard a Snipe "drumming" on February 4th in the Outer Hebrides.

What is more remarkable, to my mind, is that I heard one "drumming" in 1909, on August 1st. I was out shooting wild-fowl and flushed a Snipe which I missed with both barrels, when, to my astonishment, after flying a short distance, it commenced to "drum," and continued to do so, wheeling about in the air for upwards of ten minutes before alighting. HUGH S. GLADSTONE.

WITH regard to Mr. T. Smith's letter on this subject, allow me to say that I observed a Snipe "drumming" near Rivers-town, co. Sligo, on December 10th, 1910. Drawing my host's attention to it, he assured me that he had frequently heard Snipe "drumming" in this part of Ireland during the winter months, and that the incident was not very unusual.

The late Colonel Irby (*Orn. Straits of Gib.*, 2nd Ed., p. 278) writes as follows:—

"I never heard the drumming noise of the Snipe in Andalusia, though at home in England I have occasionally heard them drumming of an evening in the New Forest as early as the 20th of January." COLLINGWOOD INGRAM.

WITH reference to the note on this subject, I may record that I have heard Snipe "drumming" in the Poole Harbour district, Dorset, on the following dates: February 16th, 1908; February 4th, 1909; March 3rd, 1910; March 5th, 1911.

M. WILLIAM PORTMAN.

EXTRAORDINARY NEST-BUILDING.

A FEW years ago I had under observation a somewhat similar case to that given by Mr. C. W. Colthrup (*supra*, p. 308) in my own grounds, except that in this case the two nests built adjoining one another in the same shrub were those of a Hedge-Sparrow and a Song-Thrush. Unfortunately, both nests were deserted before the eggs were hatched.

JOHN R. B. MASEFIELD.

SALE OF GILBERT WHITE MSS.

THE following brief particulars of a number of manuscripts connected with Gilbert White, of Selborne, which were sold by auction by Messrs. Sotheby on March 16th. will, we think, be of interest to the readers of BRITISH BIRDS. The chief item is thus described in the catalogue :—

“ 341 FLORA SELBORNENSIS. with some coincidences of the coming and departure of the birds of passage and insects, and the appearing of reptiles for the year 1766, manuscript on 62 pp., the last page consisting of notes of events in *August*, 1767.

“ This interesting little work, which is quite unpublished, is separate from and additional to the Garden Calendar which Gilbert White kept regularly from 1751 onwards : it proves that he was a real botanist.”

This manuscript was bought by Mr. W. Mark Webb, Hon. Secretary of the Selborne Society, for £61.

Other “ lots ” of interest were the manuscript Introduction to “ The Fauna of Gibraltar ” (Porter, £4 5s.) by John, brother of Gilbert White, and two letters from Colonel George Montagu (author of the “ Ornithological Dictionary ”) written in 1789 and discussing ornithological questions raised in the “ Natural History of Selborne ” (Porter, £2 4s.) Other letters and documents are of interest chiefly on historical or personal grounds, and need not be alluded to here.

BREEDING-HABITS OF THE WILLOW-WREN.—Mr. S. E. Brock has contributed a very valuable paper (*Zool.*, 1910, pp. 401–417 and *cf.* 1911, p. 72) on this subject, basing his facts on observations of twenty-two pairs of Willow-Wrens (*Phylloscopus trochilus*) which he watched with wonderful patience and assiduity in a plantation in Linlithgowshire. The paper should be carefully read by all those interested in the subject, and here we can only draw attention to some of the points made by Mr. Brock. The question of unpaired birds is an interesting one to which the author has given some attention, and it is only by very close and careful observation that we can learn what proportion of unpaired birds there may be, and why they should be mateless. The author shows that in the case of the Willow-Wren at all events, the “ territory ” of the male is not always strictly adhered to, and he thinks that perhaps too much stress has been laid (presumably by Mr. Howard in his *Warblers*) on the precise demarcation of these “ territories.” In one case he located the nests of three Willow-Wrens in one piece of ground which was not included

in the "territory" of any of the males, and two of these nests were only thirteen yards apart. He gives exact details of the positions of twenty-one nests, dates of the laying of the eggs, and the number of eggs laid (ten of six, four each of five and seven, one each of four and eight) and young hatched (only one egg out of one hundred and twenty failed to hatch). In four cases there were apparently second broods—two of four and two of three eggs each. Among several interesting cases of nests in one year being near the site of a nest in a previous year, the following is remarkable:—In 1908 a nest was built two feet from the ground in a spruce-bush; in 1909 there was a nest within twenty yards of this site; in 1910 one within eight yards of the 1909 site, and a second brood in the same year was actually reared in the 1908 nest, which was sheltered and had remained intact and only required relining with feathers. Mr Brock also gives much valuable information on the sexual habits of the birds, incubation, feeding of the young, nature of the food, and habits of the young after fledging.

HEN-HARRIER IN CHESHIRE.—An immature female *Circus cyaneus* is recorded by Mr. A. Newstead (*Zool.*, 1911, p. 113) as having been shot near Broxton, but the date is doubtful. The bird is now only a rare wanderer to Cheshire (*cf. Vert. F. Cheshire*, p. 282).

GLOSSY IBIS IN YORKSHIRE.—Mr. E. W. Wade records (*Nat.*, 1911, p. 116) that a specimen of *Plegadis falcinellus* was obtained about the second week of October, 1909, at Ulrome. This is additional to the examples already recorded as having occurred in various parts of Yorkshire about the same time (*vide* Vol. III., pp. 229, 230 and 308).

CHANGES OF PLUMAGE IN THE RED GROUSE.—A lengthy paper on this subject by Dr. E. A. Wilson, with twenty-four coloured plates from his own drawings, appears in Part IV. of the *Proceedings of the Zoological Society* for 1910 (pp. 1000–1033). Dr. Wilson's paper is founded upon the material collected for the Grouse Disease Inquiry, and describes not only the sequence of the plumages of both male and female, but the "local variations," the effect of disease upon the plumage, and the order of growth of the primaries in the young bird. The paper has been revised by Mr. W. R. Ogilvie-Grant in the absence of Dr. Wilson in the Antartic.

GLAUCOUS GULL IN CARNARVONSHIRE.—An immature example of *Larus glaucus* was shot on February 23rd, 1911, at Deganwy (A. Newstead, *Zool.*, 1911, p. 117). The bird is a rare visitor to northern Wales.

REVIEWS

The Terrestrial Mammals and Birds of North-east Greenland: Biological Observations. By A. L. V. Manniche. Illustrated. (Copenhagen: Bianco Lunos.)

THIS book, which forms the first part of the fifth volume of the scientific results of Mylius-Erichsen's Danish Expedition to north-eastern Greenland (1906-1908) will be read with great interest by all British ornithologists, on account of the valuable notes on the breeding-habits of many northern birds. Most of these observations were made by the author in the vicinity of Danmarks Havn (Cape Bismarck, lat. 76° 46' N.), where the ship of the expedition lay for about two years. Herr Manniche was fortunate in having in this neighbourhood a comparatively fertile low coast-country, where animal life was richer than in any other tract visited by the expedition. Thirty-eight species of birds were noted, and of these eighteen were found nesting, seven others were certainly breeding but no nests were found, and thirteen were more or less accidental visitors.

The following birds were found breeding: Snow-Bunting, Greenland Falcon, Eider, King-Eider, Ptarmigan, Ringed Plover, Turnstone, Dunlin, Sanderling, Grey Phalarope, Glaucous Gull, Ivory-Gull, Sabine's Gull, Arctic Tern, Buffon's Skua, Black Guillemot, and Red-throated Diver. Those which were certainly breeding, but whose nests were not found, were: Raven, Snowy Owl, Brent Goose, Barnacle-Goose, Knot, Kittiwake, and Fulmar.

The author discovered a number of Barnacle-Geese in a marsh some ten or fifteen kilometres from the sea, and noticing that they flew off towards a steep and barren mountain (Trekroner), he set out in that direction, and arriving there found that these Geese:—

“Were swarming to and fro along the gigantic mountain wall like bees at their hive, and I heard a continuous humming, sounding like distant talk. . .

“While some of the Geese would constantly fly along the rocky wall, and sometimes mounted so high in the air that they disappeared on the other side of the rocks, the majority of the birds were sitting in couples upon the shelves of the rocky wall, some of which seemed too narrow to give room for the two birds—much less for a nest. It was only on the steep and absolutely naked middle part of the mountain that the Geese had their quarters, and in no place lower than some 200 meters from the base of the cliff. As the wall was quite inaccessible, I had to content myself by firing some rifle-balls against it in order to frighten the birds and thus form an idea of the size of the colony.

The birds which were 'at home' then numbered some 150 individuals. As far as I could judge, breeding had not yet commenced."

Herr Manniche has some interesting observations regarding the moult of the Ptarmigan and other birds, and concerning the dark and pale forms of the Fulmar, from which it would appear that the dark-breasted birds greatly predominated from about lat. 75° northwards.

Regarding the breeding-habits of the Knot, the author has much of great interest to tell us, although he was not fortunate enough actually to find a nest:—

"More than the other waders," he writes, "the Knots keep strictly in couples immediately after their arrival. . . The pairing-notes of the male filled the air everywhere a few hours after their arrival.

"The male suddenly gets up from the snow-clad ground, and producing the most beautiful flute-like notes, following an oblique line with rapid wing-strokes, mounts to an enormous height, often so high that he cannot be followed with the naked eye. Up here in the clear frosty air he flies around in large circles on quivering wings, and his melodious, far-sounding notes are heard far and wide over the country, bringing joy to other birds of his own kin. The song sounds now more distant, now nearer when three or four males are singing at the same time. Now and then the bird slides slowly downwards on stiff wings with the tail-feathers spread: then again he makes himself invisible in the higher regions of the air, mounting on wings quivering even faster than before. . .

"Gradually, as in increasing excitement he executes the convulsive vibrations of his wings, his song changes to single, deeper notes—following quickly after each other—at last to die out while the bird at the same time drops to the earth on stiff wings strongly bent upward. This fine pairing-song may be heard for more than a month everywhere at the breeding-places, and it wonderfully enlivens this generally so desolate and silent nature. The song will, at certain stages, remind of the fluting call-note of the Curlew (*Numenius arquatus*), but it varies so much with the temper of the bird, that it can hardly be expressed or compared with anything else. . .

"Already, June 10th, I found an almost fully-developed egg in a shot female. From the middle of June I often met with females, the behaviour of which made me suppose with certainty, that they had commenced to breed. In such birds I found well-marked breeding spots, and but quite small eggs in the ovaries. All the breeding birds behaved in nearly the same way. When I carefully walked over a larger table-land a bird would suddenly appear just before my feet, rushing silently and as secretly as possible away between stones and following furrows in the earth. When I—having vainly searched for the nest—rapidly followed the bird, this would, with a short call, fly high up in the air, disappear for some moments and again appear a little farther forward on the plain, where it continued its silent running, as it seemed, without the slightest inclination to go to the nest. If at last I secured such a bird it always proved to be very thin and to have breeding spots—certain signs that it had eggs or young ones. I have from an ambush watched such birds for hours, but I never succeeded in getting them to show me their nest.

"The breeding localities were quite the same as those of *Calidris arenaria*: dry, stony, sparsely covered table lands, with clay or sand-

mixed ground. I met, however, always with the supposed breeding-birds on rather extensive plains, and not on the small 'stone-islets' in the moors, a fact that made my searches after the nests more difficult.

"I met with breeding birds as well south as north of the gravel-banks plateau in the Stormkap territory, but I never found them close to the shores of the firths."

Old nests, considered to be those of Knots, were found, and birds were observed undoubtedly in company with young, but no eggs and no downy young ones were actually seen, though on August 22nd, 1907, three young able to fly, but with plenty of down still left round the base of the bill, were secured. "I did not see any old bird later than August 8th," is a significant note.

There is much here to interest us also concerning the breeding-habits of the Sanderling, which was found in considerable numbers, and photographs are given of the nest and eggs, and of the bird on the nest, as well as a coloured plate of the young in down. Herr Manniche did not succeed in finding an incubating male, and it would appear that after the eggs are laid the males join into flocks and leave the country before the middle of July. The "tactics" of the female in guarding her chicks are thus described:—

"Already when at a distance of some 200 or 300 metres from the young ones, the old female would rush towards me, and by all kinds of flapping and creeping movements in an opposite direction, try to lead me astray; all the while she would squeak like a young one and now growl angrily, striving to draw my attention to herself only. Now and then she would rise very high in the air in a direct rapid flight to disappear behind a rock on the opposite beach of a lake, etc. From quite another direction she soon appeared again just before my feet."

Of the Grey Phalarope's love-making the author gives a delightful account, from which we may quote the following:—

"As the male seemed to pay no attention to her alluring movements she flew rapidly up to him—producing as she left the water a peculiar whirling sound with her wings, and uttering short angry cries—pushed him with her bill, and then she returned to the water and took up her swimming-dance. Now the male came out to her and the two birds whirled around for some moments equally eager and with increasing rapidity. Uttering a short call, the female again flew to a tuft surrounded by water and waited some seconds in vain for the male; again she flew to the water to induce him with eager pushes and thumps to accompany her. They again whirled violently around, whereafter she, uttering a strong alluring sound flew back to the tuft, this time accompanied by the male—and the pairing immediately took place."

The Snow-Bunting was quite the commonest bird of this country, and was observed even so far north as lat. 83° 30' N.

We have quoted at length from Herr Manniche's book, but it should be read by all those interested in the breeding-habits of these birds, more especially as the author has done us the compliment of writing his narrative in English. H.F.W.



LETTERS

THE MOVEMENTS OF YOUNG ROOKS.

To the Editors of BRITISH BIRDS.

SIRS,—Regarding the BRITISH BIRDS Marking Scheme, I would suggest that during the coming nesting-season, a little more attention be given to Rooks, whose movements require some clearing up. In the Blantyre district of Clyde—which is a thorough “Rook country,” and which contains within a three mile radius, some half a score of rookeries and upwards of eight hundred nests—practically all young Rooks have migrated by the end of October. During the winter and early spring months, you may walk this countryside day after day and have hundreds of Rooks under observation, yet you will rarely see an immature, i.e., feathered-faced bird, amongst them. If all ornithologists who live in “Rook country” would examine their Rook population, some very interesting facts might be gleaned, for with a pair of serviceable binoculars, even at a range of two hundred yards, the immature birds will—for some time yet—be easily distinguishable from the adults.

Very little shooting of young Rooks takes place in this locality. Nearly all nests are built high up amongst the branches of very tall beeches, very few in fact being accessible to the climber.

WALTER STEWART.

WILLOW-TIT OR MARSH-TIT IN DUMFRIESSHIRE.

To the Editors of BRITISH BIRDS.

SIRS,—I have read with more than usual interest the notes on “The British Willow-Tit in the West of Scotland” (*supra*, page 284).

As the author of the latest work dealing with Scottish Ornithology (i.e., *The Birds of Dumfriesshire*, 1910), I feel it behoves me, in view of my inclusion therein (pp. 40-42) of the Marsh-Tit (*Parus palustris dresseri*), to write to you a few words in explanation.

I must now confess that I cannot say with certainty whether it is the Marsh- or Willow-Tit which occurs in this county. I have never closely examined a locally-obtained specimen, and although I saw one this autumn up Seaur Water, as I have done on former occasions, I failed to procure it. When I wrote my book, I thought (though I have since learned that I had no right so to think) that the Willow-Tit was confined to the south of the British Isles, and the specimen which in my book (p. 41) I refer to as shot “in Capenoch Garden on August 1st, 1908,” was so badly mauled by shot that it was only carelessly looked at and then thrown away.

My correspondents, to whom I owe much of the information given by me under the unfortunate heading of the "British Marsh-Titmouse," are unable to satisfy me convincingly as to whether their observations apply to *Parus palustris dresseri* or *Parus atricapillus kleinschmidti*.

Under these circumstances I feel it my duty, so as to avoid possible confusion hereafter, to write as I have done. The question, therefore, now stands :—Do both the Willow- and Marsh-Tit occur in Dumfriesshire ; or, if only one, which ?

HUGH S. GLADSTONE.

A BAIKAL TEAL IN DEVONSHIRE.

To the Editors of BRITISH BIRDS.

SIRS,—On February 3rd I received in the flesh an adult male Baikal Teal (*Nettion formosum*), which was shot by a coast-gunner near Plymouth on January 26th, 1911. The specimen was first noticed by my friend, Mr. Charles Tracy, who sent the bird to me as something he had not seen before. The bird was very fat but somewhat decomposed at the time of arrival, but I have managed to make a good skin of it. The position of the Baikal Teal as a British bird is at present somewhat doubtful, but it has as much claim to inclusion in our lists as many foreign visitors, for there is no reason that it should not visit us amongst the mass of duck that are bred in Siberia and come westwards in winter. On the other hand, numbers of imported Baikal Teal are now on private waters in this country, whilst it has undoubtedly bred at Woburn and probably elsewhere.

J. G. MILLAIS.

[We should not accept the addition of the Baikal Teal to the British list for the very reason that it is so frequently kept in captivity, and therefore liable to escape. It is said to have been obtained in France and Italy, but its usual winter-quarters are in China and Japan.—EDS.]

BRITISH BIRDS

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ON THE POSITIONS ASSUMED BY BIRDS
IN FLIGHT.

BY

BENTLEY BEETHAM, F.Z.S.

III. ALIGHTING.

THE act of alighting appears to be not the least difficult part in the performance of flight ; indeed, whether it be regarded from man's standpoint or from the bird's, it may well be accounted with the most difficult.

On a boisterous day when a bird wishes to alight at some particular point, its powers are often taxed to the utmost. The obvious signs of this being so are the abrupt and spasmodic turns, and the flapping of the wings, and the jerky, erratic course immediately preceding the alighting ; while not infrequently the clumsy and hurried actions on touching the ground, plainly show how comparatively little the flight had been under control the moment before alighting.

That this is a real difficulty of which the birds are fully conscious is, I think, shown by their preparing for alighting long before they actually do so. Their first care is apparently to reduce their speed as much as possible, so as still to leave them sufficient " way " to ensure some stability in the air, and some power of guidance. They soar round and round or approach slowly on a long, wavering course, trailing their feet as brakes, or advance in a vertically zig-zag course, finding much resistance in short but steep ascents. But even after these and many other preliminary devices have been tried, birds often get sadly knocked about on really boisterous days when alighting on the cliffs. The difficulty lies not so much in the mere act of alighting, as in the settling at some particular spot. A bird must slow up, or the impact would be too great for its leg muscles to cope with ; and the difficulty is that when slowing up and almost at a standstill in the air, so to speak, it is greatly at the mercy

of the air-currents—a swirling gust of wind being able then to carry it this way and that, whereas were it in full flight an equal gust might hardly affect its onward course. I have seen Guillemots and Puffins when on the point of alighting, and despite their rapidly-beating wings, bodily blown over in the air and hurled backwards thirty feet



FIGURE 1.—INTENT ON ALIGHTING.

(*Photographed by Bentley Beetham.*)

from where they intended to set foot. Frequently, too, a bird, in wild weather or when agitated, will fail to effect a landing, on a cliff for example, at the first attempt, perhaps finding it has too much pace to risk a contact with the rocks, or, having too little, a gust of wind will



FIGURE 2.—SWEEPING UPWARDS.
(Photographed by Bentley Beetham.)

“take hold” of it and bear it past the place it intended to alight upon.

As when dealing with “Taking Flight,” I illustrated my remarks by photographs of the Gannet, it may be well now to continue with the same bird, and to try to follow some of its actions when alighting.

In Figure 1 the Gannet is approaching, intent on



FIGURE 3.—MAXIMUM OF RESISTANCE.
(Photographed by Bentley Beetham.)

alighting. The pace is comparatively slow, and is being continually lessened, and the course of the bird is being steadied by the trailing feet. The position of its home is not indicated in the picture: it was on the top of the column of rock, the base of which is vaguely suggested at the left-hand side of the print. Each time

the bird approached its method was the same. It flew along the cliff-face until it reached a point nearly opposite to the nest, but considerably below it; then it swept round abruptly until it faced the cliff, at the same time giving its course a strong upward tendency, still trailing its feet. Figure 2 shows the bird just after it had faced round to the cliff and was sweeping upwards. As soon as



FIGURE 4.—JUST SET FOOT UPON THE LEDGE.
(*Photographed by Bentley Beetham.*)

it arrived directly opposite to its nest, its one thought was to stop the forward and upward impetus produced by the great soaring approach.

Figure 3 shows plainly the measures adopted by another bird—which, by the way, advanced in a more direct and horizontal course, and had, therefore, a more direct forward momentum to counteract. It flew straight for

its nest, sweeping slightly upward until it found itself almost opposite the place, and perhaps some five or six yards distant from it. Then by a dexterous turn it threw the plane of its greatest surface into a vertical position and at right angles to the direction of its course, thus offering the maximum amount of resistance possible. The whole area of the wings, body, and tail is directly



FIGURE. 5.—THE WINGS HAVE COME CRASHING DOWN
UPON THE ROCKS.

(*Photographed by Bentley Beetham.*)

opposed and spread out to resist the bird's forward-passage through the air, and it is interesting to note how the tail has been extended to the utmost, fan-wise, so as to increase as much as possible the effective area. It will be noticed that the feet are thrust forward and the

webs extended in anticipation of the coming contact. That a great strain is being placed upon the wings, and that therefore a great resistance is being encountered, is indicated by the curve of the primaries.

Figure 4 shows the position a moment later. The bird has now got its feet upon the rock (or rather one foot, for the other is thrust out horizontally on the nest, having no doubt missed its mark, and can be of little, if any, support), and appears to be almost stationary, but as a matter of fact it has still a forward impetus which the raised wings are trying to counteract. The bird has, indeed, just set foot upon the ledge, and is falling forward in the direction of its approach.

The last photograph (Figure 5) again carries us on a brief moment. Now the bird has pitched forward on to its breast, its wings having failed to find sufficient resistance in the air to counteract the body's momentum, and in consequence the wings have come crashing down upon the rocks at the end of their strenuous beat. The position of the tail is interesting; in Figure 3 it is seen fully expanded and depressed in order that its ventral surface may oppose the forward progress, and now it is turned upwards above the back so that its dorsal surface may find resistance and try to counteract the tendency to pitch forward on to the breast.

THE MIGRATION OF THE WHITE STORK.

BY

A. LANDSBOROUGH THOMSON.

AN important inquiry by the ringing-method has been carried on for several years from the station at Rossitten (East Prussia) into the migration of the White Stork (*Ciconia alba*): in these pages attention has already been drawn to this work and some of its earlier fruits (Vol. II., pp. 366-7; III., p. 86), but a paper has recently been published (Thienemann, *Zool. Jahrbücher*, Suppl. II., pp. 665-686, and plates 16-18) summarizing the results obtained up to date, and this fully deserves a brief account. The case of the Stork is of interest to us apart from the species' slight claims to a place on the "British List." not only on account of its bearing on the general question of migration, but also as an extremely fine example of the successful application of the ringing method. While summarizing the German results we may also refer to some obtained by Mr. Mortensen, of Viborg, Denmark (*Dansk ornith. Forenings Tidsskrift*, 1907, pp. 147, 155), and by the ornithologists of the Royal Hungarian Ornithological Central-bureau (Schenk, *Aquila*, Vols. XV., XVI., XVII.).

(1) *Autumnal South-easterly Migration through Europe.*—The following journeys have been performed by birds marked with Mortensen (the three Danish and the first German cases) and Rossitten rings (the remaining cases). It may be noted that all the records refer to young birds marked in the nest at the localities named first, and recorded from the second localities in the early autumn of the same years.

Viborg, Denmark, to Diekow, Brandenburg.

Viborg, Denmark, to Wulkow, near Frankfort-on-the Oder.

Viborg, Denmark, to Marclowitz, Austrian Silesia.

Weseram, Brandenburg, to Hermannstadt, south-eastern Hungary.

Geschendorf, near Lübeck, to Michelwitz, near Breslau.

Poppendorf, Mecklenburg-Schwerin, to Tenczinau, Upper Silesia.

Lippehne, Brandenburg, to Kassa Bola, northern Hungary.

Bühne, in the Harz Mountains, to Sehma, in the Erzgebirge, not far from Chemnitz.

Langfelde, near Danzig, to Grubieszow, Government of Lublin, Poland.

Agilla, East Prussia, to Sorquitten, East Prussia.

These journeys, it will be noticed, all have the same south-easterly trend, thus crossing at right angles the routes followed by most species at that season.

(2) *Migration to and from Africa*.—No marked Storks have as yet been reported from the Balkan States, or from Asia Minor, but three east Prussian Storks have been obtained in Syria—one in the April following marking, and the others in April and July of the second year after marking; there are also records of a Hungarian Stork from Syria, and of an east Prussian Stork from Palestine (August). Next we have a record of a Stork obtained near Alexandria in May of the year following that of its marking in east Prussia.

Three Storks marked in east Prussia in summer have been respectively recorded during their first autumn from—

Jawa, Lake Fittri, near Lake Chad (October);

Rosaires, Blue Nile (October 30th); and

Ukerewe Island, Lake Victoria Nyanza (November 30th).

The next locality in the southward line is Morogoro, German East Africa, but the exact history of the bird obtained there is not yet certain, the number on the ring not having been reported. Fort Jameson, north-eastern Rhodesia, is the next locality; here a Stork was shot on December 9th, 1907, which had been hatched and reared in Pomerania a few months before; there it had left the nest on August 10th and the district on August 25th or 26th. Then we have a record of an east Prussian Stork shot in the Kalahari Desert during its first winter.

(3) *Winter-quarters*.—Finally, there are seven records of Storks marked in east Prussia and neighbouring provinces, and obtained in the winter months in the Transvaal, Natal, Basutoland, and northern Cape Colony

About a dozen Hungarian Storks have been obtained in the same region, one of them in *July* of the summer following that of its marking. A Hungarian Stork has also been obtained as far west as German south-west Africa.

(4) *Return to Summer-quarters.*—We may summarize the records of Storks found in Europe in summers subsequent to that of their marking, as follows, all the records of which we have details being for German birds, but there are also some similar Hungarian cases :

<i>Distance from Birthplace.</i>			<i>Season.</i>		
3	English	miles (approx.)	..	Next	Summer.
9	”	”	..	”	”
60	”	”	..	”	”
17	”	”	..	Second	Summer after.
437	”	”	..	”	”
9	”	”	..	Third	”
19	”	”	..	”	”

A return to the summer-quarters is thus obviously the rule, but we must note the existence of the exception : the Stork born and marked near Brunswick in 1906, and reported on June 30th, 1908, from Sorquitten in east Prussia. As already stated, the localities are about 437 miles apart ; being nearly in the same latitude they are obviously on quite different lines of flight. This record, and such other exceptions as the records from the Lake Chad region and German south-west Africa, indicate the necessity for further study of a case which might otherwise be considered as nearly complete. Still more is this the case with the record which forms our final section, and which opens up an entirely fresh line of inquiry :

(5) *Autumnal South-westerly Migration through Europe.*—In 1910 the Rossitten Stork-marking area was extended into Holland and western Germany. No results have as yet been published, but while at Rossitten last September we heard of the first “return” from Dr. Thienemann, as it came to hand : marked near Cassel in western Germany that summer, the bird in question had just been recorded from the Barcelona district of Spain ! That a Stork hatched in western Germany should take such a totally different line of flight from those hatched in Den-

mark and north-eastern Germany is truly remarkable, and we await with interest the working out of this new route. The position and nature of the boundary between the south-westerly and south-easterly flighting Storks is also a momentous question. But in the meantime we must not build too much on a single record.

Dr. Thienemann certainly deserves to be congratulated on the achievement of such a notable piece of work—nor must the Danish and Hungarian contributors be forgotten—and every encouragement should be given towards its completer consummation.

NOTES

THE RECENT "REMARKABLE MIGRATION PHENOMENA."

It is not often that the phenomena of migration are brought so forcibly before the general public as they have been within the last few weeks, by the wholesale destruction that occurred on the night of March 29-30th, 1911, in the south-east of Ireland. The daily Press duly chronicled the event, and, as might be expected, the story lost nothing by repetition: and all sorts of theories, more or less fanciful, were suggested as the cause. The most trustworthy account would seem to be that which appeared in the *Irish Times* for March 31st, and, stripped of its journalistic embellishments, is shortly as follows: From the night of March 26-27th to that of the 29-30th, Curlews and Starlings were heard passing over the town of Carlow; on the latter night Curlews in "immense flocks" were heard passing [apparently] to the north-east from 10 p.m. till after midnight; while during the same period some hundreds of other birds were also passing over, and numbers of them were killed against telegraph wires, etc., being found dead in the morning in the streets, Starlings, Redwings, and Thrushes being identified. Between the same hours on the same night, similar occurrences took place at New Ross (co. Wexford) and Kilkenny, Starlings being specifically mentioned at the first locality, and Curlews, Thrushes, Blackbirds, and "Sparrows" at the second.

To those who are in any way familiar with the subject of migration, and have taken the trouble to study the Reports of the Migration Committees of the British Association and the British Ornithologists' Club, there is no need to conjure up fanciful theories to account for this "remarkable phenomenon," or, as even the *Field* heads it "Remarkable Influx of Birds in Ireland." The species concerned are all well-known autumn-migrants to, and winter-residents in, Ireland: the localities concerned all lie within a circle with a radius of sixteen miles in the south-east corner of Ireland, and, therefore, well within the known migration-route of these birds. The date is well within the normal period of the spring-migration of these species, when they might be expected to leave Ireland in a more or less easterly direction. Moreover, the moon was in her dark phase, and the night was therefore dark, and in

addition, calm and foggy—conditions which are well known as being unfavourable to the birds, in that they more or less lose their sense of direction and are attracted by strong lights, such as the towns mentioned would afford. The “phenomenon” is, therefore, exactly comparable to what happens at every season at the light-stations round our coasts on what are sometimes termed “good migration nights,” i.e., good from the observer’s standpoint, but bad from that of the birds’ Of course, it is but seldom that such a conjunction of circumstances happens in an inland locality, but it did so happen again a few nights later, as related by Mr. R. O. Mathews in the *Field* for April 15th. In the early morning of April 3rd. Curlews were heard flying north continually for several hours over Marlborough (Wilts.); some species of the larger Gulls were also heard flying in a more easterly direction, and many other species were also heard passing over. Many also came to grief as in Ireland, those found dead during the day being Redwings, Thrushes, Starlings, Blackbirds, Snipe, a Woodcock and a Common Scoter. The occurrence of the latter so far inland is, of course, unusual, and may be only accidental, but the others are all well-known migrants at this period, though there is no reason, or even need, to suppose, as the writer suggests, that the Marlborough and Irish birds were the same individuals. Without going into details, it may be worth while to add that the returns sent in by the keepers of the west-coast lights to the Migration Committee of the B.O.C. fully corroborate what has been said above, that these “phenomena” are merely part of the normal spring-migration of the species concerned, but brought forcibly before the notice of even the most unobservant by a fortuitous combination of circumstances.

N. F. TICEHURST.

BLYTH’S REED-WARBLER AT FAIR ISLE.

A NEW BRITISH BIRD.

YET another bird is added to the British list by the indefatigable workers on Fair Isle. Mr. W. Eagle Clarke records (*Ann. Scot. Nat. Hist.*, 1911, p. 70) that a bird somewhat like a Garden-Warbler was observed in some turnips on Fair Isle by the Duchess of Bedford in September, 1910, but only a momentary view of it could be obtained. On the day following (no exact date is mentioned) the bird was found in the same place, and obtained by Mr. Clarke’s observer. Mr. Clarke and Dr. C. B. Ticehurst identified it as Blyth’s Reed-Warbler, (*Acrocephalus dumetorum*) and this has been confirmed by Dr. E. Hartert.

The coloration of Blyth's Reed-Warbler is less red than that of the Reed-Warbler, and even slightly more olivaceous and rather darker than that of the Marsh-Warbler, but to distinguish any of these three species by the coloration without very careful comparison is impossible.

Blyth's Reed-Warbler, however, differs in wing-formula from both the other species, by having a considerably shorter second primary. This in Blyth's Reed-Warbler falls between the fifth and seventh (and is sometimes shorter than the seventh), whereas, in the other two species, the second is generally equal to the fourth.

According to Dr. Hartert (*Vög. pal. Fauna*, I., p. 564) Blyth's Reed-Warbler breeds in the Himalayas, Altai, Turkestan, Bokhara, Transcaspia, western Siberia, and in Russia from Orenburg to Moscow and St. Petersburg, and northward to Archangel. It winters in India, southward to Ceylon and Lower Burma. It does not appear to have been noticed previously westward of St. Petersburg.

GREAT GREY SHRIKE IN MONTGOMERYSHIRE.

ON March 25th, 1911, I received for identification an adult specimen of the Great Grey Shrike (*Lanius excubitor*) which had been found at Penybontfawr, near Llangynog; it had apparently been dead several days. There are very few previous records in the county of Montgomery (*cf. Vert. Fauna N. Wales*, p. 126).

Since writing the above, I have seen at the shop of a local taxidermist another example, obtained in the same county in October, 1910; the owner does not wish the locality to be published.

H. E. FORREST.

CROSSBILLS BREEDING IN ENGLAND IN 1911.—

IN SUFFOLK.

DURING the last twelve months I have been in regular communication with friends in regard to the movements of Crossbills (*Loxia curvirostra*) in Suffolk, and on March 9th, 1911, I received word that many birds were still about, and that they were all in pairs. On the strength of this information, I journeyed to the same locality where I found them breeding last year. On March 12th a systematic search resulted in the finding of three nests—one with four slightly-incubated eggs, another with three eggs also slightly incubated, and a third without eggs. All the nests were in typical situations in Scotch pines.

I do not think attention has been called to the beautiful manner in which the nests are concealed *from above* by branchlets of the tree; indeed, in some cases, it is almost impossible to see the nest until these are drawn to one side.

Subsequently, seventeen more nests were found in the locality, and some of these I have personally inspected. All were in Scotch pine at a height of eight to fifty feet from the ground, and all were in typical positions. The details are as follow:—March 26th, one with two eggs both sucked, one with four eggs, three broken, dead female on nest; March 29th, one with three fresh eggs; April 5th, one with three young; April 11th, one with four fresh eggs, one with four eggs, incubation commenced; April 12th, one with three eggs, incubation advanced; April 13th, one with four eggs, incubation commenced; April 15th, one with four eggs, incubation commenced, one building; April 16th, three with four fresh eggs, two with three eggs, incubation commenced, one building, one ready for eggs but apparently forsaken.

On this date a flock of seven birds was seen, and this was the most considerable number of birds seen together during the course of these observations.

So far as this locality is concerned, judging by the conversation I have had with a particularly intelligent set of keepers, I feel, in my own mind, confident that Crossbills breed here every year. Many of these keepers are certain that they are here all the year round, year after year, and, to use the words of one of the oldest keepers on the estate, "These 'ere early Green Linnets nestes I have know'd the last forty year." They have, no doubt, been overlooked owing to the very early date at which they breed.

P. F. BUNYARD.

IN NORFOLK.

DURING February and March, Mr. A. H. Meiklejohn and I paid several visits to a district about four miles from Thetford in which Crossbills nested in 1910, in order to discover whether they would do so again this year.

Our search was confined to quite a small tract of country—about half a square mile in extent—and resulted in the finding of eight nests. Of these, one (the first nest found, February 19th) contained two newly-hatched young and one egg, one two eggs (March 8th, another egg having been blown out of the nest on March 1st), one three eggs (March 25th), three, four eggs (March 19th, 22nd and 31st), whilst two other nests were being built (March 26th and 31st). The weather during the

last ten days of February was very wild, with almost continuous westerly gales, and on March 1st the nest containing young ones was found to be deserted, whilst the second nest had been blown to one side, and a fresh egg was lying broken on the ground under the tree. The keeper considerably climbed up and put the nest straight, and on March 3rd the cock was re-lining it with feathers. On March 5th the hen began to sit, and on March 8th the nest contained two eggs. Another gale from the north on March 26th destroyed the nest containing three eggs, blowing it completely upside down, and turning the eggs out.

All the nests were in Scotch firs, either at the extreme top or at the end of a lateral branch : three were in roadside trees, and three in trees close to cottages.

From inquiries I have made, I cannot hear of any Crossbills having been seen in this district between May 31st, 1910—on which day Mr. Meiklejohn and I saw one pair—and January, 1911. The keeper upon whose beat the nests recorded above were found, who is a keen observer, tells me that he saw no birds during the last six months of 1910. B. B. RIVIERE.

IN KENT.

A NEST of a Crossbill was found by the Rev. J. R. Hale and myself near Maidstone, Kent, on March 31st, 1911. The nest contained four eggs, and was built upon the identical branch of the same tree on which a pair of Crossbills nested in 1910. C. D. BORRER.

BEE-EATER IN SUSSEX.

On April 7th, 1911, Mr. L. Cooke, of White Gate Farm, Pett, saw a specimen of the Bee-eater (*Merops apiaster*) in the orchard on his farm. Mr. Cooke told me that he was quite certain what it was, as it seemed very tame, and allowed him to get within a few feet. The bird eventually flew off to a wood some distance away. On April 13th a Bee-eater (no doubt the same bird) was brought to me in the flesh for examination. It had been shot the day previous (April 12th) at Winchelsca, a few miles only from the farm at Pett where it had been seen by Mr. Cooke. H. W. FORD-LINDSAY.

HOOPOE IN WINTER IN YORKSHIRE.

A FEMALE Hoopoe (*Upupa epops*) was shot on the golf-links at Ganton, Yorkshire, by a youth with a catapult, on

November 3rd, 1910. The specimen was much damaged, a bullet or stone having passed right through its body; but it has been preserved, and is now in the possession of the Golf Club at Ganton. The crop and gullet of the bird contained a number of *larvæ* of the crane-fly. W. M. J. CLARKE.

ROUGH-LEGGED BUZZARD IN SUSSEX.

Two fine examples of the Rough-legged Buzzard (*Buteo lagopus*) were shot in Sussex last autumn. A male on October 31st, 1910, at Netherfield—which has been presented to the Hastings Museum—and a female on November 1st, 1910, between Netherfield and Battle.

I understand that both birds had been seen in the district for two or three weeks before they were obtained.

H. W. FORD-LINDSAY.

WHITE-TAILED EAGLE IN SHROPSHIRE.

MR. G. H. PADDOCK, informs me that on April 2nd, 1911, he and his son observed an Eagle near Wellington, Salop. Their attention was first attracted by the behaviour of a lot of Peewits and Starlings, which were feeding in a field and suddenly scattered in all directions. Looking up, they saw a huge bird coming from the direction of the Wrekin. At first they took it for a Buzzard, but as it approached and flew right over them, they saw that it was far too large and much darker in colour. Mr. Paddock, who is a good ornithologist, identified it without a doubt as *Haliaëtus albicilla*, a species that has been recorded over a dozen times in Shropshire.

H. E. FORREST

PEREGRINE FALCON IN WILTSHIRE.

AN adult female Peregrine Falcon (*Falco peregrinus*) was trapped by a keeper near Marlborough, on March 29th, 1911. An immature Peregrine was shot at Marlborough in September, 1908.

R. O. MATHEWS.

BREEDING OF SHOVELER, TUFTED DUCK, AND GARGANEY IN SOMERSET.

IN BRITISH BIRDS, VOL. II., pp. 83 and 415, are short notes on the breeding of the Tufted Duck (*Fuligula cristata*) and Shoveler (*Spatula clypeata*) in Somerset, the former on Blagdon Reservoir in 1906, the latter on the Somerset moors. I know of no record of the breeding of the Tufted Duck in the county prior to that date. The Shoveler has been known to breed on

the peat-moors of mid-Somerset more than twenty years ago. The late Rev. Murray A. Mathew, writing on this district, states: "The Shoveler, and perhaps the Garganey, would nest regularly if the gunners would only let them alone. I possess an egg of the Shoveler taken on the North Curry Moor some years ago" (see *Zoologist*, 1891, p. 93). I have also several notes on the appearance of the Shoveler near Glastonbury in spring and summer during the last decade of the nineteenth century, under conditions which made it almost certain the birds were breeding in the district. Since the completion of the extensive reservoir at Blagdon, in a Valley to the north of the Mendip Hills, about eleven years ago, the Shoveler seems to have increased as a breeding-species in the county, or, at any rate, has come more under observation. Donald Carr, the ranger and keeper, informs me that numbers of these birds now breed, and have done so for several years, in the meadows around Blagdon Reservoir. He reports also that two pairs of Tufted Ducks and a pair of Garganey (*Querquedula circia*) nested there in 1910. If there has been no mistake in identification, this is the first record I know of the breeding of the Garganey in Somerset, though it has often been obtained in the county in spring; and Colonel Montagu, more than a hundred years ago, states that he often received this species from the Somerset decoys in April.

I have seen literally hundreds of Tufted Duck and Pochard on Blagdon Reservoir in winter, but apparently only a few pairs of the former species, and none of the latter, remain to breed there.

F. L. BLATHWAYT.

GOOSANDER IN SUSSEX.

A FINE adult male of the Goosander (*Mergus merganser*) was obtained at Bodiam, Sussex, on February 27th, 1911, and is now in the Hastings Museum.

H. W. FORD-LINDSAY.

LATE STAY OF GOOSANDERS IN CHESHIRE.

THE Goosander (*Mergus merganser*), a not infrequent winter visitor to the Cheshire meres, has on one or two occasions remained until the third week in March, but in the winter of 1910-1911 a party of birds remained for an exceptionally long time. From December 3rd to the 17th a brown-headed Goosander was constantly on Tatton Mere, and on the 18th five were observed by the gamekeeper at Marbury, near Northwich; by January 8th the number had risen to eight. They were all brown-headed, but, judging from variation in size, the party contained birds of both sexes. They generally fed in the morning, and

during the afternoon rested on a grassy ledge below a steep bank of the mere. I repeatedly watched them during January, February, and March with Mr. T. Hadfield and Mr. A. W. Boyd, and except during a short frost early in the year, we almost invariably found them resting in the one spot. On April 9th we saw the eight birds, but on the morning of April 14th, the last date on which they were seen, the game-keeper only counted five.

T. A. COWARD.

NESTING OF THE GREAT CRESTED GREBE IN SOMERSET.

THE Great Crested Grebe (*Podiceps cristatus*) has apparently been extending its breeding-range in our islands during recent years, but I fancy there are very few records yet of these birds nesting in the south-west of England. I know of no records of the nest having been found in Somerset until last year, when I heard from quite reliable sources that two pairs nested in 1910 on Blagdon Reservoir, and several pairs on Chard Reservoir. The record is, I believe, the first for Blagdon, though, possibly, not quite the first for Chard, from which locality I hear that last June (1910) steps were taken to banish the birds as being prejudicial to the fishing. Several pairs were nesting, and eggs were found. It would be interesting to hear whether there are other records from the south-western counties.

F. L. BLATHWAYT.

LANCEOLATED WARBLERS IN SCOTLAND.—Mr. W. Eagle Clarke announces (*Ann. Scot. Nat. Hist.*, 1911, p. 71) that a specimen (a bird of the year—sex not mentioned) of the Lanceolated Grasshopper-Warbler (*Locustella lanceolata*) was captured at the Pentland Skerries (Orkney) on October 26th, 1910, and sent to him in the flesh. Mr. Clarke, who acknowledges the assistance of Dr. C. B. Ticehurst, finds that a bird which he shot at Fair Isle, on September 9th, 1908, also belongs to this species. This is likewise a bird of the year.

It will be remembered that this Warbler was added to the British List by Mr. Caton Haigh, who obtained an example in Lincolnshire on November 18th, 1909 (*cf.*, Vol. III., p. 353).

MEALY REDPOLL IN MULL.—Specimens of *L. linaria* from Skye in November, 1910, have already been reported (*supra*, p. 255), and we now have a record by Mr. D. Macdonald (*Ann. Scot. Nat. Hist.*, 1911, p. 114) of a specimen in Mull, on October 31st, 1910.

HOLBÖLL'S REDPOLL IN SHETLAND.—Additional to the records already given (*supra*, p. 291) Mr. J. S. Tulloch records

two specimens of *L. l. holboelli* from Shetland on October 28th, 1910 (*Ann. Scot. Nat. Hist.*, 1911, p. 115). Mr. W. Evans also records (*t.c.*, p. 114), that besides the one already mentioned in our pages (*supra*, p. 292), he examined a number of others from the Lothians.

NORTHERN BULLFINCH IN SCOTLAND.—In connection with the occurrence of *Pyrrhula p. pyrrhula* already recorded in our pages (*supra*, pp. 211, 250, 292), it is interesting to note that Mr. W. Evans reports (*Ann. Scot. Nat. Hist.*, 1911, p. 113) one from Archerfield (East Lothian) on October 29th, 1910. A Bullfinch seen by Mr. Budge on October 31st, at Barnness Light, near Dunbar (Haddington), was also probably of this race, as was another caught in the neighbourhood of Berwick-on-Tweed (Northumberland) in the same autumn. Mr. Evans mentions that a specimen was captured about the end of October, 1884, on the coast near Longniddry (Haddington).

NORTHERN GREAT SPOTTED WOODPECKER IN SCOTLAND.—In connection with the note on this subject (*supra*, p. 286), and especially with regard to the bird obtained in Yorkshire on September 14th, 1909, it is interesting to find that a Spotted Woodpecker obtained by the Misses Rintoul and Baxter at the Isle of May on September 16th, 1909, and already referred to in these pages (Vol. III., p. 378), has been pronounced to be a specimen of *D. m. major* by Dr. C. B. Ticehurst (*Ann. Scot. Nat. Hist.*, 1911, p. 116).

SPOTTED SANDPIPER IN YORKSHIRE.—In a recent issue (p. 319) we expressed a doubt as to the authenticity of a specimen of a Spotted Sandpiper shot at or near Hebden Bridge about 1899, and recorded by Mr. Walter Greaves in the *Naturalist* (1911, pp. 100-101). Mr. Greaves has very kindly written to us on the subject, and supplemented the information given in the article referred to. Although the exact date and exact locality are uncertain, there can be, we think, on Mr. Greaves's new evidence, no reasonable doubt that the bird was in fact shot at or near Hebden Bridge about 1899. Mr. Greaves tells us that the taxidermist from whom his information is derived is in no sense a dealer, but is a stuffer of locally-obtained specimens; that he well remembers skinning this bird himself, and immediately noticing that it was a species new to him. There is little chance, therefore, that any mistake could have been made, although, unfortunately, the essential details of date and locality were not attached to the skin.



LETTERS



THE MOVEMENTS OF YOUNG ROOKS.

To the Editors of BRITISH BIRDS.

SIRS,—Mr. Walter Stewart raises an interesting point regarding the movements of immature Rooks. In the Windermere district these birds migrate during October, and are absent until the end of March or beginning of April. A few feather-faced individuals are then seen about, but the proportion of these to white-faced birds is very small.

Another question which might be settled by ringing young Rooks is, whether these birds breed in the first year or not. Howard Saunders says that this species does not breed until nearly two years old, but in the *Field* of October 24th, 1908, a correspondent states that when watching Rooks building nests that week (autumn attempts at breeding by this species are not uncommon), he found that all the birds so engaged were immature. I believe another observer has seen feather-faced Rooks carrying sticks. Personally, though I have frequently watched these birds at Rookeries in the breeding-season, no sign of them nesting has been detected, with the exception that I once saw a bird that was undoubtedly breeding which had the face in an intermediate condition—only partially bare of the feathers.

ERIC B. DUNLOP.

SIRS,—If your correspondent, Mr. Stewart, succeeds in marking a large number of young Rooks, I think he will find that it is the bill-feathers which go before winter, and not the young Rooks.

That a few young Rooks retain the feathers after the first autumn moult is undoubtedly the case, but I believe the proportion to be very small. I have kept young Rooks in partial confinement which lost the bill-feathers before the first winter.

M. BEDFORD.

A BAIKAL TEAL IN DEVONSHIRE.

To the Editors of BRITISH BIRDS.

SIRS,—It is more than likely that the Baikal Teal reported in the April number of *BRITISH BIRDS* (p. 348) had escaped from Woburn. We have a large number of full-winged birds, and I counted fifteen flying together a short time ago.

M. BEDFORD.

SIRS,—I expect we shall soon hear of numerous "British" killed Baikal Teal from the fact that the price of live birds has recently dropped from six or seven guineas per pair to less than one-third of that sum. I do not know where the dealers obtain their stock, but the market is now full of them.

HEATLEY NOBLE.

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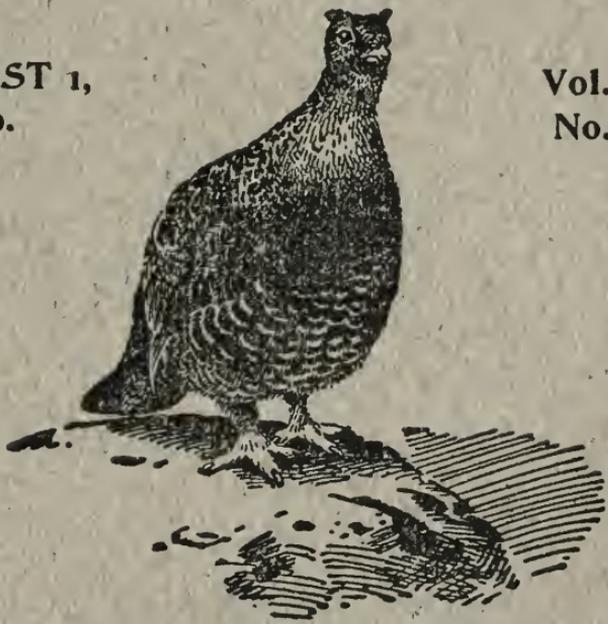
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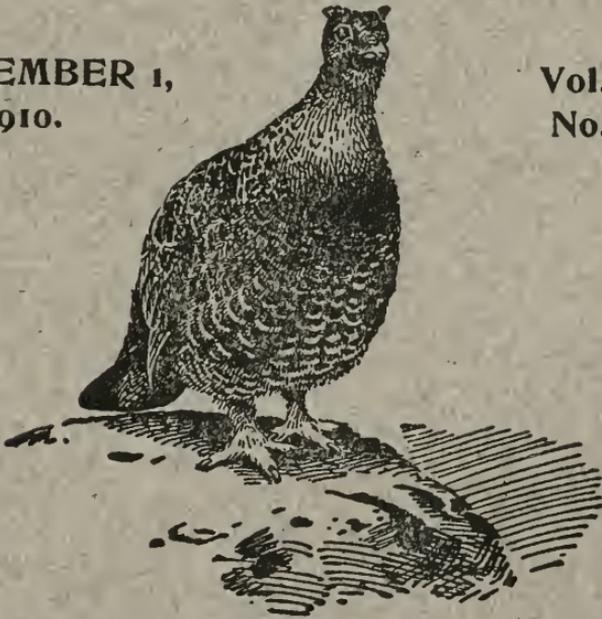
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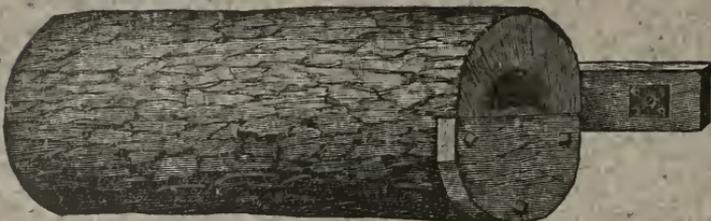


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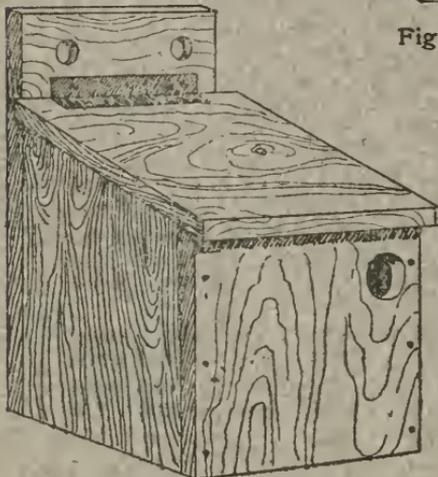


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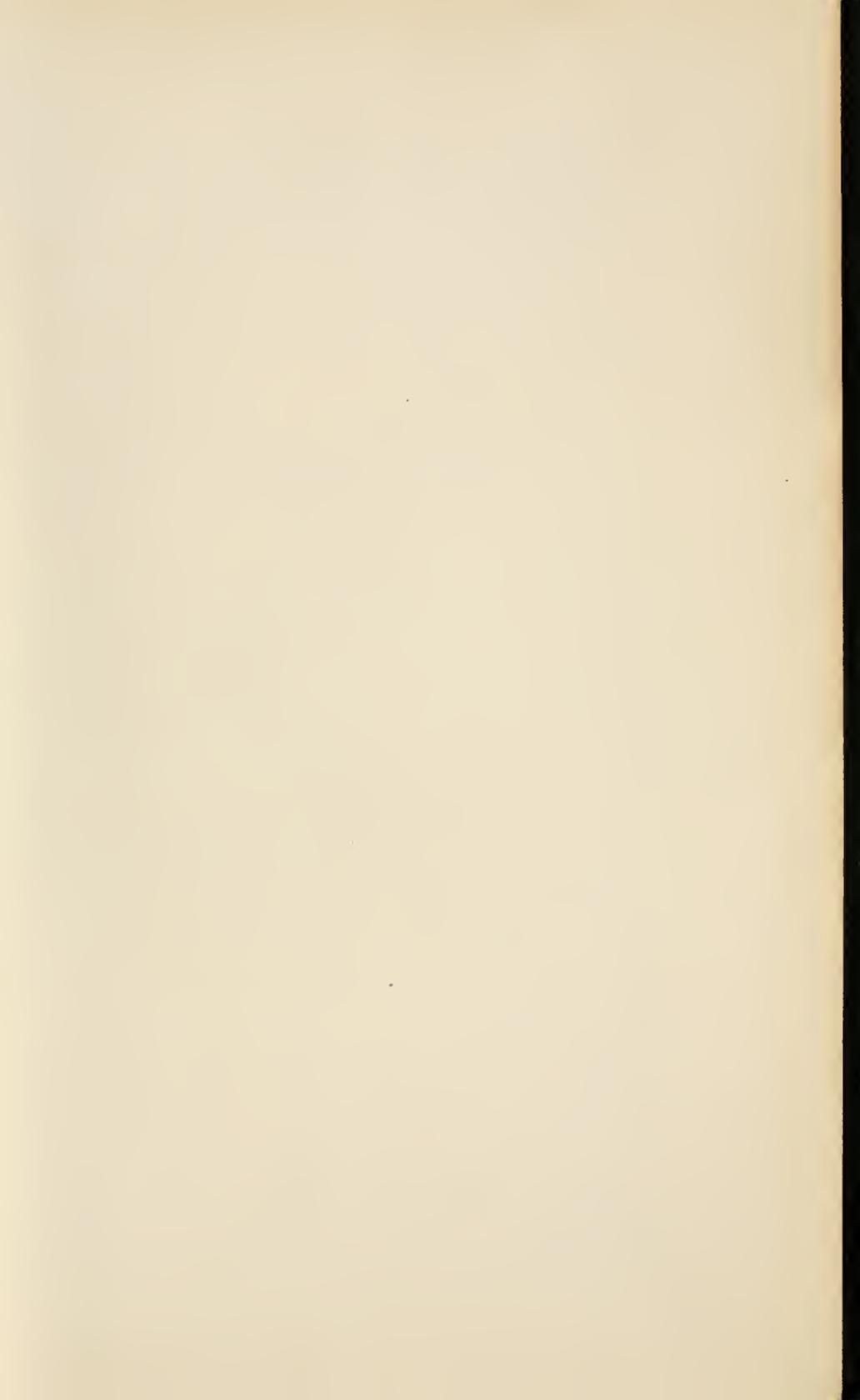
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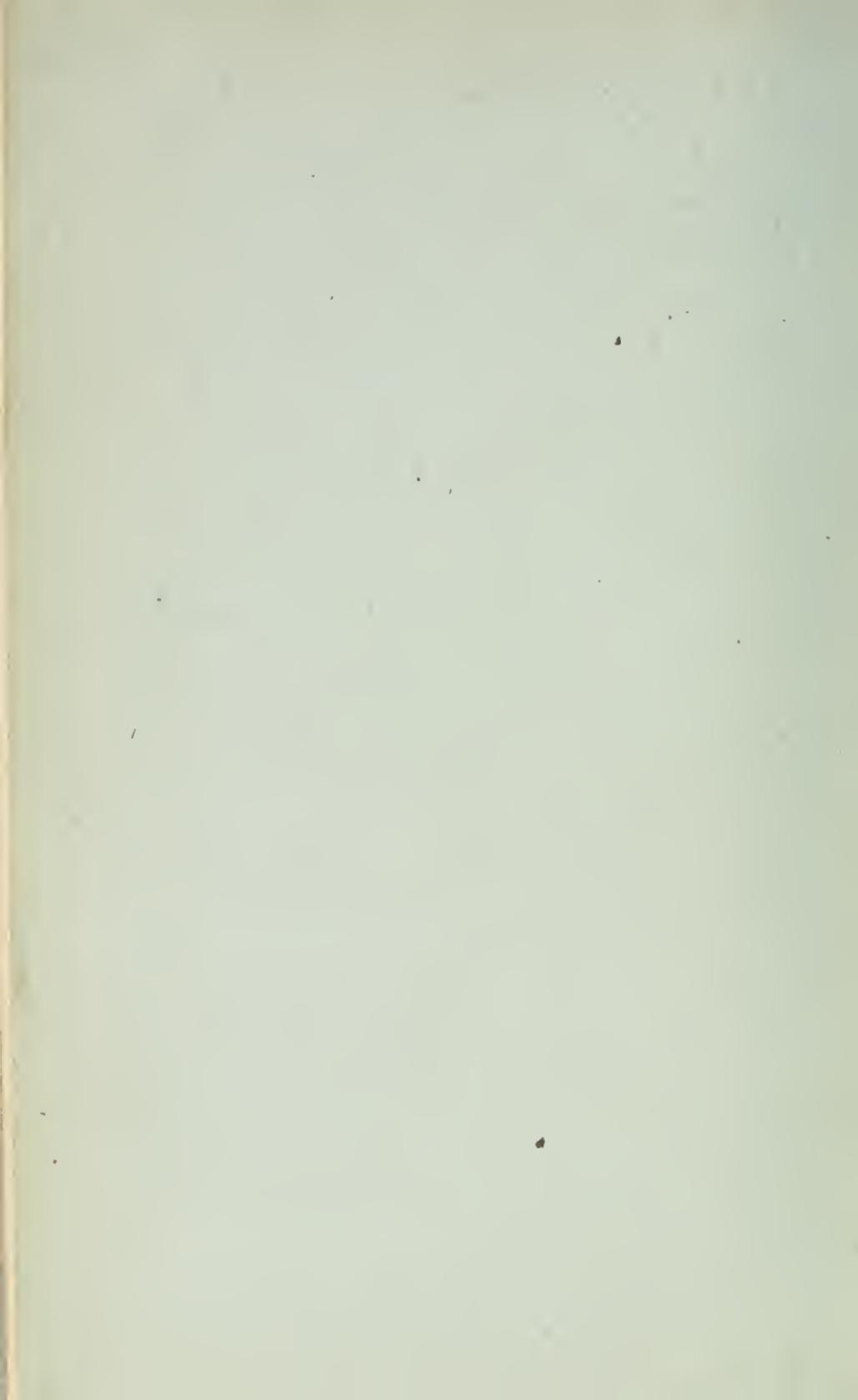
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