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# BRITSHBIRDS

WITH WHICH WAS INCORPORATED IN JANUARY 1917, "THE ZOOLOGIST."

## AN ILLUSTRATED MAGAZINE DEVOTED CHIEFLY TO THE BIRDS ON THE BRITISH LIST

EDITED BY

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ASSISTED BY

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H. F. & G. WITHERBY



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# BRITSHBIRDS

With which was Incorporated in January, 1917, "The Zoologist."

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#### ON THE BREEDING-HABITS OF THE GLAUCOUS GULL AS OBSERVED ON BEAR ISLAND AND IN THE SPITSBERGEN ARCHIPELAGO.\*

BY

#### A. H. PAGET WILKES, B.A., M.B.O.U.

Although the Glaucous Gull (Larus hyperboreus) is a tolerably common winter visitor to parts of our coast line, only the most scanty notes describe the nidification and breeding habits of this most interesting circumpolar Gull in the annals of British ornithology. In the New World, however, Mr. Bent has recently collected a good deal of information on this subject from observations made in the north of the Continent (Life Histories of North American Gulls and Terns. Messrs, Seebohm, Harvie-Brown and Pearson seem to be the only Englishmen who have made any study of the nesting of this Gull, as against observations collected from numerous sources by Mr. Bent. Pearson's notes made during a brief half-hour's visic to the sandy island of Korga, off the Kanin Peninsula (Three Summers among the Birds of Russian Lapland, 1904) were certainly not surpassed by Seebohm's and Harvie-Brown's short account of their visit to the Golaievskai Islands, in the Petchora River. Von Middendorf and other foreign ornithologists found the gull breeding along the coasts of Arctic Russia, though not very abundantly it would seem from Von Middendorf's account of the scattered pairs on the Taimyr River. In Spitsbergen, Martens was the first to record the bird in 1675, and Koenig has given us accurate details. In north-east Greenland, Manniche found it nesting but only obtained two eggs, and Winge reports it breeding in the south and west.

The most accessible breeding-place of this bird is without doubt on the Westmann Islands, off the coast of Iceland, but the scattered pairs on these islands hardly compare with

the colonies of Bear Island and Spitsbergen.

From observations made by Koenig in 1907 and 1908, and by ourselves in 1921, Bear Island seems to be more or less the headquarters of this Gull as a breeding species in the Old World. Koenig found it nesting on Gull Island, a small rocky islet standing some 300 ft. above the sea, thinly covered in places with turf-like moss. He found most of his nests about June 17th, on the shingle at the bottom of

<sup>\*</sup> No. 11 of the "Results of the Oxford University Expedition to Spitsbergen."

the cliffs round the southern end of Bear Island, just above high-water mark. From other evidence as well as this. the Glaucous Gull chooses a variety of nesting sites. Seebohm's party record the nests as mounds of sand with a hollowed apex scantily lined with sea-weed (Ibis, 1876, p. 453), and



NEST OF GLAUCOUS GULL. Edinburgh Islands, Spitsbergen. (Photographed by Seton Gordon.)

Pearson found the birds nesting in sand dunes. We found the Gull breeding for the most part on sharply sloping grass inclines above precipitous sea-cliffs some 600 ft. high. We also found it breeding some distance inland on the crags opposite Mount Humbergs, Bear Island, and at Ebba Valley.

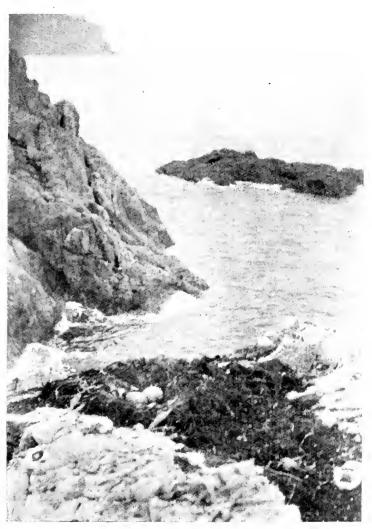
Spitsbergen. Again further north we met with it on small rocky islets in Lietde Bay and on Moffen Island, an extensive shingle-bank out at sea, over lat. 80° N. Then again, we found it on grassy ledges at Cloven Cliff and Vogel Hoek, and lastly at Mount Congress, Dickson Land and Advent Valley, on isolated pinnacles or bastions of rock. The colonies on Bear Island were larger than any we noted in the Spitsbergen Archipelago.



NEST OF GLAUCOUS GULL.

Moffen Island, Spitsbergen.
(Photographed by Seton Gordon.)

We landed on Bear Island on June 13th in the afternoon, in spite of a fairly heavy sea. Landing on Bear Island is always difficult and very often impossible and we were lucky to get on and off so easily. The cliffs were teeming with Fulmar Petrels (Fulmarus glacialis), Kittiwakes (Rissa tridactyla) and in the air, Glaucous Gulls. The Fulmars laid their single white eggs not only on the cliff faces, but on the top where the rapacious Glaucous Gulls found them easier to appropriate than on the narrow ledges and pockets of the rock. On more than one occasion we caught them—flagrante



NEST OF GLAUCOUS GULL.
Cliffs near Mount Misery, Bear Island.
(Photographed by A. H. Paget Wilkes.)

delicto. Near the top of the cliff on the promontory running out towards Gull Island, we found our first gull's nest, containing two eggs. It was placed in a depression in the soil where the top of the cliff on the one side fell a sheer 400 ft. to the sea and on the other side sloped away by easy gradations. There was little enough material, the nest consisting of a few pieces of moss, some medium sized chips of stone and a feather or two from the bird itself.

The next day being calm we rowed round to Gull Island. where we landed with some difficulty. Here we found scores of Fulmars sitting on depressions in the soil, containing in most cases nothing at all, but in several containing a stone about the size of the bird's egg. It is possible that some of the Fulmars' eggs had been eaten by the Gulls, as we subsequently saw done, but it seems more probable that the Fulmars were on the point of laying. There were also some twenty pairs of Glaucous Gulls here, just beginning to nest. Later, I went down alone to the water's edge on the south side of the island and found some more unfinished nests on the broad stone ledges half way down. One nest, apart from the rest, was complete, with the bird sitting or three eggs. The nest was a bulky structure of pieces of moss, dry sea-weed, wrack, etc., and contained quite a number of the bird's small feathers. The two birds both stood on a rock near by uttering their wild, veloing cries and taking an occasional short flight. usually coming back to the same rock. The eggs were fresh (June 14th) and were the only complete clutch we obtained on Gull Island, and are now in my collection. Near this nest I found another with two eggs. Sometimes the nests were only scrapes, barely lined with dry, brown moss; others were great piles, a foot high, of green moss, roots, saxifrage, seaweed, etc.; the moss often being soaking wet. The following day was very misty as we set out along the cliffs towards Cape Kolthoff. We met one or two outlying pairs of gulls, all nesting in typical Herring-Gull sites on broad, grassy ledges or slopes of shale, before we came to one of the colonies. The cliffs were some 400 ft. high and above them steep slopes of turf-like moss and screes of small stones half covered by the moss in places. On the slopes where the moss had gained a complete hold a small colony of Glaucous Gulls had made substantial nests, in some cases on the very edge and never more than 50 yards from it. Here we found sixteen eggs in six nests. Some of these were on the point of hatching, but in this colony we also found two nests not vet laid in.

The day after this we went northwards along the coast towards Mount Misery and found several small colonies of nests on some low cliffs, one nest containing chipping eggs. On examination of this nest the parent birds became very demonstrative and one "stooped" at my head repeatedly in the same way as I have seen *L. marinus* do. We then found a colony of twenty-eight pairs nesting on broad grass and rock terraces forming low cliffs. Round several nests one saw bones and feathers of Kittiwakes and Guillemots



TWO YOUNG GLAUCOUS GULLS AND NEST.

Moffen Island, Spitsbergen.

(Photographed by Seton Gordon.)

(Uria l. lomvia). At one nest alone there were three of the former and one of the latter. Of these nests only five contained clutches of two, but I think there is hardly any doubt that two is as typical a clutch as three. In this colony we found two young in down with a chipping egg, which shows that eggs must have been laid during the second week in May. Here again, the eggs were mostly in an advanced stage of incubation, our dates thus coinciding with those of Koenig. The next day, June 17th, Mr. Brown found a colony on the west coast at Cape Harry numbering over twenty pairs. Eggs from this colony were highly incubated with one or two exceptions

which were perfectly fresh. On June 22nd we went over to the great Guillemot colony near Cape Bull. In the middle of the Guillemot territory we came upon some twenty pairs of the Glaucous Gull nesting. A number of nests contained young in down of some size. A few were running about on the cliff and were nearly the size of an adult partridge. The parent birds exhibited great anxiety, but I carefully noted that only one bird ever attempted to "stoop" at me. Here I saw at least two Gulls eating the Guillemot's eggs. Jourdain went on about half a mile to Cape Bull itself, where he found a large colony of some 50-60 pairs. The five best clutches which he selected from the colony all proved perfectly fresh, so that here we saw two colonies, within sight of one another on the same stretch of cliff, the one with young in down of considerable size, the other with empty nests and fresh eggs. On Moffen Island we found a similar state of affairs, but the fresh eggs might have been second layings, since the island is often visited by sealers.

Owing to the inaccessibility of their breeding-grounds and the short periods which one is able to spend with them, few consistent or connected observations can be made of the home life of the Glaucous Gull, but the only chance of obtaining a more complete knowledge is by making as many careful observations as time and circumstance permit in the hope that the aggregate will some day assume the proportions of a record of value. Koenig's and Mr. Jourdain's measurements for the eggs of the Glaucous Gull are as follows:—

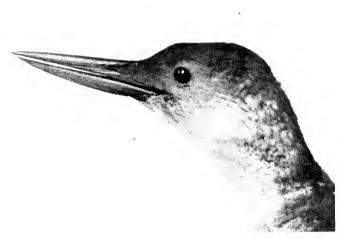
C.C.				
Koenig	g, 65 eggs.	Oxford Ex	pedition, 11	5 eggs.
Av. : 77'17	7 × 53°19 mm.	Av. :	$76.81 \times 53.9$	8 mm.
	$\times$ 54 and $\times$ 56.4	Max.:	89 × 60.è	)
	$\times$ 51.3 and $\times$		50 × 56.1	

#### ON THE WHITE-BILLED NORTHERN DIVER AS A BRITISH BIRD.

BY

#### H. F. WITHERBY.

While working out the plumages of the White-billed Diver (Colymbus adamsii) for the Practical Handbook of British Birds I found that a specimen in the British Museum collection



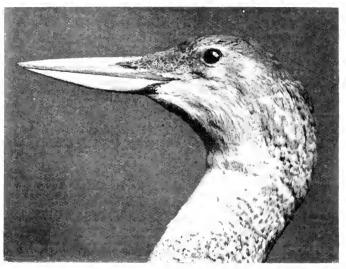
C. adamsii, Embleton, Northumberland, Dec. 1829.

obtained by Mr. Abel Chapman in 1879 in Northumberland and recorded by Mr. Ogilvie Grant in 1908 as of this species (British Birds, I., p. 295, see also V., p. 174) is in fact an example of the Great Northern Diver (C. immer). This error made me feel uncertain about the other recorded British occurrences accepted as correct in our Hand-List (p. 159). By the kindness of those in possession of the specimens I have been able to obtain sufficient details of some to determine the species and the result is that two in any case are Colymbus adamsii. Details of the specimens and records are as follow:

I. Colymbus adamsii.—December 1829, near Embleton, Northumberland, now in the Hancock collection, Newcastle-

on-Tyne. Mr. E. Leonard Gill, curator of the Hancock Museum, has very kindly sent me a photograph (here reproduced) of this bird from which it is clear by the characteristic shape of the bill that it is an example of *C. adamsii*. Mr. Gill also informs me that the shafts of the primaries are nearly white, except just at the tips, where they are dark brown. In the Great Northern Diver the shafts are dark brown throughout.

2. C. adamsii.—Spring 1852, Pakefield, near Lowestoft, Suffolk, now in Mr. J. H. Gurney's collection. Mr. Gurney



C. adamsii, Pakefield, Suffolk, 1852.

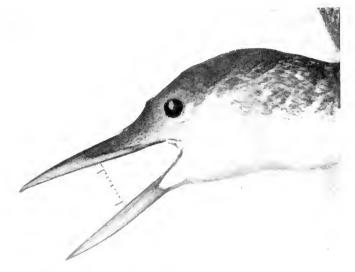
kindly provides a photograph of the bill, from which it is clear that this bird also is *C. adamsii*. As the bird is cased, Mr. Gurney has been unable to examine its primary-shatts.

- 3. Colymbus immer.—In Babington's Birds of Suffolk other examples are recorded, but the one figured in the plate in any case is clearly nothing but a Great Northern Diver, as Mr. Gurney has already pointed out (Zool., 1902, p. 99).
- 4. *C. immer.*—December 1872, Hickling Broad, Norfolk, killed by Booth, and now in the Brighton Museum. Of this bird Mr. A. F. Griffith has kindly sent us a photograph (here reproduced) procured by Mr. Toms the curator, and a cast

#### VOL. XVI.] WHITE-BILLED NORTHERN DIVER. 11

of the bill as well as a drawing of one of the primaries made by Mr. Brazenor the taxidermist. From this evidence, so carefully provided by the gentlemen concerned, it is quite clear from the shape of the bill and the dark primary-shaft that this bird has been wrongly identified and is an ordinary Great Northern Diver.

5. C. immer.—January 1879, Northumberland, killed by Mr. Abel Chapman and now in the British Museum collection. This specimen, as already remarked, has also



C. immer, Hickling, Norfolk, Dec. 1872, erroneously recorded as C. adamsii.

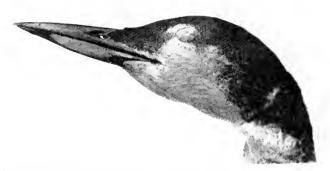
been wrongly identified as *C. adamsii*. Its bill is in no way characteristic of that species while its primary-shafts are dark brown.

All the evidence in the above cases was submitted to the B.O.U. List Committee at a meeting at the British Museum on February 8th, 1922, and I am desired here to state that the committee unanimously agreed with my conclusions.

There remain three other recorded examples (viz. 1893, autumn, Loch Fyne, Argyllshire; 1895–6, winter, Emsworth Harbour, Hants.; 1897, January, Filey, Yorks.), which I have been unable to trace and of which no sufficient details

have been published to enable me to come to any conclusion with regard to them. Under the circumstances I should exclude them from the British List until they can be proved to be correctly identified.

In summer plumage *C. adamsii* is quite easy to distinguish owing to the white spots on the upper-parts being much larger and the white streaks on the throat and neck broader and fewer than in *C. immer*, besides the head and neck being glossed purple rather than green. At all seasons and ages the shafts of the primaries in *C. immer* are dark brown, while in *C. adamsii* they are whitish (except at the tip), but this



C. immer, Northumberland, Jan. 1879, erroneously recorded as C. adamsii. The tip of the lower mandible was broken and has been repaired.

character though useful is not invariable, since one specimen of *C. adamsii* in the British Museum has dark primary-shafts. Otherwise in juvenile and immature plumage the two birds are alike. The shape of the bill is, however, always diagnostic, and is much more important than its colour or size. The upper line of the upper mandible in *C. adamsii* is remarkably straight and does not descend towards the tip as in *C. immer*, while its sides are flatter and not so rounded; also the upward slope of the gonys is more abrupt than in *C. immer* and this gives the tip of the lower mandible a slightly upturned appearance. These differences in the two species were clearly pointed out by the late Prof. Collett (*Ibis*, 1894, pp. 269–283).

#### RECOVERY OF MARKED BIRDS.

The following have kindly sent in subscriptions towards the expenses of the Marking Scheme since the last acknowledgment was made: Capt. C. E. Alford, Messrs. C. F. Archibald, J. Bartholomew, R. O. Blyth, Mrs. Boord, Major H. S. Greg, Miss Logan Home, Dr. Moon, Miss Mellish, Messrs. R. Lawson Russell, J. T. Stephens, and the Waukegan Bird Club.

JAY (Garrulus glandarius).—88,210, ringed at Middleton Hall, Tamworth, Warwickshire, by Mr. E. de Hamel, on December 11th, 1920. Reported at the same place, on

December 31st, 1921, by Mr. James Rollason.

Starling (Sturnus v. vulgaris).—99.877, 99,926, ringed at Broughty Ferry, Forfarshire, as young birds, by Messrs. J. N. D. and T. L. Smith, on June 21st, and August 23rd, 1921. Reported near and at the same place on September 19th and November 7th, 1921, by Messrs. G. W. Roberts and J. A. Gregory.

100,843, ringed at York, as an adult, by Mr. V. G. F. Zimmerman, on May 25th, 1921. Reported at the same place, on April 18th, 1922, by Mr. A. W. House.

94,995, ringed at West Park, Leeds, by Mr. C. F. Archibald, on November 11th, 1921. Reported at the same place, on April 7th, 1922, by Mr. A. Threapleton.

Greenfinch (Chloris c. chloris).—MZ.32, MZ.97, ringed at Torrance, Stirlingshire, as young birds, by Mr. J. Bartholomew, on June 6th and 23rd, 1920. Reported four miles north of Glasgow, and at Glasgow Bridge near Kirkintilloch, Dumbartonshire, on March 6th and January 12th, 1922, by Messrs. J. Ritchie and J. Dick per Cage Birds.

926, JN.34, ringed at Southport, Lancs., as nestlings, by Mr. F. W. Holder, on June 1st, and May 14th, 1921. Reported near the same place, and at Marygate, York, on February 7th, and in March 1922, by Mr. R. Rimmer,

and per the Daily Mail by Mr. Matthew Hall.

Bullfinch (*Pyrrhula p. pileata*).—QW.92, ringed at Headington, near Oxford, as a young bird, by Mr. J. F. Madden, on May 31st, 1921. Reported at Shotover,

Oxford, in November 1921, by Mr. C. Creese.

Chaffinch (*Fringilla c. cælebs*).—ČM.20, ringed at Stanmore, Middlesex, as a nestling, by Mr. R. O. Blyth, on May 18th, 1919. Reported at the same place in April, 1922, by Miss Romer.

TREE-SPARROW (Passer m. montanus).—OR.99, ringed at Cheadle, Staffs., as a nestling, by Mr. J. R. B. Masefield, on June 9th, 1921. Reported at Easton, Stamford. Lines., about October 23rd, 1921, by Mr. W. H. Tillson,

PIED WAGTAIL (Motacilla a. lugubris).—OO.20, ringed at Whitley Bay, Northumberland, as a nestling, by Mr. W. Raw, on May 6th, 1921. Reported at Seville, Spain. on November 15th, 1921, by Miss L. Clow.

MISTLE-THRUSH (Turdus v. viscivorus).—101,358, ringed at Southport, Lancs., as a nestling, by Mr. F. W. Holder. on May 24th, 1921. Reported at Westhoughton, Lancs., on October 17th, 1921, by Mr. J. Croft.

Song-Thrush (Turdus ph. clarkei). 90,217, 100,385, ringed at Orpington, Kent, as nestlings, by Mr. S. Kendall Barnes, on April 13th, and May 22nd, 1921. Reported about eighteen miles north of Rochefort. Charente Inférieure, France, and Pourville-sur-Mer, near Dieppe. France, on February 10th, 1922, and in November 1921. by MM. I. Stimarodge and A. Dreyfus.

88.926, ringed at Ullswater, Cumberland, as a nestling, by Dr. H. J. Moon, on May 18th, 1919. Reported near Rathangan, co. Kildare, on January 1st, 1922, by Mr.

Simon Malone.

HV.23, ringed at Torrance, Stirlingshire, as a young bird, by Mr. J. Bartholomew, on June 2nd, 1919. Reported at Annalong, co. Down, Ireland, at the end of January 1922, by Mr. J. W. McNeilly.

92,548, ringed at Bardowie Castle, Stirlingshire, as a young bird, by Mr. J. A. Anderson, on June 2nd, 1918. Reported at Balmore, Stirlingshire, on April 16th, 1022.

by Mr. D. Lennox.

Blackbird (Turdus m. merula).—99,894, 99,910, 99,937, ringed at Broughty Ferry, Forfarshire, one young and two adult birds, by Messrs. J. N. D. and T. L. Smith, on June 21st and 27th, and November 6th, 1921. Reported at the same place on September 10th, November 14th and December 25th, 1921, by Mr. A. S. Cameron, Miss Nina Scott, and the ringer. 101,296, ringed at Southport, Lancs., as a nestling, by

Mr. F. W. Holder, on May 14th, 1921. Reported near the same place on September 8th, 1921, by Mr. J. Forshaw. 94,183, ringed at Bilton, near Rugby, as a young bird, by Mr. A. C. Greg, on June 6th, 1919. Reported at Dunchurch, near Rugby, on October 21st, 1921, by

Mr. J. Lee.

94,087, ringed at Cheadle, Staffs., as an adult, by Mr. J. R. B. Masefield, on February 8th, 1919. Reported at the same place on January 26th, 1922, by the ringer. 101,485, 101,497, ringed at Pyrford, Surrey, one nestling and one young bird, by Mrs. L. E. Taylor, on June 19th and 26th, 1921. Reported at and near the same place on December 3rd and November 11th, 1921, by Miss Etheridge and Mr. R. J. Garland.

HM.11, ringed at Torrance, Stirlingshire, as a nestling by Mr. J. Bartholomew, on May 2nd, 1918. Reported at Clydebank, Glasgow, on March 17th, 1922, by Mr. J. McPherson.

Redbreast (*Erithacus r. melophilus*).—5,402, ringed at Laugharne, Carmarthenshire, as a nestling by Mr. J. F. Thomas, on August 20th, 1921. Reported at the same place, on January 6th, 1922, by the ringer.

3,866, ringed at Pyrford, Surrey, as a nestling, by Mrs. L. E. Taylor, on June 26th, 1921. Reported at the

same place, on January 4th, 1922, by the ringer.

BZ.28, BZ.29, 4,557, one adult and two young birds ringed at Patterdale, Cumberland, on May 7th, April 16th, and May 8th, 1921. Reported at the same place, on January 2nd, 1922, November 24th and December 28th, 1921, by the ringer and Mr. I. B. Philipson.

1,679, ringed at Bradfield, Berks., as a young bird, by Mr. W. A. Elliston, on May 27th, 1921. Reported at Bradfield Workhouse, on January 11th, 1922, by the

Sister in charge per the Daily Mail.

1.331, ringed at Reading, Berkshire, as an adult, by Mr. A. Steven Corbet, on August 14th, 1921. Reported at the same place, on April 15th, 1922, by Miss Pesterre.

3,086, ringed at Laugharne, Carmarthenshire, as an adult. by Mr. J. F. Thomas, on August 8th, 1921. Reported at the same place on April 8th, 1922, by the ringer.

Hedge-Sparrow (Princla m. occidentalis).—QS.20, ringed at Cheadle, Staffs., as an adult, by Mr. J. R. B. Masefield, on March 24th, 1921. Reported at the same place on February 10th, 1922, by the ringer.

QQ.68, ringed at Burnham, Bucks., as a young bird, by Mr. A. Mayall, on April 25th, 1921. Reported at the same place, in September 1921, by Mr. F. Lidden.

1,680, ringed at Bradfield, Berks., as a young bird, by Mr. W. A. Elliston, on May 25th, 1921. Reported at the same place, in March 1922, by Mr. N. H. Joy.

GY.49, ringed at Lytham, Lancs., as a young bird, by Dr. H. J. Moon, on May 1st, 1921. Reported near the same place on April 1st, 1922, by Mr. H. Turner.

TAWNY OWL (Strix a. sylvatica).—9,654, ringed at Rusland, Ulverston, Lancs., as a young bird, by Mr. C. F. Archibald, on June 4th, 1921. Reported on the moors of Westmorland, in December 1921, by Mr. John Taylor. 8,242, ringed at Bewdley, Shropshire, as a nestling, by Mr. J. Steele Elliott, on May 12th, 1915. Reported near the same place, on October 2nd, 1921, by Mr. A. G. Brockway.

Buzzard (Buteo b. buteo).—100,731, ringed at Matterdale, Cumberland, as a young bird, by Dr. H. J. Moon, on May 24th, 1921. Reported on Cross Fell, Cumberland,

in September 1921, by Mr. C. E. Wilcox.

Sparrow-Hawk (Accipiter n. nisus).—70,782, ringed at Kinclune, Kingoldrum, Forfarshire, as a nestling, by Messrs. J. N. D. and T. L. Smith, on July 2nd, 1921. Reported on The Duke of Atholl's Estate, Stanley, Perthshire, on February 11th, 1922, by Mr. A. McLaren.

Mallard (Anas p. platyrhyncha).—37.363, ringed at Leswalt, Stranfaer, Wigtownshire, as an adult, by Mr. M. Portal, on February 28th, 1921. Reported at Lake Storsjön, about 24 miles north of Gefle, Sweden, on August 4th, 1921, by Mr. C. J. Norman.

37,371, ringed as 37,363. Reported at place where

ringed on February 23rd, 1922, by the ringer.

37,384, ringed as 37,363. Reported at Nordskaale Village, Færoes, on May 12th, 1921, by Mr. Poul Niclasen, Editor of *Dimmalactting*.

37,389, ringed as 37,363. Reported one mile west of Norrköping. Sweden, on September 23rd, 1921, by

Mr. L. Ryuberg.

Teal (Anas c. crecca).—25,811, ringed at Leswalt, Stranraer, Wigtownshire, by Mr. M. Portal, on January 16th, 1915. Reported in small lake, two kilometers south of Riala Church, near Stockholm, on August 8th, 1915, by Dr. E. Lonnberg.

67,116, ringed at Beckside, Longtown, Cumberland, as a nestling (hand-reared), by Mr. T. L. Johnston, on August 8th. 1919. Reported at Surendal, a little east of Christiansund, Norway, on September 27th, 1921, by Mr. O. Vordgard.

Wigeon (Anas penclope).—36,806, 36,816, ringed at Beckside, Longtown, Cumberland, as young birds, by Mr. T. L. Johnston, on September 4th, 1920. Reported on Rockcliffe Marsh, Carlisle, Cumberland, on October 29th and September 14th, 1921, by Mr. A. Percival and Miss C. Mounsey-Heysham.

Stock-Dove (Columba &nas).—36,896, ringed at Cheadle, Staffs., as a nestling, by Mr. J. R. B. Masefield, on June 6th, 1919. Reported at the same place on April 3rd,

1922, by Mr. R. Fallows.

Lapwing (Vanellus vanellus).—94,464, ringed at Kilmacolm, Renfrewshire, as a nestling, by Mr. and Mrs. R. O. Blyth, on June 4th, 1921. Reported at Paisley, Renfrewshire,

on September 9th, 1921, by Mr. J. T. Carstairs.

95,975, 98,155, ringed at Torrance, Stirlingshire, as young birds, by Mr. J. Bartholomew, on June 3rd, 1920, and June 1st, 1921. Reported on the shores of Lough Neagh, Ireland, and Rathfriland, co. Down, in January, 1922, and on February 13th, 1922, by Mr. J. McDonald and the Rev. Thomas McDermott.

49,834, ringed on East Cheshire Hills, Cheshire, as a nestling, by Mr. R. E. Knowles, on May 24th, 1914. Reported near Long Eaton, Notts., on January 16th,

1922, by Councillor S. Husbands.

19,416, ringed on Rockcliffe Marsh, Cumberland, as a nestling, by Miss Mounsey-Heysham, on May 23rd, 1912. Reported at Knott End, three miles from Fleetwood, Lancs., on December 24th, 1921, by Mr. W. Troughton.

81,707, ringed at Hornby, Lancaster, as a young bird, by Major H. S. Greg, on June 4th, 1918. Reported at Slyne, Lancaster, on December 26th, 1921, by Mr. E.

Johnson.

Redshank (*Tringa totanus*).—91,579, 95,960, ringed at Torrance, Stirlingshire, one nestling and one young bird, by Mr. J. Bartholomew, on May 26th, 1918, and May 28th, 1920. Reported at Longton, near Preston, Lancs., and Beach Faim, Warton, near Lythain, Lancs., on November 19th, 1921, and March 10th, 1922, by Messrs. W. H. Heathcote and G. H. Preston.

88,614, ringed at Freshfield, Lancs., as a nestling, by Mr. E. W. Hendy, on June 1st, 1917. Reported at the same place on January 4th, 1922, by the Editor of the

Liverpool Echo.

97.446, ringed at Kirkby Moor, Ulverston, Lancs., as a young bird, by Mr. A. H. Greg, on May 15th, 1921. Reported at Saint Suliac, Ille-et-Vilaine, Brittany, France, on December 11th, 1921, by Monsieur E. Mordrel.

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SNIPE (Gallinago g. gallinago).—101,348, ringed at Southport, Lancs., as a nestling, by Mr. F. W. Holder, on May 24th, 1021. Reported near Wigan, Lancs., on December 30th, 1921.

95,906, ringed at Holcombe Brook, near Bury, Lancs., as a nestling, by Capt. A. W. Boyd, on May 27th, 1921. Reported on the marshes near Harlech Castle, North

Wales, on October 12th, 1921, by Lord Harlech.

85.803, ringed at Adel, Leeds, as a nestling, by Mr. C. F. Archibald, on May 14th, 1916. Reported at Headingly, Leeds, on September 5th, 1921, by Mr. R. G. Emstey. 90,256, ringed at Bridgnorth, Shropshire, as a young bird, by Miss F. Pitt, on May 16th, 1917. Reported near Holt, Denbighshire, North Wales, on November 8th, 1920, by Mr. T. A. Acton.

Woodcock (Scolopax rusticola).—97,490, ringed at Buchanan Castle, Drymen, Glasgow, as a young bird, by Mr. Robert Stewart, on June 17th, 1920. Reported at Alexandria, Dumbartonshire, on January 6th, 1922, by

Havemeyer.

COMMON TERN (Sterna hirundo).—HQ.7, ringed at Ravenglass, Cumberland, as a young bird, by Mr. H. W. Robinson, on July 8th, 1918. Reported on Longton Marsh, near Preston, Lancs., on August 27th, 1921, by Mr. A. Spiny.

LESSER BLACK-BACKED GULL (Larus f. affinis).—39,018. ringed at Foulshaw, Westmorland, as a young bird, by Mr. H. W. Robinson, on July 26th, 1920. Reported at Levens, Westmorland, on September 16th, 1920, by the Rev. E. U. Savage.

39,637, ringed as 39,018, on July 21st, 1921. Reported on the banks of the Humber, about eight miles from Hull, early in October 1921, by Mr. J. R. Appleby.

39,730, ringed as 39,018, on July 30th, 1921. Reported at Newcastle-on-Tyne, Northumberland, on September 11th, 1921, by Mr. A. Ridley.

39,663, ringed as 39,018, on July 23rd, 1921. Reported at Glassan Dock, near Lancaster, Lancs., on September

8th, 1921, by Mr. J. Johnson.

39,625, ringed as 39,018, on July 21st, 1921. Reported near the mouth of the Loire, near Batz, Loire Inférieure, France, on April 10th, 1922, by Monsieur Prosper Naudin.



## LARGE SETS OF ROOKS' EGGS IN ESSEX AND BERKSHIRE.

On April 1st, 1922, a party examined a large number of nests of Rook (Corvus f. frugilegus) in a big rookery at Saling, Essex. The number of eggs in the nests averaged very high. Very many nests contained five eggs and quite a large proportion held six; one nest actually had seven eggs. These eggs varied very much both in size and colour. Some were lightly marked and others very heavily pigmented. Out of the many hundreds of nests I have examined with the aid of boys, since I have been at Felsted, this is the only time that I have known a nest to contain seven eggs.

J. H. Owen.

Although I have examined large numbers of Rooks' nests and have seen six eggs not infrequently, it was not till April 8th, 1922, that a nest containing seven eggs was met with in a Berkshire rookery. They were quite uniform in type, being long, pointed, greenish-blue eggs, and formed a striking contrast with a set of six rounded, greyish eggs from the same tree. Since then Mr. R. W. Chase has shown me another set of seven in his collection.

F. C. R. JOURDAIN.

### MEALY REDPOLL IN BUCKINGHAM AND HERTFORDSHIRE.

THE meagre positive evidence of the Mealy Redpoll (Carduelis l. linaria) in Buckingham and Hertfordshire will perhaps justify a note on its occurrence in some numbers during the past winter. On December 4th, 1921, there was a flock of between twenty and thirty at Weston Turville Reservoir. When I first saw them the birds were clinging to the wilted stems of willow-herb (Epilobium hirsutum) and feeding on the seed, but on that day and afterwards they were mostly in the large patches of a goose-foot (Chenopodium rubrum), which had sprung up on the wide stretches of mud exposed by the drought of last summer. They varied a good deal in plumage, some being much grever and having more distinct white wing-bars than others. During December and January I could always count on the birds being among the patches of goose-foot, picking the seeds, sometimes from the dried flower-heads but as often from the ground. By February 12th their numbers had dwindled to about a

score, and I did not see them afterwards; the submergence of the mud in mid-February drove them, no doubt, to seek other feeding grounds. During January there were odd birds on the canal bank near the Tring Reservoirs, feeding on the seeds of the willow-herb, and once picking seed from a dried flower-head of yarrow (Achillea millefolium). From February 5th until mid-April there was a little party—feeding on I know not what—in the dried-up watercress beds at Berkhamsted. Originally ten, the birds had decreased to seven by April 13th. I left home on that day and failed to find them when I returned on the 19th. For two or three days previously a trilling song, indistinguishable to my ears from that of the Lesser Redpoll (C. 1. cabaret) had been associated with their customary twitter. Chas. Oldham.

#### REED-BUNTINGS FLOCKING IN SPRING.

THAT Mr. C. E. Pearson during a long residence in the Trent Valley has not until this year seen Reed-Buntings (Emberiza s. schemiclus) in flocks in early spring and the editorial comment on his note (antea XV., p. 269), makes me wonder whether my own experience has been unusual. Every spring since I came to live in Hertfordshire, fifteen years ago, I have seen parties of this species, varying in numbers from half-adozen to fifty or more, and usually associated with Meadow-Pipits (Anthus pratensis) and Pied Wagtails (Motacilla a. lugubris) on the banks of the reservoirs at Tring. Very few Reed-Buntings winter in west Hertfordshire and the appearance of these flocks, as a rule in March, but sometimes as early as mid-February, is second only to the return of the Great Crested Grebes (Podiceps c. cristatus) to their breeding-places as evidence of spring migration. The sight of these flocks at Tring was merely a continuation of my experience in Cheshire, and represented, I supposed, the normal state of things, for in Cheshire as in Hertfordshire the Reed-Bunting is scarce in winter, and the appearance of these mixed flocks on the margins of the meres in late February and March was as certain and constant an indication of the season as was the coming of the Chiffchaff (Ph. c. collybita) a little later. CHAS. OLDHAM.

I THINK that in Cheshire the flocking of Reed-Buntings in spring may be regarded as a regular habit and is certainly not at all unusual. In looking through my notes for the past dozen years I find that the date of their arrival by the Cheshire meres is usually from the middle to the end of March, and at this time they are often in flocks; in fact they may be

considered to be (with Pied Wagtails and Meadow-Pipits) our first summer migrants here. For example, on March 29th, 1911, I found a willow-bed practically full of newly arrived birds; on March 17th, 1912, I saw a large flock with Pied Wagtails and Meadow-Pipits—the Buntings predominating; and similar notes in subsequent years.

For occurrences of the same kind cf. T. A. Coward, Vert. Fauna of Cheshire, pp. 224 and 225.

A. W. Boyd.

#### EARLY ARRIVAL OF TREE-PIPIT.

On March 17th, 1922, I heard the first Tree-Pipit (Anthus trivialis) singing near Bexhill, Sussex. On the 18th I observed a pair in another part of the neighbourhood, but I did not see any again until April 12th, when I observed another pair. It is not a very common species in this district. The 17th March is, I think, an unusually early date for its arrival.

CHARLES G. YOUNG.

[The earliest dates recorded in the Migration Reports of the B.O. Club are March 30th, 1912 and April 1st, 1905 and 1906. Dr. W. E. Clarke's *Studies in Bird Migration* (p. 126) gives March 22nd, 1893.—EDS.]

#### FIRECREST IN WORCESTERSHIRE.

On November 29th, 1921, whilst sitting by a plantation overlooking the Upper Bittell Reservoir, north Worcestershire. I was astonished to see a Firecrest (Regulus ignicapillus) fly into a bush a few feet from me; it quickly passed through into the plantation, but I had time to see its markings well; it was a male bird. On this occasion it was silent. On December 2nd, whilst I was watching a Red-necked Grebe, already recorded (British Birds XV., p. 274) on the reservoir from near the same spot, I heard the distinctive note of the Firecrest, and saw it again, though not so well. A bird seen for a moment on December 8th may have been the Firecrest, but subsequently I could only see Goldcrests in the plantation, whereas, strangely enough, I saw none on the days when I saw the Firecrest. Owing to my experiences of the reappearance of Firecrests in early spring in Kent at spots visited during the late autumn, I looked and listened several times in March, but I did not see it again. H. G. ALEXANDER.

#### REDWINGS SINGING IN ENGLAND.

A good deal has, I believe, been written about the singing of the Redwing (*Turdus musicus*) in this country, and it seems to be generally concluded that what has been described in

such cases as singing is only the ordinary musical babble of a flock. The *Practical Handbook* states definitely that the true song is never heard in Britain. I had certainly never heard it myself until last Good Friday, April 14th, 1922. On that day I was walking down a wooded valley near Stocksfield, Northumberland, in heavy rain, and my attention was caught by a song that was new to me. A large straggling flock of Redwings was crossing the country from west to east, and all were pitching in transit into the wood. While they were in the trees their babble was incessant, though I did not once hear the usual winter call-notes, "querk" and "tsee." But many of them repeatedly broke into song; a short song in a clear, piping thrush-veice, falling slightly and very plaintively down the scale. The syllables I noted to remember it by were "chiree, chiree, chirerr, chirirerr."

In this connection it may be worth while to mention that about twelve years ago, at the end of April, I heard several Fieldfares sing on the wing as they were flying towards the coast over the Town Moor, Newcastle.

E. LEONARD GILL.

It seems very doubtful whether the tentative whistling of the Redwing, which has occasionally been heard in the British Isles, and which certainly forms *part* of the true song, and is quite distinct from the ordinary babble, can be described as the *full* song of the species. See notes on the subject by Messrs. N. B. Ashworth, W. Serle and one of the Editors in Vol. VII., pp. 322 and 346.—Eds.]

#### WHEATEARS MOBBING A WEASEL.

With reference to my note on the Wheatear (E. a. ananthe) (Vol. XV., p. 114) and the peculiar hovering flight of both male and female, I had ample confirmation on April 22nd, 1922, that Mr. A. H. Machell Cox's explanation (Vol. XV., p. 140) was the correct one. On that date I had been watching a pair when I suddenly saw them behave in the way so well described by Mr. Cox; for some time a fold in the ground hid the object of their attentions, but presently I saw that it was a weasel, advancing alternately above ground and under ground (via rabbit-holes). What interested me especially was that another pair of Wheatears from a neighbouring pitch came to help drive the weasel out of the territory of the first pair, but I did not notice that the Meadow-Pipits (Anthus pratensis), of which there were several about, offered any aid.

In the original instance, on the South Downs, the Wheatears were probably mobbing stoats, for there are a great number of these pests to be found there.

J. F. Thomas.

#### REDSTART NESTING IN ISLAY.

In the Practical Handbook of British Birds (Vol. I., p. 463), it is stated that the Redstart (Ph. ph. phænicurus) breeds in Mull but not elsewhere in Inner Hebrides. On June 5th, 1919, one of the keepers at Kildalton, Islay, showed me a Redstart's nest in a wall, and the same keeper wrote to me that he had seen two pairs of Redstarts at Kildalton in the summer of 1929. He had not seen any before 1919.

James Bartholomew.

#### GOSHAWK IN LEICESTERSHIRE.

Towards the close of March 1922 news reached me that a big bird of prey was frequenting the Freeby woodlands, near Melton Mowbray, and in due course the keeper, George Carter, came over and gave me some information about it. He and others had seen it several times, and it was supposed to be a Goshawk, but at the moment positive evidence was lacking. It was stated to be very destructive, and had once been surprised in the act of attacking a hen belonging to a local farmer named Miller. Subsequently it was scared away from a partridge it had Filled, and very accommodatingly shed a tail-feather that conclusively determined its identification. This tell-tale feather was 12 inches in length, and had five darkish brown bands on its upper surface; one glance at it was enough to show me that it had belonged to an immature female Goshawk (Accipiter gentilis). Henry S. Davenport.

#### BEWICK'S SWAN IN CHESHIRE.

THOUGH I was not lucky enough to see any of the Bewick's Swans (Cygnus b. bewickii), recorded in Vol. XV., p. 212, whilst they were alive, I had a very good view of one which crossed over a road near Bowdon immediately in front of me and at no great elevation on April 21st. As the bird approached, its small size, and the wing action, much more rapid than that of Mute Swans (C. olor), which frequently fly from mere to mere in Cheshire, at once attracted my attention, and as it passed within easy range of my glasses the bill pattern was very distinct. About the same time, though I do not know exact date, a bird described as "a cross between a goose and a swan "was shot (and I believe eaten later) on an east Cheshire reservoir, but from the direction of flight, northwest, of the bird I saw I do not think that the two were the same. T. A. COWARD

#### A FORMER STAFFORDSHIRE DECOY.

Decoys in the Midland counties are practically non-existent at the present day, and within a few more years time their unrecorded history may be beyond recall. Of the Duck decoy on the pool at Chillington Park, Sir Ralph Payne-Gallwey only briefly refers to it in his "Book of Duck Decoys." 1886, while Mr. A. M. McAldowie unfortunately ignores it altogether in his "Birds of Staffordshire," 1893. On a recent visit I found that the remains of the two pipes still exist, although the site of one is already difficult to locate, but of the other the greater part of the wire-netted iron framework still stands in position and a small portion of the reed screen also, even though it is now nearly forty years or more (Payne-Gallwey states 1883-4) since it was last worked.

Mr. W. T. C. Giffard, the owner of the estate, gives me the following list of Ducks taken in the respective years, and adds that the decoy has not been in use since the last year. Two Pintail Ducks were once taken.

1862	 65 ]	Ducks.	1870	 19 Ducks.
1863	 36 <b>5</b>	, ,	1871	 183 ,,
1864	 312	,,	1872	 145 ,,
1865	 168	,,	1873	 39 "
1866	 202	,,	1874	 208 ,,
1867	 225	,,	1875	 128 ,,
1868	 74	j 1	1876	 30 ,,
1869	 162	,,		J. S. Elliott.

#### GARGANEY IN CHESHIRE.

On March 26th, 1922, I put up a pair of Garganey (Anas querquedula) from the edge of the mere in Oulton Park and later watched them feeding in a muddy patch of marsh at the end of the mere. There was a pair of Teal (Anas c. crecca) there also, and the two drakes had a quarrel, chasing one another about in the shallow water until the Teal flew off followed by its duck. The Garganey allowed us to watch them at very close quarters, both in the water and on the marsh—the drake being a very beautiful bird. They were still there on April 1st but I did not see them later.

I heard them utter their harsh quack only, but Mr. G. F. Gee, who also saw the birds, heard the drake's rattle-note as well.

A. W. BOYD.

When watching a number of Teal at Rostherne on April 1st, 1922, I distinctly heard the rattle of a Garganey, but in the poor light failed to see the bird; on the following day, how-

ever, Dr. C. Cairnie saw on this same water a drake and one, if not two ducks. On the 5th I found two drakes on the water, but no ducks were visible. When I first saw these two they were more than half a mile away, but their much lighter appearance on the wing, when compared with Teal, was very noticeable. By careful stalking I had excellent views of them at close range, both on the wing and when settled on the bank.

The movement of Garganey through Cheshire may have been larger than is suggested by these observations and those of Captain Boyd and Mr. Gee, for a gamekeeper told me that on one day early in April he saw a large flock of light-coloured ducks, "a shade bigger than Teal," which were quite new to him. He is familiar with Teal. Wigeon, Tufted, Pochard, and Goldeneye, and it was when the birds were flying that he noticed their light appearance.

T. A. Coward.

#### COMMON SCOTER INLAND IN SOMERSET.

On April 18th, 1922, a fine male Common Scoter (Oidemia n. nigra) was shot by a farm labourer on West Sedgemoor, in Somerset, some twenty miles from the sea-coast. It was probably driven inland by the terrific south-west gale that was blowing on April 15th. A large part of the moor was flooded at that date.

C. J. Pring.

#### LARGE FLOCK OF GOOSANDERS IN MIDDLESEX.

On February 18th, 1922, Mr. C. A. Gladstone and I saw at least sixty Goosanders (Mergus m. merganser) on the two reservoirs of the Metropolitan Water Board at Staines. Though the large majority of the birds had brown heads, at least six were old drakes. At the same time, four Redbreasted Mergansers (M. serrator) were seen, all of which were brown-headed. Several times during the winter I observed Goosanders, up to the number of six, but can only be certain of having seen Mergansers on one other occasion.

It might be of interest to record one or two further observations. A flock of about twenty-five Goldeneyes (Bucephala c. clangula), including six mature drakes, wintered on the reservoirs. On April 13th an immature or female Common Scoter (Oidemia n. nigra) was seen by Mr. A. W. Boyd and myself.

Between January 31st and February 24th I saw the Black-necked Grebe (*Podiceps nigricollis*) on four occasions, three being seen together on February 14th. The birds were in

winter or juvenile plumage and the eye was clearly situated in the black portion of the head.

On April of six Grey Plovers (S. squatarola) and three Dunlins (Calidris alpina) were observed. K. Fisher.

#### SMEW IN WORCESTERSHIRE.

In view of the other records of "Saw-billed" Ducks from various parts of the country during the past winter, it may be worth recording that two Smew (Mergus albellus), apparently immature birds, were on the Upper Bittell Reservoir on December 27th, 1921. There was no sign of them on January 1st, 1922, but on the 6th one was seen again. It is rather remarkable that on December 27th the two birds were extremely difficult to approach, flying from end to end of the reservoir; but on January 6th, although the mud was frozen, allowing a much closer approach to the water's edge, the single bird then seen would not fly at all.

H. G. ALEXANDER.

#### SMEW IN ESSEX.

On March 18th, 1922, while accompanied by my friend Mr. S. Austin, I saw a female Smew (Mergus albellus) on Walthamstow Reservoirs. Occurrences of this species either in the London area or in Essex are not common. It would seem that there must have been an unusual movement of this species about the end of February as Mr. Rudge Harding records elsewhere three drakes and five or six ducks on Barnes Reservoirs on February 25th.

WILLIAM E. GLEGG.

[Sir Merrik R. Burrell records (*Field*, February 25th, 1922, p. 249) a Smew near Hailsham, Sussex, on February 14th.—Eds.]

#### BLACK-NECKED GREBES IN ESSEX.

Easter 1922 was spent with my friend Mr. C. S. Bayne on the Blackwater, in the neighbourhood of Bradwell. Of a number of interesting species seen the most outstanding was the Black-necked Grebe (*Podiceps n. nigricollis*). The first was identified on April 14th, when a single bird was seen at the edge of the water and as the tide was low the assistance of a high-power telescope was necessary to complete the identification. On the following day with a more suitable tide and working up stream, we saw several more. The birds were in their striking breeding plumage. Their activity was very remarkable as on all occasions, when we observed

them they were constantly diving, usually in the shallow water, and no sooner were they up than they went down again. From what we saw we are convinced that there were several pairs on the estuary.

WILLIAM E. GLEGG.

#### BLACK TERN IN CORNWALL.

As appearances of the Black Tern (*Hydrochelidon n. nigra*) on the west coast are somewhat irregular, it may be worth recording that on April 17th, 1922, I watched one for some time at Harlyn Bay, near Padstow, hawking over a piece of marshy ground. On May 9th I again saw one flying along the shore.

J. F. V. Lart.

### A BREEDING RECORD OF THE SPOTTED CRAKE IN DORSET.

EGGs and chicks of the Spotted Crake (*Porzana porzana*) have been recorded on several occasions from the Christchurch district, Hants, by Mr. Edward Hart, but I am not aware that the species has ever been recorded as breeding in Dorset. The following note is therefore worth putting on record. Mr. Howard Lacey of Bournemouth has just informed me that the late James Panton of Wareham, a gentleman who took a great interest in the birds of that district, presented him with six eggs of this species about the year 1868. These he found near Wareham and Mr. Lacey still has one of them in his possession. The bird still occurs in the district and very possibly breeds from time to time, but the nest is a very difficult one to discover.

## RED-LEGGED PARTRIDGE WASHED UP ON SUSSEX COAST.

An example of the Red-legged Partridge (Alectoris r. rufa) was washed up dead at Benhill-on-Sea, on April 30th. 1922. It had evidently been in the water some hours and was possibly on migration.

Charles G. Young.

The Godman-Salvin Medal.—In 1919 the British Ornithologists' Union resolved to institute a medal to be called the Godman-Salvin Medal, which should be given from time to time for distinguished ornithological work. At the Annual General Meeting of the Union held on March 8th, 1922, the first of these medals was bestowed, with the hearty approval of those present, upon Dr. W. Eagle Clarke in recognition of his researches in connection with the migration of birds.

Bulwer's Petrel in Yorkshire.—Dr. W. E. Collinge records (Nat., 1922, p. 128) that an example of Bulweria bulwerii washed ashore at Scalby Mills, near Scarborough, was found on February 28th, 1908, by Mr. A. W. Linfoot, who preserved the bird and has recently presented it to the York Museum.

Yellow-legged Herring-Gull seen at Fair Isle.—Dr. W. E. Clarke and Surg.-R. Admiral J. H. Stenhouse record (Scottish Nat., 1921, p. 180) that on September 28th, 1921, they saw a Larus argentatus cachinnans on a stubble-field at Fair Isle. The bird was most distinctly seen. This is the first record of its appearance in Scotland. In a subsequent issue (1922, p. 16) Mr. H. W. Robinson states that Mr. F. W. Holder saw a Yellow-legged Herring-Gull in company with a party of Common Herring-Gulls on the Formby shore, Lancashire, on February 10th, 1918.

#### OBITUARY.

#### WILLIAM DAVIES.

With great regret we record the death at Torquay, on March 25th, 1922, of Mr. William Davies of Walsall, at the advanced age of 72. Up to the end of 1921 he was still an active fieldworker and in full possession of his faculties, and few keener and more conscientious field-naturalists have ever lived than this kind-hearted and enthusiastic observer. He was a contributor to British Birds from its commencement, and every note sent by him was marked by the same characteristics of scrupulous accuracy and keen observation. Most of his work was done in the counties of Staffordshire. Worcestershire and Warwickshire adjoining his home, and one of the most interesting discoveries made by him was the presence of the Marsh-Warbler (Acrocephalus palustris) breeding numerously in Worcestershire and in smaller numbers also in Staffordshire. One of the few instances of the Cuckoo depositing its egg in a Marsh-Warbler's nest came here under his observation. Mr. Davies was also a good entomologist and botanist, but ornithology was always his first and chief interest, and one always felt that nothing was done by him for the sake of notoriety, but all from a deep love of nature and truth.



Report on Scottish Ornithology in 1920, including Migration. By Evelyn V. Baxter and Leonora J. Rintoul. (Reprinted from *The Scottish Naturalist*, 1921, pp. 105-120, and 135-158.)

This report, which is in its usual concise and useful form. contains a great deal of interest and importance. The year 1920, in fact, was quite a notable one for Scottish Ornithology. A large number of occasional visitors was reported especially from Lerwick, which seems fast becoming a second Fair Isle, but of greater importance was the attempted nesting of the Bee-Eater and the nesting of the Brambling, a new nesting-place of the Gannet and the extension of the Fulmar. all of which have already been reported in our pages. Many occurrences of rare visitors, however, are here reported for the first time and of the most important of them we give brief particulars below. The whole report provides a most excellent summary of observations in Scotland in 1020, and it is very seldom that anything is missed in these reports. so that we may mention for the sake of completeness that occurrences of Blackcaps and Continental Robin at S. Uist and of Great Spotted Woodpeckers in Inverness-shire in 1920, recorded in our pages (Vol. XIV., pp. 117 and 276) appear to have been overlooked.

Northern Bullfinch (*Pyrrhula p. pyrrhula*).—This bird has been recorded from the northern isles in most autumns or winters during recent years. It was frequently reported from Lerwick (Shetland) between January 13th and March 20th, a female is noted on October 21st, and on Fair Isle there were three on October 28th, while one is recorded at Kergord, Weisdale (Shetland) on May 3rd—an unusally late date.

ORTOLAN BUNTING (*Emberiza hortulana*).—Single birds are reported from Noss Head (Caithness) on May 3rd and 4th, Fair Isle on the 5th and Lerwick on the 3rd, and on November 16th.

Rustic Bunting (E. rustica).—One was obtained near Lerwick on October 6th.

RICHARD'S PIPIT (Authus v. richardi).—One is reported from Fair Isle on October 2nd

Tree-Pipit (A. t. trivialis).—Passage-migrants at Fair Isle and Lerwick in April and May.

Blue-Headed Wagtail (Molacilla f. flava).—One at Fair Isle on May 12th and 15th.

Yellow Wagtail (M. f. ravi).—One at Lerwick on May 19th.

GREAT TIT (Parus miajor).—One probably of the Continental form at Kergord, Weisdale (Shetland) on May 2nd.

Red-backed Shrike (Lanius collurio).—One at Lerwick on August 22nd.

Red-breasted Flycatcher (Muscicapa p. parca).—Several are reported from Lerwick, viz., single birds on September 23rd, October 7th and 8th, and two on October 9th, while there were several at North Ness on October 7th.

Siberian Chiffchaff (*Phylloscopus c. tristis*).—Two were obtained at Lerwick on October 8th.

YELLOW-BROWFD WARBLER (Ph. p. præmium).—One at Lerwick on October 3rd.

Wood-Warbler (Ph. s. sibilatrix).—One at Lerwick on May 13th.

REED-WARBLER (Acrocephalus s. scirpaceus).—One at Lerwick on May 30th.

ICTERINE WARBLER (Hippolais icterina).—One is reported from Noss Head (Caithness) on May 3rd. Though the bird has occurred several times in the northern islands this is, we believe, the first record for the mainland of Scotland.

Barred Warbler (Sylvia n. nisoria).—One at Lerwick on August 29th and another on September 10th.

Garden-Warbler (S. Lorin).—One at Noss Head on May 12th is stated to be the first record of the bird in Caithness, others at Lerwick in May, August. September and October.

Lesser Whitethroat (S. c. curruca).—Single birds at Noss Head (Caithness) on May 12th, Lerwick, on 13th, and two on 16th, one October 3rd, one at Loch Maree (W. Ross) on June 16th.

HOOPOE (U pupa e, e pops).—Hoopoes were noted at the Isle of May on several dates between September 30th and October 9th.

ICELAND FALCON (Falco r, islandus).—One visited Vallay (Outer Hebrides) on October 29th.

WIGEON (Anus penelope).—Wigeon bred in the Kilpatrick Hills, egg-shells and down being taken and the birds seen. This is stated to be the first breeding record for the Clyde area.

RED-NECKED GREBE (*Podiceps griseigena*).—Two at Loch Ryan (Wigtownshire), where there was a great assemblage of Grebes (including many Great Crested, a number of Slavonian, several Little and one Black-necked) on December 4th.

STOCK-DOVE (Columba ænas).—One at Fair Isle on April 26th and two on November 6th.

BLACK-WINGED STILT (Himantopus himantopus).—As the Stilt has very rarely occurred in Scotland, it is curious that two should have appeared in one year, one being reported here (p. 108) as seen at Scatfield on the Moray Firth on May 18th, while another was recorded in our pages (Vol. XIV., p. 104) at Loch Ryan, on the other side of Scotland on October 17th.

IVORY-GULL (Pagophila eburnea).—One at Auskerry (Orkney) on May 20th.

#### LETTERS.

#### VELOCITY OF FLIGHT AMONG BIRDS.

To the Editors of British Birds.

SIRS,—In reference to the correspondence on the flight of birds and the respective speed of different species (Vol. XV., p. 298), it may be of interest to record that of Chætura nudipes and Chætura cochinchinensis. Both these species have a normal flighting speed of something very nearly approaching 200 miles an hour, enormously in excess of the powers of any other bird with which I am acquainted. In North Cachar, Assam, these birds used to fly directly over my bungalow in Haflang, flying thence in a straight line to a ridge of hills exactly two miles away and when over the ridge at once dipping out of sight. We constantly timed these Swifts and found that stop watches made them cover this distance in from 36 seconds to 42 seconds, i.e. at a rate of exactly 200 miles an hour to 171.4. Green Pigeons took about 2 minutes 30 seconds to 2.45 seconds, Paroquets 2.15 seconds to 2.30 seconds, but were more difficult to time as they did not fly in so direct a line.

E. C. Stuart Baker.

SIRS,—I have had an opportunity to ascertain the exact speed of the flight of a bird. I was in a car going along a rather narrow road when a Willow-Warbler (Phylloscopus trochilus) flew out of a hedge, It flew along over a ditch at the side of the road for about 15 yards, going at exactly the same speed as the car. I looked at the speedometer, and it recorded 23½ miles per hour. The speedometer is certainly correct as it is a nearly new high-class car. There was a light wind behind us. The bird cannot have been affected by the air pressure being altered by the car as it flew just opposite the driver's seat, where I was, but not driving. It was, of course, frightened by the car, so it was not necessarily the rate of its migratory flight; it also altered its course once or twice as if to dart into the hedge, but it did not drop back more than a few inches in doing this. It would be interesting if some other correspondents were able to time birds under similar conditions.

Norman H. Joy.

Sonning, Nr. Reading, May 5th, 1922.

[The possibility of deriving some information as to the speed at which certain birds fly by means of the method described by Dr. Norman Joy, occurred to me some years ago, and I made a few observations while being driven in a friend's car. Since then I have always driven myself and after one or two attempts I gave up trying to make observations as I found that it was impossible to do so with any degree of accuracy and to drive at the same time. A year or two later there was a letter on the same subject in the Field, but I do not remember reading of any other observations of the kind. My records were made in the autumn of 1906 and were briefly as follows:—

House-Sparrows kept just ahead of the car over a distance of about 200 yards when we were going 24 m.p.h., and were slowly caught up

and passed at 29 m.p.h.

Starlings kept well ahead of the car, gaining a little, at 24 m.p.h.

A Pied Wagtail kept ahead at 21 m.p h.

An adult cock Blackbird kept ahead at 22 m.p.h. A young cock Blackbird kept ahead at 18 m.p.h.

In each case the birds rose in front of the car and kept ahead of it, except the Sparrows that were overtaken, so that they could not have been affected by the wind of the car. To have any real value a large number of observations would of course be necessary for each species.

N. F. TICEHURST.!

#### THE RACES OF EIDER DUCKS.

To the Editors of British Birds.

SIRS,—In reply to Mrs. Meinertzhagen's note to my letter on this subject, I think that the reason that the soft parts in Eiders as described by the authors stated are wrong is that they have been quite obviously described from museum skins which had probably been dead for years. It is a case of one author copying another. In the majority of cases this orange-yellow has completely vanished as soon after death as the bird is cold, and the beak invariably goes through other colour changes before becoming fixed as seen in a skin. How Millais came to miss this I cannot say, except that he may not have examined his birds until he started to skin them, when in all probability it would have vanished.

Smalley (*British Birds*, Vol. 1., p. 74), gives the colour of the base of the beak in freshly killed male Common Eiders shot in Orkney as orange-yellow, and Thorburn almost rightly gives it this colour in his latest plate of the species, although rather an undecided orange-yellow.

I cannot see on what evidence the Common Eider is given as a resident and non-migrant species in Britain, for the fact that immature drakes are extremely rare in winter in Orkney, where they arrive again in spring, points to these at any rate being almost total migrants, as I showed in the Scottish Naturalist for 1915, p. 264. The markings of such are so distinct that their arrival is at once noted, and they are conspicuous by their almost total absence in winter.

I regret that I cannot submit specimens for examination as, being scattered and in private collections, they are not available, but the specimen in the Oldham Museum, in which this orange-yellow colour

was stable after the bird was set up, is there for all to see.

H. W. Robinson.

[In The Practical Handbook we have never described the colouring of the "soft parts" from its appearance in dried skins. It is true that this was done many years ago, but there is no excuse for doing so now, when so many notes on the subject from freshly killed birds are available.—H. F. W.]

#### THE COLOUR OF THE EYE IN THE HAWFINCH.

To the Editors of British Birds.

SIRS,—In The Practical Handbook the eye of the Hawfinch (Coccothraustes coccothraustes) is given as greyish-white. It is certainly this colour in a dead bird, and also changes to this colour in a frightened bird when handled or struck down by a Hawk. In life it is chocolate-brown, and in the breeding-season at times becomes almost red, especially so just before coition. Thorburn rightly shows it as chocolate-brown in his latest pictures of the bird. Change in colour of the eye under stress is not confined to this species, another notable case being that of the male Pochard (Nyvoca ferina) which, when wounded or handled, changes from the normal red to pale yellow.

H. W. Robinson.

# BRITISHBIRDS

WITH WHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST."

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## SOME OBSERVATIONS ON THE HABITS OF THE RED-THROATED DIVER IN SPITSBERGEN,\*

EY

#### G. J. VAN OORDT AND J. S. HUXLEY.

Whilst staying last summer in the Dutch settlement near Cape Boheman (Icefjord, Spitsbergen), I had a good opportunity to study the biology and the behaviour of some of the birds inhabiting the tundra and the surrounding islets.

Cape Boheman is the eastern point of the large Tundra Boheman, which is about 8 miles long. The tundra itself can be divided into a wet, swampy, low part, in which numerous lakes and pools are to be found, and a higher and drier part where, in some places, the sandstone rocks, eroded by ice

action in the glacial period, reach the surface.

The coast of the Tundra Boheman is not steep; it is only on the eastern side and at some places of the south coast that moderately high slopes occur. South of the tundra several islands are to be found, on which Northern Eiders and Arctic Terns bred in great numbers. However, both species were nesting also on Cape Boheman and scattered along the coast. At the east coast of the tundra, in the crevices of strongly weather-beaten sandstone rocks. I found a small colony of Mandt's Guillemots, consisting only of four pairs. Scattered all over the tundra, in the wet as well as in the higher part, the splendid King-Eiders and the Red-necked Phalaropes were breeding abundantly. Characteristic breeding birds of the dry tundra are the Snow-Bunting and the Purple Sandpiper, while at the side of the lakelets a few pairs of the beautiful Red-throated Diver (Colymbus stellatus) had their nests.

This fine species can be found on most freshwater lakes and pools of Spitsbergen, but nowhere is it very common, for never more than one pair is found at a time on one lake. In the Tundra Boheman they bred rather numerously. Continually we heard their goose-like call and saw them flying high in the air with great speed to and from the fjord, where they usually sought their food. Sometimes, however, I saw a bird feeding in one of the lakes in the neighbourhood

of our settlement.

In a small pool, about one mile north-east of the settlement, I several times saw one or two Divers in the last week of June;

<sup>\*</sup> No. 12 of the results of the Oxford University Expedition to Spitsbergen, 1921.

so I concluded that here or close by the nest might be expected. On June 30th I went to the spot. At the north-east side this pool was bounded by a fairly high hill on which several large stones lay scattered. Making a wide detour, I crept to the upper side of this hill and hid myself behind one of these boulders, from which I could overlook the pool and the surrounding land with my glasses. The first thing I saw was a bird on its nest, quite near the water's edge, but when I reached it, it turned out to be a female King-Eider. The nest contained six eggs, somewhat smaller than those of the Common Eider.\* No Diver was to be seen then, but on walking along the pool I chanced upon a large flat heap of mud and vegetable remains, on the shore of the pool, surrounded on all sides by shallow water. It contained one dark coloured brown egg. So I had very quickly found the nest, whose owner later allowed me to make the following interesting observations.

According to Le Roi (in the excellent Avifauna Spitzbergensis) the Red-throated Diver is, even in Spitsbergen, very shy near the nest. This I could establish for most of the Divers. which I saw in the Icefjord area. But the female† belonging to this nest behaved very differently. Visiting the pool a few days later on, I saw the hen from afar, sitting on her nest. I approached slowly and when I came nearer and she saw me, she stretched her neck horizontally (Fig. 1). It would appear that this renders the bird less conspicuous. When it appeared that in spite of my approach to within 20 yards, the bird did not leave the nest, I made up my mind to photograph her on her nest, though I had no tent. I came nearer and nearer, but yet the bird remained on the nest (Fig. 2). When I came close to her she uttered an anxious plaintive call, not unlike the mewing of a cat. Also she made a guttural sound with open bill and raised neck (as in Fig. 3) but she did not fly from her nest, though I was less than two feet away from her. Thus I had an excellent opportunity to photograph her.

When I found the nest the water was pretty high. When the bird adopted the protective attitude of stretching her

<sup>\*</sup> This duck and the eggs are now in the collection of the Oxford University Expedition.

<sup>†</sup> When a pair of birds is seen together, there is usually a marked difference in general size, and particularly in massiveness. It is presumable that, although the size measurements of the two sexes overlap, the smaller of a pair is normally the female. The bird seen on the nest in our case was apparently always the same individual, and is presumed, though not proved, to have been the female. J.S.H.

neck over the water's surface she was very well concealed from an observer at any distance; the nest with the bird on it looked like a heap of mud near the water's edge. But later on, when the water in the pool had sunk, she still observed the same attitude, although this was no longer protective, for then the head and neck, being about six inches above the water's surface, were very conspicuous.

Some days after I had found the nest, she laid a second egg. I could not make out the exact date, for I would not



Fig. 1. Red-throated Diver: Bird No. 1 (Cape Boheman), with neck outstretched in "alarm position."

(Photographed by G. J. van Oordt.)

move the bird from the nest, being afraid that then she would leave it for ever. As far as I could ascertain only the female, which was distinctly smaller than the male, was incubating. The male was not often in the vicinity of the nest, except in the last days of June, during the courtship period, and later on, when the young were expected to hatch off. During the entire month of July the behaviour of the bird was the same. She was rarely off the nest; she sat so closely that I had to push her with my foot to see whether

she had eggs or newly hatched young. Even then she did not fly away, but pecked furiously at my boots (cf. Fig. 4).

Coming back from a trip in the Icefjord with the Oxford University Expedition, I saw (July 20th) that the bird sat as closely as in the first half of July. At the end of this month, i.e., the time in which the eggs were expected to hatch off, the male was, as already stated, more in the vicinity of the nest. He was very shy and always flew away when I was still at a great distance from the pool. Because I wanted



Fig. 2. Red-throated Diver: Bird No. 1 in normal incubating attitude.

(Photographed by G. J. van Oordt.)

to know the duration of the incubation period, I visited the nest daily in early August. On August 2nd the female appeared not to be on the nest, but swam near the nest in the water. When I came nearer she remained in the water and did not fly away. When I stood in the water quite near the nest, she approached me, swimming, attacked me, and tried to beck my boots and outstretched hand. The nest contained only one egg, the other lay beside it, broken. On examination it appeared to contain no embryo. How it had been removed

I did not discover. Perhaps it had been taken by one of the Skuas, which were always in the neighbourhood in search of King-Eider ducklings, or by one of our dogs, which were always wandering over the tundra for the same purpose. The bird continued to incubate the other egg. Next day (August 3rd) I took several photographs of the bird on the nest and of the bird pecking at the foot of one of my friends. When the bird was forcibly pushed off the nest, it swam in the water and attacked my friend furiously with open bill (Fig. 4). After the attack, when my friend withdrew, she



Fig. 3. Red-throated Diver: In attitude of anger adopted on the close approach of an intruder.

(Photographed by G. J. van Oordt.)

immediately returned to the nest and sat on it to incubate further (Fig. 3).

All her devotion was in vain, however, for on August 10th, after more than five weeks of incubation, she had left the nest, and it appeared that the remaining egg was also infertile.

G. J. vas O.

During the absence of Dr. van Oordt with the Oxford Expedition's ship, I took his place ashore at Cape Boheman, and was enabled to make a number of observations on the bird he describes. This was in the period July 12–16, when she had two eggs.



Fig. 4. Rep-тикоатвр Diver: Pecking at an intruder after being forcibly driven off the nest. (Photographed by G. J. van Oordt.)

The stretching of the neck forwards was a common occurrence when intruders came within a certain distance, but was usually given up when they came close—say, within 10 yards. With the water at the low level it then had, it was certainly only to a slight extent protective. It should be mentioned that the same attitude is adopted, so far as my own observations go, whenever the mewing call-note is



Fig. 5. RED-THROATED DIVER: Bird No. 1 photographed at two feet.

(Photographed by J. S. Huxley.)

given, even on open water. I am inclined to think that it is not protective, but associated with the call-note, or with a state of mind similar to that occurring when the call-note is given, for when it is adopted on the nest it is often accompanied by this note. Miss Turner ('13) also mentions the bird's adoption of this pose when alarmed and gives a good photograph. Bahr ('07) believes in its protective value

and says it is adopted when Ravens or Black-backed Gulls fly overhead.

The bird sat very quiet as an intruder approached, not doing much more than move its head slightly until one was within about six feet, when she would begin to give utterance to the guttural sounds above alluded to. I was able to photograph her at the near limit of the lens, getting what one may call a "close-up" picture (Fig. 5). On the two occasions when I went right up to her, she had to be pushed off the nest; curiously enough, when another member of the party visited her on the day succeeding one of my visits, she slipped off the nest when he was at a fair distance. On neither of my visits did she resume her position on the



Fig. 6. Red-throated Diver: Attitude adopted when swimming on open water hesitating to attack an intruder between herself and the nest.

(Photographed by J. S. Huxley.)

nest as soon as I had gone; in fact, on the only occasion when I gave special notice to this point, she refused to come on as long as I remained within sight—a distance of over 400 yards. I conclude that the different behaviour recorded by Dr. van Oordt was due to his having seen her at a later stage of incubation.

The bird did not attempt to peck at an intruder until he was within striking distance (Figs. 3, 4). When pushed off the nest on two occasions by me, she did not attempt at once to peck, as she did at a later stage (see above). On the contrary, she swam off and remained some ten yards away. On my wading out between her and her nest, perhaps the most interesting of all her actions took place.

To start with, she repeatedly went through the process which I call "splash-diving"—a dive in which the normal rippleless submergence of diving for prey or to escape an enemy is completely abandoned, and the bird simply dives for a distance of a few feet, kicking up a shower of spray as she submerges. It is of considerable interest that this form of diving is used largely in post-nuptial "courtship," and, so far as my experience goes, nowhere else.

We thus have an example of the employment of one and the same action under the influence of two quite different forms of emotion—a "transformation of emotion." This is of course well known. Another example of an action normally employed in courtship being used in anger is afforded by the singing of various birds, c.g. the Sedge-Warbler, when disturbed. In both cases it would not appear that any useful purpose is served by this secondary, abnormal use of the action, and we may conclude that it is simply a liberation of emotion. What, however, determines the precise transference of one particular action from one emotion to another, what the associational mechanism is in any one case, is at

present impossible to say.

The Diver's actions, however, were not confined to this "splash-diving." At intervals she would swim deliberately at me with neck bent right down in a low curve, beak almost touching the water; this usually happened after she had swum in the same position, or with head somewhat forward. body low in the water, but in irregular curves as if hesitating, for some little time (Fig. 6). Arrived within striking distance, she delivered a sharp peck at my leg, then turned—like a competitor in a swimming race turning at the end of the bath, but far quicker—and almost immediately dived. She would emerge five or ten yards away, but the emotional intensity under which she laboured was so great, the diving and subaqueous swimming actions so forcible, that she emerged as if shot, at a low angle to the surface, from a gun under the water, rising very nearly right off the surface, and settling down with a great splash. The way in which she turned and dived with great rapidity, immediately after pecking at me, was interesting as showing the psychological mechanism at work. The maternal instinct stimulated to anger against the intruder: this continued to gather until the impulse to attack became dominant. But even during its dominance the instinct of fear was active, and, immediately the anger was temporarily dissipated by its physical expression in attack, fear became dominant and led to very rapid flight. The dissipation of an emotion by allowing free rein to its physical expression is of course a well-known psychological fact, but it is interesting to see psychological conflict at work in one of the lower animals. As soon as the flight instinct had expressed itself, the ground was free for the stimulus of the intruder's presence to arouse the maternal instinct once more, and so the bird continued to behave in this cyclical fashion for the ten or fifteen minutes that I remained.

As Dr. van Oordt mentions, König records the Red-throated Divers of Spitsbergen as being shy. That this is by no means universal was found by us. Apart from the bird described. Mr. Seton Gordon was able to approach within six feet of a sitting bird in Liefde Bay, and Mr. Jourdain tells me that a pair in the same locality, swimming in the fjord, approached to within two or three yards of a party standing on the water's edge. On Prince Charles' Foreland, while most of the Divers, including a pair with one egg, were extremely shy, I found one bird which showed an intermediate grade of behaviour, swimming round on the nest-pool thirty or forty yards from the intruder. It appears clear that, while the species is extremely variable in its reactions to man, "tame" birds are far more common in Spitsbergen than in civilised countries. Miss Turner ('13) finds very great variation in tameness in the British-breeding birds. Great variability is also found in the amount and kind of nesting material: see Bent ('10).

I should add that on one occasion I saw the other bird, presumably the male, on the same pool as the nest, but that he left at the first sign of danger. Both sexes are said to take turns during incubation, but in the birds I saw, one member of the pair appeared to be invariably on the nest. Accurate observations of the time spent by male and female on the nest would be interesting; also as to whether a nest-

relief ceremony took place.

A word may be in order on the Diver's mode of progression on land. In Spitsbergen, where a period of rapid melting takes place, the water level of the breeding-pools may change considerably. The birds build close to the water's edge as soon as the ice is melted, but within a week the first burst of the thaw is over, and the water-level, in practically all the pools I observed, is lowered by several inches. As the pools are generally shallow, with gently-sloping margins, this means that the nest will now be at a considerable distance from the water. In the case of one bird which I watched closely, the nest, shortly after the deposition of the second egg, was about five yards from the water; while in another,

which had been built on the margin of a shallow arm draining into a pool, the bird had to make its way over 15 yards or more of mud, or water so shallow as not to permit of swimming, and this before the second egg had been laid.

Thus interesting opportunities were afforded for seeing the Diver on the alien element of land. The usual method of land progression that has been observed is that accurately described, e.g. by Pike ('11). The bird lies on the ground, gives a powerful stroke with its hind legs, which first raises



Fig. 7. Red-throated Diver: Bird No. 2 (Prince Charles Foreland), walking towards her nest. Note the angle of the body and the downwardly directed head.

(Fhetegraphed by J. S. Huxley.)

the hinder part of the body, then lifts the breast off the ground, then pushes the whole body forward. The unsupported fore-part tends to fall meanwhile, and so the breast comes down with a bump some distance ahead of where it was before. The general impression was similar to that made by the slow progression of a feeding rabbit; only of course here the whole action was much more awkward, for to make the comparison fair, one would have to deprive the rabbit of its fore-legs!

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This method seems to be the more common one; however, another exists, in which the upright position, or one approximating to it, is adopted. In this, the bird rises on to its legs (presumably the whole tarsus is on the ground, but I was never able to satisfy myself of this by direct observation); the body slopes forwards at a considerable angle, and the head and neck are stretched down, with the head about horizontal and almost touching the ground, in the extraordinary pose shown in Fig. 7.



Fig. 8. Red-throated Diver: Bird No. 2 pushing her eggs back with her lower mandible before settling down to incubate. Note the open bill.

(Phetographed by J. S. Huxley.)

In this attitude the bird takes a few steps forward, and then, after covering at most six or eight feet, collapses into the sitting position. There she will lie for perhaps a quarter or half a minute, and then resume her "walk." The condition is obviously one of unstable equilibrium, which can only be maintained so long as the bird is moving forwards at a certain rate; when, through exhaustion or some inequality in the ground, this rate is slowed down, the bird can only fall.

One nest seen by our party on Moffen Island was 20 yards from the water, yet the bird never walked to it (Jourdain, '22). This once more illustrates the variability of the bird's behaviour.

The nest of the very tame bird above described was so close to the water that she could slip off it directly into the swimming attitude. The pool by which she had nested was a large one and not so subject to changes of level.

In connection with this subject, reference should be made to the observations of Miss Turner ('13), who describes a Red-throated Diver jumping a considerable distance up a steep bank towards the nest, and diving directly off the nest into the water, either from a sitting position, or, more rarely, after standing up. When the nest was far from the water, I have seen birds fly straight up from the nest if alarmed.

In Bent ('19) the only authority quoted in favour for the Red-throated Diver assuming the standing position is Audubon. Sedlitz ('13) who has had wide experience, never saw any Diver adopt the erect posture except in coition.

Bahr ('07), however, not only describes a Red-throated Diver as walking to her nest just as I have described, but gives a very good photograph. It probably occurs only when the nest is at some distance from water, but even then is not adopted by all individuals.

The bird always arranges the eggs on coming on to the nest, shoving them well back under the body with her bill. While incubating, she may rise and repeat the process. When doing this, it is worth noting that she always has the bill open; she is of course pressing the eggs with the lower mandible. This is illustrated in Fig. 8, and is also well shown in one of Miss Turner's photographs (*loc. cit.*), although she does not refer to the opening of the bill in the text. It is not figured in the drawing given by Bahr ('07, p. 32), where the bill is drawn closed.

J. S. H.

#### LITERATURE CITED.

Bahr, '07.—Home Life of Marsh Birds, by Turner and Bahr. Witherby & Co., London, 1907.

Bent, '19.—Life Histories of North American Diving Birds. Bulletin 107 of the U.S. Nat. Museum Washington, 1919.

JOURDAIN, '22.—Ibis, 1922, p. 169.

PIKE, 'II.—British Birds, V., 178.

SEDLITZ, '13 .- Journ. f. Ornith., LXI., 179.

TURNER, MISS, '13.—British Birds, VII., 150.



#### UNUSUAL LINING IN JAY'S NEST.

Some notes have been published in Vol. XV. (p. 187 and 206) on the subject of Jays' nests (Garrulus g. rufitergum) being lined with horsehair. Mr. J. M. Goodall mentioned that he had one in his possession found by Mr. C. H. Roper. I am sending you a similar nest found in company with Mr. Roper on May 20th, 1922, in Epping Forest, which you will see is copiously lined with black horsehair. The nest was deserted and contained four eggs.

C. E. Baker.

#### SERIN IN NORFOLK.

On May 1st, 1922, a female Serin (Serinus c. scrinus) was netted in a garden in Yarmouth and taken to Mr. E. C. Saunders, through whose courtesy I was enabled to see it a few days later. If one admits the authenticity of two specimens purchased by the Rev. H. A. McPherson in April, 1877, said to have been captured at Yarmouth (Southwell, Birds of Norfolk, Vol. III., Appendix p. 379) which, in view of its subsequent occurrences at this place, I see no reason for not doing, this makes the eighth record for Norfolk, all of these having occurred at Yarmouth, and all in the first half of the year.

B. B. Riviere.

#### WOOD-LARK NESTING IN LINCOLNSHIRE.

I Wish to record the nesting of the Wood-Lark (Lullula a. arborea) in north-west Lincolnshire. I found the nest on May 28th, 1922; it contained four young birds about a week old. I had searched systematically for the nesting of this bird for some years in this neighbourhood without result up to now.

W. S. Medlicott.

[cf. Mr. Medlicott's notes, Vol. XIII., p. 26; Vol. XV., p. 57. The last nesting record for Lincolnshire appears to be from Sleaford in 1902 (Vol. IX., p. 78).—EDS.]

#### UNMARKED EGGS OF TREE-PIPIT.

Ox May 14th, 1922, I found the nest of a Tree-Pipit (Anthus t. trivialis) only just started. On the 21st this nest had two eggs which were of a uniform very pale blue. I did not examine them closely for fear of upsetting the bird. When the bird had finished laying, I took the five eggs. They were

all the same colour and rounder in shape than usual. At first sight they seemed to have suppressed purple markings, but on moving the eggs in my hand I found that these spots moved about inside the egg. On blowing the eggs, I saw that the spots were due to the presence of numerous black substances in the yolks. Some of them were in a liquid state and came out quite easily: others were more solid and were only got away with considerable difficulty. In one egg the black stuff was so large and solid that I have been unable to get it away at all. The bird must obviously have been in an unhealthy state and I shall be glad to know if any reader of *British Birds* can give any explanation of the presence and substances of the black matter in the yolks. I have previously never seen unmarked eggs of the Tree-Pipit.

#### GREY WAGTAIL BREEDING IN SURREY.

On April 24th, 1921, I found a nest of Grey Wagtail (Motacilla c. cinerea) containing three eggs and two young birds, at Pyrford Lock, Surrey. A third bird eventually hatched, and one of the addled eggs I have in my possession. I caught the parent bird on the nest and ringed her and also the young birds. About the same date I saw a pair, which probably had a nest, at Weybridge and also a pair near Wisley church on April 28th, 1922.

WILLIAM P. G. TAYLOR.

#### GREAT GREY SHRIKE IN STAFFORDSHIRE.

The Rev. H. P. Reader, of Hawkesyard Priory, Rugeley, Staffordshire, writes me that on April 5th, 1922, he "was able to watch a Great Grey Shrike (*Lanius excubitor*) near at hand for a good quarter of an hour through a field glass. It was perched on the barest bough it could find."

This is a rare visitor to our county and previous records

do not exceed a dozen in number.

JOHN R. B. MASEFIELD.

#### PROBABLE WOODCHAT SHRIKE SEEN IN SUSSEX.

While walking over the strip of country immediately behind the shore near Climping, Sussex, in the early morning of June 5th, 1922, I was surprised to see an unfamiliar black and white bird fly into a hedge close by. I watched and presently a typical Shrike perched on the top of another part of the hedge. Its bright brown head and black eye-stripe were at once noticeable; the back was of a dark shade and there was a white patch on the shoulders; the under-parts were light greyish-white. It flew high in the air to catch an insect in the approved Shrike fashion, and again the impression of a small black and white bird was obtained.

It finally flew off towards the sea, and although I returned to the spot in the afternoon I could get no further sight of it.

By a coincidence I happen to have a specimen of the Woodchat Shrike (*Lanius senator*) at home and I feel confident that the Climping bird may be identified as of this species, which I read is an occasional visitor to the south-eastern counties of England.

John E. S. Dallas.

#### WAXWINGS IN SURREY.

Two Waxwings (Bombycilla garrulus) were watched in a garden at Woodham, on January 24th, 1921.

WILLIAM P. G. TAYLOR.

#### UNUSUAL TAMENESS OF BROODING BLACKBIRD.

On April 5th, 1922, on asking a patient to show me any young birds he might have in his garden he took me to a nest of a Blackbird (*Turdus m. merula*). This was in a hedge and the hen bird was brooding three half-fledged young, whose heads were just visible. My patient told me that his son had touched the old bird on the nest, so I put out my hand and stroked her back twice without disturbing her in the slightest. I was told that there had never been a tame Blackbird about the place, which was an isolated farmhouse in Oxfordshire.

NORMAN H. IOY.

#### BLACK REDSTART IN SHROPSHIRE AND SURREY.

I had under observation from March 20th to April 1st, 1922, at Hengoed, near Oswestry, Salop, an immature male Black Redstart (*Phænicurus o. gibraltariensis*). I saw it each morning at the same place using the posts of a wire fence, from which it frequently took flights down to the rough pasture. I did not hear it utter any note. T. Robinson. On March 19th, 1922, a fine male Black Redstart (*Phænicurus o. gibraltariensis*) appeared near my house at Tadworth, and remained in the neighbourhood until March 25th, paying frequent visits to my own and the adjoining gardens. The bird was by no means shy, frequently alighting on the fence rails within a few yards of the windows, and taking short excursions after passing insects, returning to a favourite perch after the manner of a Spotted Flycatcher. It also

spent a good deal of its time upon the ground, giving particular attention to a newly dug patch, where its actions closely resembled those of a Robin.

On May 20th, shortly after dawn, I heard a Black Redstart singing near my garden, and it continued to do so at frequent intervals until about 9.30 a.m., and soon after this apparently took its departure, but not before I had satisfied myself as to its identity. The bird was not quite so dark in appearance as the one observed in March, and there was little or no white visible on the secondaries, from which I infer that the bird was a young male. This would appear to be a late date for the bird to be observed in the British Isles.

HOWARD BENTHAM.

#### SIZE OF CLUTCHES OF EGGS OF WREN.

I THINK Mr. A. H. Machell Cox in his notes in the May number rather under-estimates the normal clutch when he says 5 to 6. My experience for this part of the country (near Didsbury) points to 6 to 8, and we never find anything like 3, 4 or 5. My own series at present is represented by 2/7, 2/8, 1/10, 1/14. Two pairs generally use my nesting-boxes and though these have movable lids, the nest is always domed, and I am not able to see the number of eggs without destroying the nest, but I generally find one or two addled eggs when the boxes are cleaned out.

HERBERT MASSEY.

#### PEREGRINE FALCON ATTACKING A WOMAN.

At the end of April 1922 a woman living near Yealmpton, Devon, seeing a large hawk attacking, as she thought, one of her fowls, went to the rescue. The hawk, instead of flying off, turned on her, tore her apron, and finally fixed its claws so firmly in her dress that it was unable to extricate them, and had to be killed. The bird proved to be a Peregrine (Falco p. peregrinus) and its victim not a fowl but a Kestrel (F. t. tinnunculus). Both birds are now in the possession of my brother, and are being set up by Mr. Chalkley, taxidermist, of Winchester. I would be very glad to know if such behaviour is common on the part of Peregrines or similar hawks. The Kestrel would seem to be an odd prey for a hawk of a different species.

P. E. A. Morshead.

[Mr. John Yonge, of Puslinch, Yealmpton, has kindly forwarded the following more detailed account: "The incident occurred on April 28th, 1922. Mrs. Furzland, a woman aged about seventy, lives in a cottage near Puslinch

Bridge on the river Yealm. She saw a large hawk on the ground apparently eating another bird, and thinking its prev was one of her chickens, she went to the rescue and tried to drive it away. When she got near, it flew at her, and clawed her apron and finally got its claws so firmly fixed in the stuff that she could not shake it off. She was somewhat frightened, thinking it would attack her face, so called to her grandson (a small boy) to bring his grandfather's walking stick, and with this weapon she killed the hawk. The bird it was mauling was a Kestrel. Whether it was really eating it I cannot say—but all the skin and flesh had been torn from the head—the rest of the body was uninjured. When Mrs. Furzland picked up the Kestrel it was dead and had only just been killed, but she did not actually see the Peregrine strike it down. She related the story to me herself, and I am quite sure there is no reason to doubt any part of it. She gave me the two birds and I sent them to Capt. R. Y. A. Morshead. JOHN YONGE."

In Vol. XIV., p. 158, Mr. J. F. Peters records single instances of the finding of the remains of Peregrine, Buzzard and Sparrow-Hawk in the eyrie or on the feeding-place of different Peregrines and mentions that Mr. S. P. Gordon once met with the remains of a Kestrel. An instance of a Peregrine attacking a boy under very similar circumstances to those related above is recorded by Mr. Kirke Swann in Vol. XIII, p. 31.—Eds.]

#### A NEW ESSEX HERONRY.

As is quite well known, Herons (Ardea c. cinerea) have frequented Walthamstow Reservoirs for many years in gradually increasing numbers, and it was naturally assumed that these birds came from Wanstead, which is probably correct.

In a paper published in the *Essex Naturalist* (Vol. XIX., pp. 69-71) Mr. J. Mackworth Wood states that several pairs had nested "during the last year or two," but apparently unsuccessfully on account of the egg-taking propensities of the many Carrion-Crows (*Corvus c. corone*) which frequent these reservoirs, where flocks of over thirty may be seen (see my note, *t.c.*, Vol. XX., pp. 47-48). This year and probably previously, however, the Herons have nested very successfully and on May 20th, 1922, I saw two nests both containing well-grown young birds. These nests were built on somewhat low trees on one of the islands in No. 5 Reservoir and could be seen easily from the public road. I am informed

that at least ten nests were used successfully this year on the islands on this particular reservoir and still further that no fewer than nineteen nests of the Carrion-Crow have been destroyed this year to protect the Herons and other species which nest there.

It is difficult to define how many nests constitute a heronry but it seems that the foregoing information indicates that an addition has been made to the number of Essex heronries.

WILLAN E. GLEGG.

#### UNCOMMON BIRDS IN GLAMORGANSHIRE.

In continuance of our notes published in Vol. XV. (pp. 205-6), we have now to report the following occurrences which seem worthy of record:—

Goldeneye (Bucephala clangula).—Two immature birds on the Roath Park Lake. January 1st, 1922, and one adult male on the Llanishen Reservoir, February 12th, where he was joined by a female on March 5th. The two latter birds remained on the reservoir until March 10th.

SMEW (Mergus albellus).—On December 18th, 1921, one was seen on the Roath Park Lake, and it remained there until February 5th, 1922, when it was joined by a second. Both appeared to be adult females. The lake being drained after the latter date, both birds apparently removed to the Llanishen Reservoir, where they were seen on February 12th. On February 19th one had left and no others were seen after that date.

Great Northern Diver (Colymbus immer).—The bird mentioned in our previous notes (British Birds, Vol. XV., p. 205) remained on the Llanishen Reservoir until January 29th, 1922.

RED-NECKED GREBE (*Podiceps griscigena*).—One appeared on the Llanishen Reservoir, February 5th, 1922. It was joined by a second on March 12th. The following week, March 19th, only one was to be seen, and this bird remained until April 2nd.

Observations made through a telescope at fairly close range on three occasions enabled us to note the following changes. On February 5th the beak was brownish-black with some yellow at the base. The head bore slight horn-like tufts, only noticeable from behind. On February 26th the base of the bill was dark yellow, and the horn-like tufts on the head were more distinct than on the 5th, while the base of neck and the shoulders had a reddish tinge. On

March 26th the yellow at the base of the beak was much more vivid, and showed as a distinct patch covering both sides of the gape. The beak was also darker with a whitish tip. The colour of the shoulders and the sides of the neck were now distinctly light reddish-brown.

On February 26th the bird was watched at a distance of less than thirty yards. It appeared quite at ease, diving and bringing up a fair sized fish once or twice, which it swallowed without any preliminary shaking or head-tossing. The prey was held in the bill and swallowed straightway without any apparent effort. A habit frequently indulged in was that of stretching the head and neck along the back, throat uppermost, and vigorously rubbing the back of the head from side to side. When suspicious it straightened its neck, holding the head very erect, and rapidly drew off shore.

BLACK-NECKED GREBE (Podiceps nigricollis).—On February 5th, 1922, a single bird on the Llanishen Reservoir. It remained there until March 12th, when a second appeared. On March 19th one had gone and the other was last seen on April 16th. The bird that arrived on February 5th was particularly unsuspicious on that date, also on the 12th, and we were able to watch it at a distance of ten to twelve feet, as it swam and dived close in to the bank where we were lying.

Green Sandpiper (*Tringa ochropus*).—On April 9th, 1922, one was seen at the Llanishen Reservoir.

GEOFFREY C. S. INGRAM. H. MORREY SALMON.

## SHOVELERS BREEDING AND OCCURRENCE OF BLACK-WINGED STILTS AND OTHER UNUSUAL BIRDS IN BERKSHIRE.

I have been fortunate enough this year (1922) to have had permission to wander over a piece of marsh-land in Berkshire, where I have seen the following interesting birds:—

Shovelers (Spatula clypeata).—On April 26th I saw some Shovelers, while by May 11th I became convinced that there were at least five pairs breeding. On that date one of the birds dropped an egg on some mud when flushed. Later we heard that a duck's nest with ten eggs had been cut out in a grass-meadow. It was undoubtedly a Shoveler's, both by the teathers and the size of the eggs. As the eggs had been left exposed the whole day, on account of the haymakers being about, one of my friends kindly took them, and put them in an incubator. They hatched out in fifteen days,

but unfortunately all the ducklings died. On May 25th I saw a duck Shoveler with six young ones. I think this is the first definite record of the Shoveler having nested in Berkshire.

Black-winged Stilt (Himantopus himantopus).—On May 18th, with two friends, I had the good fortune to see four Black-winged Stilts. Two of these allowed us to approach within about fifty yards. Both had black heads, and were therefore males according to Miss Jackson (British Birds, Vol. XII., p. 147). The others were rather wild. One had a white head, and was therefore probably a female. The other had a few dark marks on the head, so was probably a last year's bird. They had been seen the day before and were last seen on May 21st.

Other birds seen at the same place were as follows:—

WIGEON (Anas penelope).—A pair on April 26th.

DUNLIN (Erolia a. alpina).—One shot on January 28th was brought to me for identification and a few days afterwards I heard one.

Ruff (*Philomachus pugnax*).—I saw a Reeve on May 3rd with the Redshank mentioned below.

Green Sandpiper (*Tringa ochropus*).—Two on April 26th and one on May 11th.

Common Sandpiper (*T. hypoleuca*).—Three on May 11th. Redshank (*T. totanus*).—A number on May 3rd and 12th. Greenshank (*T. nebularia*).—One with the Redshanks on May 12th.

Norman H. Joy.

#### COMMON SCOTER IN DERBYSHIRE.

On April 14th, 1922, I saw a Common Scoter (Oidemia nigra) on the same pond in Hardwick Park on which I saw a Rednecked Grebe in February (British Birds, XV., p. 272). It seemed very tired, spending most of its time with its head resting on its back, and had gone by the following day. Mr. Jourdain informs me that there have been four other occurrences of this species in Derbyshire since the publication of his list in the Victoria History of Derbyshire, I., p. 141.

C. B. CHAMBERS.

#### GREAT NORTHERN DIVER IN WARWICKSHIRE.

On December 24th, 1921, I saw a Great Northern Diver (Colymbus immer) in Sutton Park. It stayed till the 26th. I saw one on the same pool from November 26th to December 3rd, 1911.

Brenda A. Carter.

#### DOTTEREL IN STAFFORDSHIRE.

On May 13th, 1922, a Dotterel (Charadrius morinellus) was picked up on the roadside at Draycot-le-Moors, Staffordshire. The bird when found was alive, but seriously injured through having collided with overhead wires. It came into my possession and on dissection proved to be a male. The gizzard contained remains of vegetable matter, and several particles of pebbles. The primaries and tail-feathers had moulted through, but the remainder of the plumage was undergoing moult. The last authentic record of this species in Staffordshire appears to be one shot by a keeper on the Weaver Hills, near Cheadle, in October 1895 (Trans. North Staffs. Field Club, 1901, p. 46.)

B. Bryan.

#### HATCHING OF THE GOLDEN PLOVER.

Last summer (1921) I was able to make some notes on the hatching out of the young of the Golden Plover (Charadrius a. oreophilus) on Tentsmuir, Fife. A nest containing four eggs was found on June 18th, and on July 4th, at 4 p.m., I noticed that one egg was chipped, and the membrane exposed. On the 5th, at 11 a.m., except for a few small cracks, there was no change in No. 1 egg, but one of the others had a hole in it through which the chick's bill was visible, while a third was slightly chipped. By 2 p.m. Nos. 2 and 3 had advanced a little, and No. 4 was chipped. When I arrived at 11.40 a.m. on July 7th I found that Nos. 2 and 3 had hatched, and the chicks with their down quite dry were lying in the nest. The top of No. I was very loose, and No. 4 was more chipped than before. At 12.30 p.m. the parent which was brooding was suddenly startled and dashed off the nest upsetting No. 1 and causing the chick to make a hurried entrance into the world exactly sixty-eight and a half hours after I first noticed the chip in the shell. Eighteen minutes after hatching, the new chick, still looking very bedraggled, crawled from under its parent's breast and lay for a short time in the open before returning under cover. The older chicks were more active and crept out and in several times, but did not go more than a yard from the nest. On the morning of the 8th, the chick from No. 4 egg had hatched and was still in the nest. J. N. Douglas Smith.

#### ARCTIC SKUA IN ESSEX IN JUNE.

An Arctic Skua (Stercorarius parasiticus) was seen on June 10th, 1922, by me and three others at Bradfield, Essex. It was of the dark form and when first seen was circling over

the river, but apparently attracted by a terrier which I had with me, it flew up to us and circled two or three times over us at a height of about 100 feet, then made off, inland, due west.

Walter B. Nichols.

#### INCREASE OF BLACK GROUSE IN LINCOLNSHIRE.

In Vol. XII., p. 22, reference was made to the reappearance of the Black Grouse (Lyrurus tetrix) in small numbers in northwest Lincolnshire in 1918, and perhaps earlier, and I recorded their continued presence in 1920 and 1921 (Vol. XV., p. 57). They have now increased considerably. I have seen young but no nest and can always see old birds when I look for them. A keeper flushed eighteen at once last winter. Is this Black Cock note known?—a hollow dove-like cooing, the articulation reminding one of Red-legged Partridge and the whole utterance of the "gobble" of a Turkey at a distance, "Wooda-wood-wood-wood-worroo" repeated many times, especially at sundown, and rather quickly uttered. It is very soft and rippling and when I say hollow it is the sort of note one could almost produce with the hollow wooden Wood-Pigeon calls one buys. There was a regular chorus last night (May 28th) at 9 p.m. It is not the same note as the gentle "coocoo-coo," which I have heard the Black Cock make. I consider a love-call. This other call is not a mating note.

W. S. MEDLICOTT.

#### RED-LEGGED PARTRIDGES ON YORKSHIRE COAST.

I NOTICE in the June number of *British Birds* (p. 27), a record of the occurrence of an apparently migratory Red-legged Partridge at Bexhill-on-Sea. A number occurred at Scarborough and Filey during the latter half of March and early April 1922, and all came in from the east as though migrating from the Continent. One was captured alive in the North Eastern Railway's Goods Station at Falsgrave, another in Vernon Place in the centre of the town. A third was seen to fall exhausted in the sea near the East Pier, and its still warm body was recovered shortly afterwards. Still another was seen to come in from over the sea and fall exhausted on the Foreshore Road, where it was picked up by a dog.

Mr. Knight Horsfield of Filey told me that six had occurred there about the same period, and all came in from oversea.

Whence do these birds come? They do not, I believe, occur on that part of the Continent opposite to the Yorkshire coast, yet almost every spring examples arrive from some

unknown place. They cannot be local birds returning from a semi-circular trip out to sea and back again, as has been suggested, for the Red-legged Partridge, although resident, is rare in our district.

W. J. Clarke.

Fulmar Petrel Breeding in Yorkshire.—Since the summer of 1919 a few Fulmar Petrels (Fulmarus g. glacialis) have frequented the Specton and Bempton cliffs (cf. B.B., XIII., p. 59, XV., p. 65), but apparently they did not actually breed. Mr. T. S(heppard) now makes the interesting announcement (Nat., 1922, p. 201) that he is informed by Mr. H. B. Booth that on May 26th, 1922, he saw a fresh unblown egg brought from the cliff-face at Bempton, while another egg was brought up on the same date. It is believed that a third pair is breeding and it is to be hoped that now breeding is proved the climbers will be content to leave any further eggs they may find. In any case one can now welcome the Fulmar as an English breeding-bird and we shall expect it to increase and spread even further.

Common Curlew Nesting in Lincolnshire.—Mr. W. S. Medlicott informs us that the Curlew (*Numerius a. arquata*) nested again in Lincolnshire in 1922. For previous records see Vol. XV., p. 57.

#### OBITUARY.

#### HEATLEY NOBLE.

Heatley Noble, who died at his residence "Temple Combe," Henley-on-Thames, on March 26th, 1922, was born on June 4th, 1862, the third son of the late John Noble of Park Place, Remenham, Berkshire.

Although Noble severed his connection with the British Ornithologists' Union and B.O. Club several years since, he was too good a man and ornithologist to be let fall out of the ranks unnoticed. Though a salmon fisherman, deer-stalker, and one of the half dozen best shots at Grouse and driven Pheasant in the kingdom, the living bird was Noble's life-interest, and its egg, if taken by his own hand, his most cherished trophy.

Many years ago he sent to the hammer an immense and authenticated collection of eggs of the Palæarctic region, and recommenced and carried to a large degree of completeness a new collection of his own taking. To make this he travelled in Spain, Hungary, Iceland (and isles north of Iceland), the Dovrefjeld, Scotland, and elsewhere. On one of these

expeditions he was accompanied by the late F. C. Selous. No day was ever too long, nor any country, or sea, too rough for Noble when on the war-path, but he was neither exterminator nor dealer, merely a naturalist-sportsman. He knew our native birds intimately, and was (I think) the first to find Scaup breeding in the British Islands, and surprised Scottish naturalists with eggs and down of Pintail from Loch Leven. His collection of young-in-the-down was extensive and valuable.

As a schoolboy he reared a young Honey-Buzzard almost from the first plumage, and discovered that the books are wrong, and that the chick must have honey-in-the-comb for some weeks before it can assimilate wasp-grubs. He proved that the young bird when feathered will attack the first wasps' nest it sees, dig it out unaided and gorge the grubs. He was a fine type of field-naturalist, always learning, and as grey hairs accumulated developed literary tastes, archæological and scientific, compiling a summary of the Birds of the Palæarctic region, a List of the Birds of Berkshire and Oxfordshire; a history of Park Place, Henley, and notes on the Four-horned sheep, etc. In fact, he was perpetually and indefatigably busy, and during the Great War (in which he lost his second son) worked at crutch-making until his health was affected; for even his muscular system was not equal to twelve hours a day at top-speed.

I remember during the war his making annual efforts (all ineffectual) to add to the food resources of the country by systematic collection of rock-birds' eggs. The Government Department delayed until autumn. He acted as deputy Chief Constable for a rural district, and kept the authorities

informed as to its resources in horses, carts, etc.

As a youngster up at Cambridge Noble was a bold but rather unlucky rider. In later years his affection for, and knowledge of rare British and foreign trees were remarkable, and his skill in forestry extraordinary. I have known him save a tree entirely "ringed" by rabbits with a jacket of clay reinforced by wire-net. He was equally clever in the management of machinery—and men.

As host, friend and genial companion, many of us found him almost incomparable. He was a well-informed, modest and kindly gentleman of a delightful type. H.M.W.



DIVER, REPORTED AS COLYMBUS ADAMSII, OBTAINED AT LOCH FYNE, ARGYLLSHIRE, AUTUMN 1893.

To the Editors of British Birds.

SIRS,—In Mr. Witherby's paper on the White-billed Northern Diver (antea, pp. 9-12) he states that he has been unable to trace the above bird. In Sharpe's *Handbook to the Birds of Great Britain*, Vol. IV., p. 304, (addenda) is the following note:—

" Colymbus adamsi.

"During a recent visit to Manchester, I found a young bird of this species in the very interesting collection of Mr. Bulkeley Allen at Altrincham. The specimen was shot at Achaglachgach, Loch Fyne, by a keeper named Ebenezer Burgess, late in the autumn of 1893."

Mr. Allen's collection is now at the Manchester Grammar School, and Mr. F. A. Bruton, of that school, has kindly allowed me to see the specimen and given me a copy of the entry in the catalogue relating

to it, which is as follows:-

"No. 33. Great Northern Diver (Colymbus glacialis or adamsi). "This bird, which I supposed to be an immature Great Northern Diver, was sent to me from Achaglachgach, Loch Fyne, by my brother's keeper, Ebenezer Burgess. Mr. Bowdler Sharpe, who saw my bird on March 16th, 1897, expressed great doubt whether it was not the White-billed Diver, C. adamsi."

I have compared the bird with the illustrations given in Mr. Witherby's article and, judging from the bill, the bird is *C. immer*. The upper line of the upper mandible descends towards the tip and the general shape of the bill resembles those of other Great Northern Divers in the collection. As the bird is cased I cannot give any details as to the shafts of the primaries.

Mr. Bruton has kindly given me permission to photograph the bird and I hope to let you have a print in the course of a few days.

N. Abbott.

DAVENPORT GREEN, WILMSLOW, CHESHIRE, June 17th, 1922.

[The photograph kindly sent confirms Mr. Abbott's opinion.—H.F.W.]

#### THE RACES OF EIDER DUCKS.

To the Editors of British Birds.

SIRS,—In his reply to Mrs. Meinertzhagen's note (antca, p. 32), Mr. Robinson quotes me (British Birds, Vol. I., p. 74) as saying the colour at the base of the beak in freshly-killed adult male Common Eiders shot in Orkney is orange-yellow. I never wrote anything sofoolishly wrong. A reference to Vol. I., p. 74, will show that the words I wrote were "adult drakes have a yellow base to the bill," no mention of the word orange, and I shall be glad in future if Mr. Robinson, when he does think fit to quote me, will do so correctly.

I have gone through all my notebooks, also examined all the notes of colour of soft parts written by me on the labels of the numerous Eiders in my collection, data carefully noted when I shot the birds, and in no single instance have I ever used the word orange, in fact I never saw any orange in the beak of S. m. mollissima.

A brief summary of these notes may be of interest:

- d juv. 1st feather.—Upper mandible pale green. Lower mandible, pale blackish-grey.
- ♂ 1st winter.—Pale sea-green, tip whitish.
- & 16-20 months.—Bluish-grey, base yellowish, nail white.
- ♂ Adult.—Base yellow to greenish-yellow, rest of beak green.
- 3 Adult in "eclipse."—Bluish-grey, base yellow.

Regarding S. m. borealis being a good race, I would refer readers to my remarks in *British Birds*, Vol. I., p. 73; after going into the matter very fully with Mr. E. L. Schiöler and Dr. C. B. Ticehurst some time ago, I see no reason to modify what I then wrote. If you are going to make a race or sub-species solely on the depth of colour in beak, you are surely going to fall into line with those who would have us divide Anser anser into two races, Anser anser and Anser rubrirostris (F. Coburn, Bull. B.O.C., XII., p. 80) which, in my opinion, F. W. SMALLEY. is as wrong as it is absurd.

1st June, 1922.

#### To the Editors of British Birds.

Sirs,—In my reference to Mr. Smalley in my last letter, I find that I have misquoted him in making him say "orange-vellow"; it should be "vellow." H. W. Robinson.

#### SUPPOSED PHEASANT×BLACK GROUSE HYBRID IN NORFOLK.

To the Editors of British Birds.

Sirs,—Mr. S. L. Whymper, who was present when the two supposed Pheasant×Black Grouse hybrids were shot at Hunstanton (Brit. Birds. Vol. XV., p. 292) informs me that one of them was sent by his direction to the Natural History Museum, where it was not considered to show any Grouse blood, but to be merely a cross between Phasianus colchicus and P. versicolor. It is desirable that this mistake should be corrected. I. H. GURNEY.

Keswick, Norfolk.

WITH WHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST."

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

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## THE MIGRATIONS OF BRITISH STARLINGS: RESULTS OF THE MARKING METHOD.

BY

#### A. LANDSBOROUGH THOMSON, O.B.E., D.SC.

The writer is indebted to Mr. H. F. Witherby for an invitation to work out the results to date of the marking of Starlings under the *British Birds* scheme, and for the further suggestion that the scope of the analysis should be widened by combining with these data the records for the species obtained by the writer himself during the Aberdeen University Inquiry. He must also gratefully acknowledge the very useful advice which Mr. Witherby has given him during the preparation of this report, and the extremely helpful manner in which the records were made available for its purposes.

The data here summarised are, accordingly, the records for the Starling (Sturnus vulgaris) which have so far been obtained during the course of the British Birds marking scheme or which were obtained during the now concluded Aberdeen University Inquiry: many of the first-named series have been published individually or in ad interim summaries in these pages,\* while a separate analysis of the Aberdeen records was included in the writer's final report† on the Inquiry. The numbers now dealt with are as follows:

		tal marked o 31st Dec. 1921.)	Total Re- covered.	Percentage Recovered.
British Birds		7,598	410‡	5.4
Aberdeen University	• •	1,900	62	3·3 —
		9,498	472	5.0

The recovery figures for the Aberdeen Inquiry may be regarded as final, whereas those for the *British Birds* scheme are only partial, seeing that many of the more recently marked birds

<sup>\*</sup> Witherby, H. F., British Birds, passim (cf. Index to Vols. I.—XII., etc.); Joy, N. H., British Birds, 1911–12, V., 129, 297, and 1913–14, VII., 341; Ticehurst, C. B., British Birds, 1912–13, VI., 97.

<sup>†</sup> Thomson, A. L., *Ibis*, 1921, Eleventh Series, III., 502; also  $Scot.\ Nat.$ , 1912, 220 and 1915, 315; etc.

<sup>&</sup>lt;sup>‡</sup> The numbers of birds recovered given here exclude imperfect or doubtful records, records of birds recaught at the places of marking on the same day or within the flightless period, and second or subsequent records for the same bird. A slight discrepancy with figures previously published (*British Birds*, 1921–22, XV., 238) is thus explained.

are still likely to be recorded. As regards the difference in percentage between the two sets of records it should be remarked that the number of recoveries is to some extent artificial, a very large number of records being due to the retrapping activities of the markers themselves. If all records from the places of marking and from within very short distances be excluded, the recovery rates for the two inquiries work out at an almost identical figure of approximately 0.5 per cent.

All the recovery records relate to birds marked in Great Britain. Among the *British Birds* records English-marked birds predominate, and among the Aberdeen records Scottish-marked birds are in the majority. Taking the two sets together, various sub-analyses have been made on a territorial basis without revealing any significant differences, and it has accordingly been decided that the whole series can be treated as a single geographical group.

Locality within Great Britain being thus left out of account, the records may be conveniently grouped in the following divisions according to the season and circumstances of marking:—

- (A) Birds marked as nestlings; obviously native to the places of marking.
- (B) Birds (all or mainly adults) caught and marked in summer (April-September, but principally in the breeding season): presumably native to the places of marking.
- (c) Immature birds caught and marked in the late summer, possibly at a distance from their birthplaces in view of the early movements which young birds are known to make. (This category includes only the birds specifically described by the markers as immature: a few others may thus be included in the previous group).
- (D) Birds caught and marked in winter (October-March), except those marked at lighthouses: the relation of place of marking to native locality is unknown, but these are probably a mixture of sedentary birds and of winter visitors from other districts or from abroad.
- (E) Birds caught and marked at lighthouses while on migration.

The series of tables (similarly lettered) given below presents analyses of the recovery records of birds falling into these five marking groups. A supplementary table (F) gives particulars of Starlings marked abroad and recovered in the British Isles.

TABLE A.

Analysis of Recovery Records of Starlings Marked as Nestlings in Great Britain.

Year of bird's life (dating from 1st April of summer of marking).		Recovered place of 1		Recovered at a distance.		
		April– September	October– March	April– September	October– March	
First year Second year Third year Fourth year			15 10 8	18 14* 5	5 I O	3 0 1
Total	••		36†	39‡	6	6

Grand Total: 87 records, representing 86 individuals.

\* One bird reported twice, once in each of these categories.

 $\dagger~\mathrm{Six}$  (two in each of the second, third and fourth years) reported as nesting.

‡ Monthly incidence: October, 6; November, 10; December, 3 January, 5; February, 10; March, 5.

TABLE AA.

(Details of cases in Table A, columns 4 and 5).

Particulars of Starlings Marked as Nestlings and Recovered at a Distance.

Ring Number.	Date of Marking.	Place of Marking.	Date of Recovery.	Place of Recovery.
B.B.49706 B.B.84466 B.B.81886 B.B.42667 B.B.96245	10.5.14 20.5.15 28.5.15 29.5.13 23.5.20	Berkshire Shropshire Staffordshire Staffordshire Staffordshire	28.6.1.4 	Buckinghamshire Worcestershire Montgomeryshire Cheshire Lincolnshire
A.U.36353 (Case 457) B.B.10899	31.5.11	Hampshire Stirlingshire	17.1.14 ca.20.1.12	Cornwall Co. Donegal, Ireland
B.B.42678 B.B.91567 B.B.87755 B.B.19056	29.5.13 22.5.18 2.6.16 24.5.13	Staffordshire Stirlingshire Staffordshire Staffordshire	13.2.14 13.9.19 3.19 29.1.17	Lancashire Cheshire Derbyshire Co. Roscommon, Ireland
B.B.41085	20.6.13	Berkshire (	8.2.15	Place of marking (released with newring, 83837) Cornwall

From Tables A and AA it is apparent that many of the birds are sedentary, numbers being recorded from the same

place or district throughout the year (distances of less than twenty miles have been ignored). Of the records of birds recovered away in summer, four represent short early movements of young birds and the fifth is really an autumn record. Of the records of birds recovered away in winter, the most interesting are the two showing migration to Ireland—one from Central Scotland and one from the English Midlands: the case of the Berkshire bird recovered in Cornwall in its fourth winter after having been recorded at home in its second, may also be noted.

There is a further British record of special interest which should be mentioned under this heading. Among a small number of records obtained by Dr. C. B. Ticehurst, when using his own rings, is one of a Starling (Ticehurst 72) marked as a nestling at Tenterden, Kent, on May 22nd, 1908, and recovered at Berck Plage, near Boulogne, France, on October 8th, 1908 (C. B. Ticehurst, *British Birds*, 1910–11, IV., 238). This appears to be the only case of an undoubted native Starling being recovered in France, and it represents what is practically the minimum possible in the way of a cross-Channel journey.

### TABLE B.

ANALYSIS OF RECOVERY RECORDS OF STARLINGS CAUGHT AND MARKED AS ADULT BIRDS IN GREAT BRITAIN IN SUMMER (APRIL—SEPTEMBER). (A few full-grown immature birds may have been included by the markers).

Year of bird's marked life (dating	Recovered place of		Recovered at a distance.	
from 1st April of summer of marking)	April– September		April– September	October March
First year	. 6	6	o	2
Second year	-	3	О	O
Third year		0	0	O
Fourth year	. ı*	I	0	O
Fifth year	. 0	О	0	O
Sixth year	. О	1	O	O
Total	. 19†	II		2 ‡

Grand Total: 32 records, representing 30 individuals.

<sup>\*</sup> One thrice, once in each of these categories.

<sup>†</sup> Five recorded as nesting.

<sup>&</sup>lt;sup>‡</sup> B.B. 11772 and 11774, both marked in Lincolnshire on 10.9.10, and recovered in December of the same year in Yorkshire and Pembrokeshire respectively.

The records given in Table B show that many of the birds are sedentary, and there are only two cases of recovery at distances exceeding about twenty miles. Of the birds recovered at the place of marking, five (all in Kent, as it happens) were recorded as nesting—two later in the same summer, two in the second summer, and one in the second summer (first and second broods) and again in the third and in the fourth summer: this last bird, a female, was also nesting when originally marked and is therefore known to have bred at the same place in four successive seasons, and to have had two broods in one of them.

#### TABLE C.

Analysis of Recovery Records of Starlings Caught and Marked as Immature Birds in Great Britain in Late Summer.

(With three exceptions all these birds were marked in Lincolnshire in 1913 and, with one other exception, in July or August).

Year of bird's life (dating from 1st April of summer of marking).		Recovered place of		Recovered at a distance.		
		April– September	October– March	April– September	October- March	
First year			9	15	О	4
Second year			1	1	0	2
Third year			2	2	1	O
Fourth year			0	0	0	O
Fifth year			1	0	О	O
Total			13	18	I	6

Grand Total: 38 records and individuals.

TABLE CC.

(Details of cases in Table C, columns 4 and 5).

Particulars of Starlings Marked as Immature Birds and Recovered at a Distance.

Ring Number.	Date of Marking.	Place of Marking.	Date of Recovery.	Place of Recovery.
B.B.16812	11.9.12	Lincolnshire	22.3.14	Cambridgeshire
B.B.46363	11.8.13	Lincolnshire	1.11.13	Lancashire
B.B.46284	9.8.13	Lincolnshire	2.12,13	Lancashire
B.B.46375	11.8.13	Lincolnshire	2.12.13	Co. Kilkenny, Ireland
B.B.46322	9.8.13	Lincolnshire	17.1.14	Nottinghamshire
B.B.46258	8.8.13	Lincolnshire	30.10.14	Wiltshire
B.B.46524	23.8.13	Lincolnshire	6.15	Norfolk

The records of immature Starlings caught in late summer, given in Tables C and CC, have been treated separately because these young birds may not have been native to the places of marking: the very early movements of birds of the year are well known and are indeed confirmed by some of the records of Starlings marked as nestlings (Table AA). As has already been remarked, however, a few immature birds, not specially noted as such by the markers, may be included in Table B. So far as the records can be relied on for the purpose, they confirm the deductions which can be drawn from Tables A, AA and B: as compared with Table B, there is a greater proportion of birds recovered at a distance, but the figures are probably not large enough to be considered as significant in this respect.

TABLE D.

Analysis of Recovery Records of Starlings Caught and Marked in Great Britain in Winter (October-March).

(Excluding birds marked on migration at lighthouses, for which see Table E).

Year of bird's marked life (dating		d at or near Recovered marking. Recovered		
from 1st October of winter of marking).	October- March		October– March	April– September
First year	67	51†	5	3
Second year	111	13	О	I
Third year	33	7	3	2
Fourth year	15	3	2	О
Fifth year	5	2	O	0
Total	231	76	10	6

Grand Total: 323 records, representing 311 individuals. (Twelve birds recorded twice each, in different years or seasons).

† Three reported as nesting.

TABLE DD.

(Details of cases in Table D, columns 4 and 5).

Particulars of Starlings Marked in Winter and Recovered at a Distance.

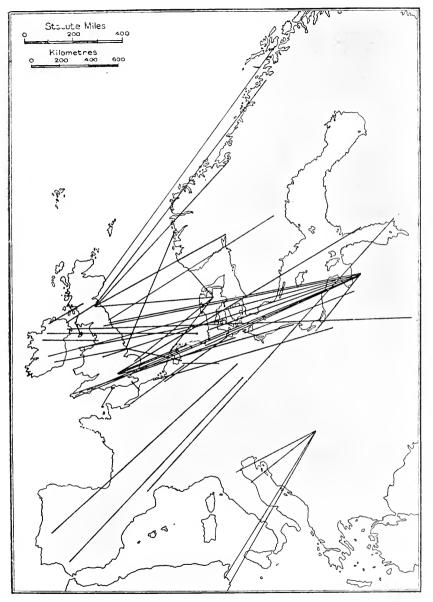
Ring	Date of Marking.	Place of	Date of	Place of
Number.		Marking.	Recovery.	Recovery.
B.B. C234 B.B.16078 B.B.83913 B.B.42342	1.2.11 19.1.12 18.10.14 26.10.13	Berkshire Berkshire Berkshire Northumber- land	20.2.11 2.2.12 5.1.15 3.2.14	Kent Essex Middlesex Dumfriesshire

TABLE DD-continued.

Ring Number.	Date of Marking.	Place of Marking.	Date of Recovery.	. Place of Recovery.
		**		6 1 1 1
B.B.80578	14.12.16	Kent	4.2.17	Cambridgeshire
A.U. 167B (Case 308)	24.12.10	East Lothian	6.2.12	Co. Durham
B.B.11125	15.10.10	Lincolnshire	4.10.12	Zwolle, Holland
B.B. 31	16.1.11	Berkshire	9.2.14	Friesland, Holland
B.B.16196	29.1.12	Berkshire	8.3.14	Pomerania, Germany
A.U.14891 (Case 459)	10,2,11	Mid-Lothian	11.3.14	Christiania, Norway
B.B.16018	31.1.12	Berkshire	17.4.12	Helsingfors, Finland
A.U.16480 (Case 218)	20.3.11	Mid-Lothian	20.4.11	Nordland, Nor- way (above Arctic circle)
B.B.15461	10.11.11	Berkshire	23.4.12	Ostfriesland, Germany
A.U. 8536 (Case 246)	20.1.10	Aberdeen- shire	ca.20.8.11	Nordland, Nor- way (above Arctic circle)
A.U.16479 (Case 455)	18.3.11	Mid-Lothian	5.4.13	Nord-Trondh- jem, Norway
B.B 46788	18.1.14	Lincolnshire	29.6.17	Near Bergen, Norway

Both on a priori grounds and from the results themselves it can be concluded that Table D deals with a mixed population of British native Starlings and of winter visitors from abroad, while of the former some are sedentary and others may be migratory within the limits of the British Isles. The records of birds marked in winter and recovered at or near the same places in summer (or both in winter and in summer in a few cases of double records) confirm the results of marking native birds in summer. Of the birds marked in winter and recovered at the same places in subsequent winters nothing definite can be said, as there is no evidence to show whether the birds were native to these places or not: similarly, of the birds recovered in winter at a distance, but within the British Isles, it is not possible to say whether they were migrants merely within the area or winter-immigrants from the Continent.

The records of Starlings marked in Great Britain in winter and recovered on the Continent in summer give a very interesting indication of the summer area to which at least



THE MIGRATIONS OF MARKED STARLINGS.

Each straight line on the map connects the place of ringing and the place of recovery of a marked Starling. The records are taken from both British and foreign sources, but only the principal cases—those showing long-distance or overseas journeys—are included.

(The lines are NOT intended to indicate the actual routes followed).

some of the British winter-immigrants are native. The region indicated includes Southern and Arctic Norway, Finland and Northern Germany. These records are supplemented, moreover, by the Danish record in Table E, and by the records in Table F of Starlings marked abroad and recovered in the British Isles.

The period October to March has been treated as the winter half of the year for the purposes of this paper—a convenient but obviously arbitrary grouping. Four birds marked within this period in the British Isles have been recovered abroad at the same season but in subsequent years. The birds recovered in October and March (2) may possibly have been in their summer areas at these times; or they, and also the February bird, may have found different winter-quarters from those of the year of marking or have been, at the time of recapture, at intermediate points in their journeys.

TABLE E.

Recovery Records of Starlings Caught and Marked on Migration at British Lighthouses.

Ring Number.	Date of Marking.	Place of Marking.	Date of Recovery.	Place of Recovery.
A.U.24753 (Case 458)	12.10.13	Lighthouse, Isle of May, Firth of Forth	29.1.14	Co. Antrim, Ireland
A.U.37742 (Case 456)	23.11.13	St.Catherine's Lighthouse, Isle of Wight	6.1.14	Guernsey Channel Islands
A.U.31144 (Case 822)	13.3.15	St.Catherine's Lighthouse, Isle of Wight	25.12.16	Staffordshire
A.U.498A (Case 452)	23.10.12	Skerries Lighthouse, off North Wales	ca.10.5.14	Svendborg, Denmark
B.B.43749	26.2.14	Galloway Lighthouse, Wigtonshire	26.11.15	Dumfriesshire
B.B.43750	26.2.14	Galloway Lighthouse, Wigtonshire	early 4.14	Lanarkshire
B.B.43746	26.2.14	Galloway Lighthouse, Wigtonshire	24.5.14	Isle of Man

Total: 7 records and individuals.

The records given in Table E represent the fruits of marking Starlings at lighthouses. They could, of course, have been included under the general heading of birds caught and marked in Great Britain in winter, but owing to their special interest they have been kept apart. With regard to the four Aberdeen University cases the writer remarked elsewhere that "Case 452 was obviously a winter visitor, and Case 458 not improbably the same; the other two may have been native birds but in view of the conclusions already suggested it is of interest that in all the instances of this kind there is at least a possibility that the subjects were winter immigrants." The three British Birds cases, marked at the Galloway Lighthouse, are less significant in that the journeys indicated are in any event comparatively short: the case of B.B. 43746, recorded in May south of where it was marked late in February, is curious, especially when compared with B.B. 43750, which was marked at the same time and recovered further north in April.

TABLE F.

Starlings Marked Abroad and Recovered in the British Isles.

(So far as ascertainable from published sources).

Ring Number.	Date of Marking	Place of Marking.	Date of Recovery	Place of Recovery.	Authority.
Helgoland 16166	31.3.14	Heligoland	12.14	Co. Leitrim, Ireland	fide B.B., 1918-19, XII.
Viborg 1031	15.9.04	Viborg, Denmark	early 3. 'o6	Edinburgh, Scotland	Mortensen, Dansk Ornith, Forenings Tidsskrift, 1907, I., 152.
Viborg 204	7.10.11 (as im- mature)	Viborg, Denmark	12.11.11	Norfolk, England	fide B.B., 1911-12, V.,
Stockholm 2067	8.6.15 (as nest- ling)	Borgsjö, Vesternorr- land, Sweden	1.2.18	Yorkshire, England	fide B.B., 1918-19,XII., 158.
Rossitten F15943	31.5.13 (as nest- ling)	Ribnitz, Mecklen- burg,	winter '13	Cornwall, England	fide B.B., 1917-18, XI., 187.
Rossitten 108	10.6.09 (as nest- ling)	Germany Wolmar, Livonia	ca. 20.3.11	Yorkshire, England	Thienemann, J.f.O., 1912, 160.

Table F-continued.

Ring Number.	Date of Marking	Place of Marking.	Date of Recovery	Place of Recovery.	Authority.
Rossitten 4116	10.6.11 (as nest- ling)	Wolmar, Livonia	26,12,11	South Devon, England	Thienemann, J.f.O., 1913 Sonderheft, 58
Rossitten 7043	6.12 (as nest- ling)	Wolmar, Livonia	1.1.14	Yorkshire, England	fide B.B., 1913-14, VII.
Rossitten 24603	3.6.16 (as nest- ling)	Talsen, Courland	before 24.3.17	Co.Tipperary, Ireland	
Rossitten 24609	5.6.16 (as nest- ling)	Talsen, Courland	14.3.19	Co.Tipperary, Ireland	
Moskwa 1889F	5.14	Wołmar, Livonia	5.12.14	Worcester- shire, England	fide, B.B., 1916-17, X.,
Moskwa 6160F	(as nest- ling)	Wolmar, Livonia	3.16	Cornwall, England	fide B.B., 1917-18, XI., 187.
Moskwa 2768F	5.14	Vitebsk, Western Russia	2 or 3.	Co. Down, Ireland	fide B.B., 1917-18, XI. 187.

In addition to the instances of Starlings marked abroad reaching the British Isles, given in Table F, there are other foreign records which may be mentioned as relevant to movements in the North European area in general. Starlings marked as nestlings in Holland have been recovered in Belgium and in Seine Inférieure, France (Van Oort, Notes from the Levden Museum, 1913, XXXV., 222). Starlings marked at Viborg, Denmark, have been recovered on the Texel, off Holland, and at Lister, at the southern extremity of Norway, respectively (Mortensen, Dansk Ornith. Forenings Tidsskrift, 1907, I., 152). Several Starlings marked as nestlings in Northern Germany and the Baltic States have been recovered further west in Germany, and also in Holland and Belgium: the early dates of some of these recoveries are noteworthy, nestlings marked in May being found at a distance in early July of the same year (Thienemann, I.f.O., passim; and Lucanus, Die Rätsel des Vogelzuges, Berlin, 1922, 69). Finally, there is the remarkable case of a Starling (Palmèn 604) marked as a young bird on June 8th, 1914, at Wiborg, Finland, and recovered before July 26th, 1915, in Aude, Southern France—a distance of 2,640 kilometres (fide, B.B., 1919-20, XIII., 80).

In a different category, but of great interest for comparative purposes, are the records of Starlings marked in Central Europe. Two Starlings marked near Leipzig and Magdeburg, Central Germany, were recovered in Southern Spain and in Portugal respectively (Thienemann, *J.f.O.*, 1922, 82, and 1921, 32). Of Starlings marked as nestlings in Hungary, two have been recovered in Italy (Ancona and Rovigo) and no less than five in Tunis (Schenk, *Aquila*, 1913, XX., 467).

#### SUMMARY.

- (A) Starlings marked in Great Britain as nestlings have been recovered chiefly at or near the places of marking, and that at all seasons of the year. One has reached the north of France in winter; two have reached Ireland in winter; others have performed shorter journeys.
- (B) The same applies generally to adult Starlings caught and marked in Great Britain in summer (April-September), but no case of movement beyond Great Britain has been recorded.
- (c) The same also applies to Starlings caught and marked in Great Britain as immature birds in late summer, one journey to Ireland and a number of shorter journeys having been recorded.
- (D) Starlings caught and marked in Great Britain in winter (October-March) have yielded recovery records of four kinds:—
  - Recovered at or near the places of marking in summer, thus providing further examples of sedentary native birds.
  - (2) Recovered at or near the places of marking in winter—of indeterminate significance.
  - (3) Recovered at a distance in summer, thus indicating the summer-quarters, in Norway, Finland, and Northern Germany, of Starlings which are winter visitors to Great Britain.
  - (4) Recovered at a distance in winter, and of rather doubtful significance.
- (E) A Starling marked in autumn at a lighthouse in the Firth of Forth was recovered later in the same winter in Ireland; one marked in November at a lighthouse in the Isle of Wight was recovered later in the same

winter in the Channel Islands, while another marked there was recovered in a subsequent winter in the English Midlands; a fourth, marked in autumn at a lighthouse off North Wales, was recovered in summer in Denmark; shorter journeys were also recorded in the cases of three birds marked at the Galloway Lighthouse, Wigtonshire.

(F) Starlings marked in summer, mainly as nestlings, in Denmark, Sweden, Northern Germany, Courland, Livonia and Western Russia, have been recovered in the British Isles, thus confirming and amplifying the records mentioned under (D) (3) above.

Looking at this summary, and comparing it with what is known from other sources about the British migrations of the species, the most striking thing is the almost entire absence of records showing movements of native British birds. to France or other countries to the south. The only exception is the case, already cited, of a Starling which crossed from Kent to the Department of Pas de Calais, a journey so short that it would hardly have been taken into account as migratory if it had not involved the passage of the Channel. Although Dr. Eagle Clarke (Studies in Bird Migration, 1012, I., 255. footnote) has said that "Marked native British Starlings have been recovered in winter in France," the present writer cannot trace any other records supporting the plural form of the statement. The only other similar journey recorded in the case of a marked Starling appears to be the one shown above in Table E: here again there is little more than the bare minimum of a cross-channel flight (Isle of Wight to Guernsey), and there is in any event no proof that this bird was native to the British Isles. Too much stress must not. of course, be attached to such negative evidence as the mere absence of records, but it may be noted that the numbers of Starlings marked have been large and the proportion of recoveries considerable, while there are records of Starlings marked elsewhere (and in smaller numbers) being recovered in France, Belgium, Spain, Portugal, Italy and Northern Africa. There is positive evidence, moreover, that native British Starlings are to a large extent either sedentary or merely local migrants within the British Isles.

On the other hand, Dr. Eagle Clarke's classical investigations of the movements reported from light-stations (*Report of the British Association*, 1903, 291; and *loc. cit.*) led him to the conclusion that there is a southward cross-Channel

emigration of Starlings in the late summer and early autumn, before the arrival of the first immigrants from the north-east or east. The cognate Reports of the British Ornithologists' Club Migration Committee, although giving little information as to cross-Channel emigration in the late summer, also tend to show that immigration on the eastern seaboard is not generally observed before the last week in September: but in 1912 large flocks were recorded going westwards at Spurn Head Lighthouse, Yorkshire, on the 25th and 29th June, and a further flock on the 10th August, although it is unfortunately not stated whether they were seen arriving from the east (Bull. B.O.C., 1914, XXXIV., 246). The assumption that the early cross-channel emigrants are native birds, however, is based solely on this absence of observed immigration at the same season; as this is itself negative evidence, one may fairly argue that it is not necessarily of greater weight than the negative evidence of contrary indication obtained by the marking method. On a priori grounds, furthermore, there would seem to be reason to suspect the possibility of some immigration occurring at earlier dates than those generally recorded. Very early movements on the part of young birds of the year are well-known in this country, both from the results of marking (vide supra) and from observation: the same is true on the Continent, and it has already been mentioned that nestlings marked in the Baltic States and in Northern Germany have performed long westward migrations as early as the beginning of July. On Heligoland the passage of young Starlings is observed in the second half of June and in July (Gätke, Heligoland as an Ornithological Observatory, Eng. trans., 1895, 228; Weigold, I.f.O., 1912, Sonderheft, 54, etc.).

Further investigations, it may be concluded, are desirable for the elucidation of this interesting point, about which there seem to be reasonable grounds for doubt. From the bird-marking aspect this means (a) the ringing of more native British Starlings, preferably nestlings, to strengthen or destroy the negative evidence already obtained; and (b) the ringing in Scandinavian or other Northern European countries of more Starlings which are native there, to bring to light any early immigration to the British Isles that may possibly exist, and to provide more data for a comparison of the movements of British and Continental Starlings respectively. The Starling is not only a good subject for the marking method, but also one particularly suitable for an international inquiry; it is indeed one of the few species which have

already been largely marked, and could be still more largely marked, in all of the European countries in which the method is now in use.

### Conclusion.

Many British native Starlings are sedentary, while some are migratory within Great Britain, or from Great Britain to Ireland: except for one record of a short cross-Channel journey, there is no proof from this source that any of these native birds emigrate to countries abroad. British winter immigrant Starlings come from Denmark, Southern and Arctic Norway, Sweden, Finland, Northern Germany, the Baltic States and Western Russia.

(Records of Starlings marked abroad also show journeys from Finland to Southern France, from the Baltic States to Northern Germany, from Denmark to Holland, from Northern Germany to Holland and Belgium, from Holland to Belgium and Northern France, from Central Germany to Spain and Portugal, and from Hungary to Italy and Northern Africa).



# SOME OBSERVATIONS ON THE FLOCKINGS OF STARLINGS.

Thirty years ago, as far as my observations went, the flocks of Starlings (*Sturnus v. vulgaris*) split up into breeding pairs in March and the end of the breeding season was duly recorded in my note books, late in June or early in July, by the

entry, "Starlings in flocks."

For some years past I have been puzzled at coming across Starlings in flocks during April, May and June. Last autumn and during the winter months a large flock, which increased towards the end of March, 1922, to probably four or five thousand birds, has roosted nightly in the shrubberies and trees at Rose Castle, Cumberland, the residence of the Bishop of Carlisle.

The birds arrived at the roost each evening, about an hour before sunset, in flocks and parties varying in size from two or three hundred to a dozen or two, and many of them

apparently came some distance.

Though much fewer in numbers, probably not more than 3,000, they continued to spend the night there during April, May and June, and at the same time that pairs of birds were busy nesting all around.

On 1st June I sent nine birds, shot from the flock, to

Mr. H. F. Witherby and his report is:—

- No. 1. 3 Adult by plumage; feathers long, pointed and with very few and very small buff tips; testes fairly large,  $7 \times 7$  mm. diameter. So far as I can see undoubtedly an adult in breeding condition.
- Nos 2 and 3  $\circlearrowleft$  d like No. 1 Testes 10  $\times$  8, 13  $\times$  10.
- No. 4 3 Testes very small  $(5 \times 3)$ , and dark, not in a breeding condition; feathers considerably shorter and less finely pointed than Nos 1, 2 and 3 and with a good many buff tips. No doubt a bird of last year.
- Nos. 5, 6, 7.  $33 \times 2^{\frac{1}{2}}$  like No. 4 but testes smaller,  $5 \times 2$ ,  $3^{\frac{1}{2}} \times 2^{\frac{1}{2}}$ ,  $4 \times 2$ .
- No. 8. \$\times\$ Ovary very small, oviduct straight, not bulged at all and apparently never used; feathers not sharply pointed, undoubtedly a bird of last year that has never bred.
- No. 9. ♀ As No. 8, but ovary slightly larger and ova slightly better formed but, nevertheless, very small. Oviduct not used; feathers as No. 8.

On 19th June I fired five shots from a 20 bore into the flock and brought down forty birds of this year in juvenile

plumage, and four others. Mr. Witherby's report on the four is:—

"Three of these were last year's males and not in breeding condition and may be described as my No. 4 of the first batch. The fourth bird was by plumage an adult, but I am certain it had not bred as the testes were quite small and dark as in the other three."

On 26th June the flock was nearly double in size and about half appeared, through glasses, to be juvenile birds.

It would, of course, be unwise to base any definite conclusions on the thirteen examples given above, but I hope to continue the investigation next year, and, if the result is about the same, it would seem to indicate that a certain proportion of adult males cannot get mates, and that a very large number of Starlings do not breed in their first year.

It would be well also if observers in other parts of the country, who have opportunity, would make similar investigations.

E. U. SAVAGE.

[In connection with the above it is interesting to note that we have two records of Starlings ringed as nestlings by Dr. N. F. Ticehurst, breeding in the following year. *cf. Brit. B*, vii, p. 9, viii, p. 45.—H.F.W.]

### GOLDEN ORIOLE IN SHROPSHIRE.

A MALE Golden Oriole (*Oriolus oriolus*) was seen on May 18th, 1922, near Ludlow. It flew across the road close in front of a motor-car, affording a clear view to the occupants, one of whom is a good naturalist and reported the occurrence to me next day.

H. E. FORREST.

### WOOD-LARK NESTING IN SHROPSHIRE.

For the last four years Mr. E. H. Potts has observed Wood-Larks (*Lullula arborea*) in the vicinity of Clun, under circumstances that indicate that it breeds there, though he has not actually found the nest. A few miles further south a nest was found this year (1922) by Mr. O. R. Owen of Knighton. It was in Shropshire but close to the Radnorshire border. The Wood-Lark breeds regularly in several localities in the latter county. H. E. Forrest.

### THE NEST-COVERING OF THE BLUE TIT.

There is a point in connection with the nesting habits of the Blue Tit (*Parus cœruleus*) which has interested me for the past few years, and upon which readers who have nestingboxes may be able to express an opinion. During the laying period the Blue Tit seems to draw over the eggs a thick pad of the material of which the nest is composed, and as a rule the clutch is not left uncovered until incubation has begun. I have noticed on several occasions that if this covering is turned aside intentionally by the observer, or in the case of a bird which does not cover the nest well, some of the eggs often show a small indentation in the shell. This looks as if it were made by a claw, either on the hasty return of the parent, or, as is more likely, by the bird on leaving the nest. The damaged eggs are always disposed of in some way before the others are hatched, but I have never seen any of them near the nesting-box.

This year I have watched a very exaggerated case of this kind. The Tit was so tame that when found on the nest it did not fly off even when the lid of the box was lifted and replaced, so the damage to the eggs cannot have been caused by the bird being driven hurriedly from them, as might be supposed. The nest-covering was very small in amount, and although the earlier eggs gradually became embedded in the moss and feathers, each subsequent egg was left exposed to view for some time. In all, this bird laid eight eggs, and of these the third, fourth, fifth, and eighth, when examined within a few hours of being laid, were found to be indented. On the day that the eighth egg was laid (22nd May), I found that the eggs had been gathered together in the cupshaped nest, but the clutch then consisted of only five eggs. I did not disturb them, but it was obvious that at least two were chipped. The next day there were three eggs in the nest and, when examined, two (Nos. 7 and 8) were found to be damaged. On May 20th the nest contained one egg (No. 6); No. 7 had been removed, and No. 8 was lying on the top of the nesting material just underneath the entrance hole, as though the Tit had been trying to get rid of it also. replaced this egg in the nest and the bird brooded the two eggs certainly till the evening of the 20th. I was unable to watch the box carefully after that, but the bird was on the nest on June 2nd, although I do not know how many eggs it was incubating. On June 4th the nest was found to be deserted. It contained one egg (No. 6) which was unfertile.

Possibly this case was exceptional, and I have not known of any other nest where more than two or three eggs were destroyed. Its importance lies in the fact that outside interference had nothing to do with the exposure of the eggs, some of which were chipped before the box was opened. I do not know if this happens only to young Blue Tits with

their first nest, but it points to the nest-covering being of considerable value in securing the safety of the species.

J. N. Douglas Smith.

# LESSER WHITETHROAT BREEDING IN CARNARYONSHIRE.

On June 13th, 1922, I observed a pair of Lesser White-throats (Sylvia c. curruca) on the Carnarvonshire side of the river, near Conway, and as it was evident from the behaviour of the birds that they were nesting, I made a search, resulting in the discovery of a young bird which had apparently just left the nest.

I did not meet with any other Lesser Whitethroats during a stay of three weeks in the neighbourhood.

HOWARD BENTHAM.

### REDWINGS SINGING IN ENGLAND.

MR. E. L. GILL's note on this subject (antea, p. 21), suggests an interesting question. What is the "true" song of a bird? Most species, such as Chiffchaff, Hedge-Sparrow, Great and other Tits, Chaffinch, Yellowhammer, Cuckoo, etc., have a definite song (or songs) which never appear to vary in length, force or tone, at any rate to any appreciable extent, even when the birds are singing in winter quarters, though for the first few days in spring they may be a little "out of gear." But other species, such as Song-Thrush and Blackbird, some of the Warblers, and perhaps Larks, have songs that vary in length and force and composition, not only between individuals but also according to the season and even perhaps the time of day.

It may be noted, for example, that the two British Whitethroats and the Blackcap have a soft September warble hardly audible fifty yards away, and in the case of the Lesser Whitethroat in particular the writer, at any rate, has never heard the characteristic loud babble after the August moult. Song-Thrushes, again, begin a kind of song in late September, but I have never heard them in "full song" till the end of

November.

My brother, C. J. Alexander, noted that Song-Thrushes wintering in Central Italy never sang with the full vigour of a "good" English Thrush; but I believe *T. ph. clarkci* has a louder and finer song than his continental representative ever achieves. The autumn song of the Blackbird is usually a very poor affair; but the Mistle-Thrush, on the other hand,

though much more rarely heard in autumn, seems to sing at full strength or not at all.

My own experience with the Redwing is that every spring, chiefly on fine days in February and March, I hear, in addition to the warbling chorus, frequent brief outbursts of really loud song, as loud as a Mistle-Thrush. I can hardly believe that the birds at their breeding-place sing more loudly, but the song may well be more persistent.

Skylarks, in my experience, are quite as likely to sing for three or four minutes on end within a week of the first autumn song, and up to the very end of the summer song-period, as in the middle of spring. All this refers to the south-east of

England chiefly.

I think it would be very interesting if someone with a good deal of leisure could go still further than Mr. Birkett suggested in a recent letter, and could note during several years the times of day when particular species are heard singing from month to month, and also the comparative force of the song.

H. G. ALEXANDER.

# SWALLOW RINGED IN BERKSHIRE, FOUND IN CAPE PROVINCE.

The sixth Swallow (*Hirundo r. rustica*) ringed under the *British Birds* scheme to be found in South Africa has now been reported to me. Some little time ago I heard from Mr. N. P. R. Williams, Mr. W. Beaumont-Thomas and others, that a notice had appeared in the *Cape Argus* to the effect that Mr. Egbert Greeff of Brandnek, Jansenville, had caught a Swallow with a *British Birds* ring.

By the kind offices of Col. J. W. H. Seppings, who, as I have before mentioned, has taken great trouble to make known our marking scheme in South Africa, I have now received this ring from Mr. Greeff, who kindly writes as

follows:---

Brandnek, Jansenville, May 7, 1922.

" Dear Sir,

I have been requested by Lieut.-Colonel J. W. H. Seppings, to forward the little ring which I found on the Swallow's leg, to him, or to you. I am very sorry I failed to let him know that I have sent it on to you, and most likely he has left for England by this time.

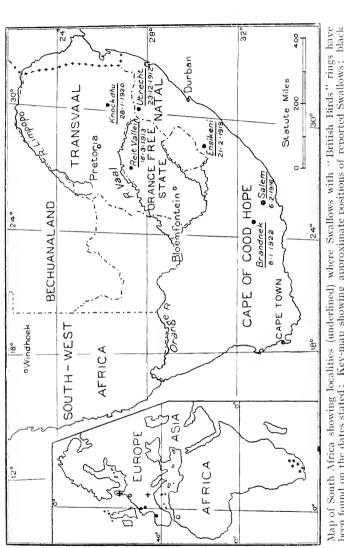
The bird was caught in my kitchen window on the 8th January, 1922, about thirteen miles from Jansenville. I posted the ring to you on the 6th May, and I hope the little match-box will reach you safely.

Yours faithfully, EGBERT GREEFF." The number of the ring is 5224 and the Swallow was marked as a nestling by Mr. A. Mayall near Windsor, Berkshire, on August 20th, 1921. I may here be allowed to congratulate Mr. Mayall, who has assisted the scheme so enthusiastically for so many years, on this successful record, and to thank Mr. Greeff for taking so much trouble to provide us with full particulars.

The following table gives brief details of the six South African records of Swallows. In the similar table printed on page 43, Vol. XIV., the date of recovery of K.R.87 was inadvertently given as 13.5.1920 instead of 28.1.1920.

C. H. Ruddock
A. C. Theron
S. G. Amm
Bishop of
Glasgow
C. H. Ester- huysen
E. Greeff

These six South African records prove that in any case, a considerable proportion of our Swallows have their winter quarters in the region which can be seen by reference to the accompanying map, where the places at which the Swallows have been found are underlined and the interesting fact that all these are in the eastern half of South Africa may again be mentioned. What we do not yet know is by what route or routes they reach South Africa. There are very few records of ringed Swallows found en route. All those I know of are charted approximately on the accompanying small sketch map. Four British Birds records (indicated by black dots) are from Brittany, Indre-et-Loire, Charente Inférieure and Bilbao, northern Spain. One ringed in Holland (marked with a circle at each point) was found at Tangier, Morocco and one ringed in Schleswig-Holstein (marked with a cross at each point) was obtained at Bregenz (Lake Constance). These records are, however, insufficient to tell us which way the Swallows go, but I am confident that our ringers will persist in their efforts and that they will eventually be able to claim the honour of adding this interesting fact to our H. F. WITHERBY. knowledge.



been found on the dates stated: Key-map showing approximate positions of reported Swallows; black dots—ringed in British Islands; circles—ringed in Holland, reported Tangier; cross—ringed in Schleswig-Holstein, reported Lake Constance.

### LITTLE OWL BREEDING IN MERIONETH.

On June 29th and July 2nd, 1922, near Aberdovey I saw a Little Owl (*Athene noctua mira*) sitting on a fence-rail. On the latter date, searching the immediate neighbourhood, I found four of these birds; so far as I could see with my glasses two of them were juveniles. They were flying about in an old slate quarry. In a hole I found what probably was the site of the nest—in it were a few twigs and small branches and three or four feathers.

I notice in the *Practical Handbook* breeding is only recorded from Monmouth and Radnor.

J. B. Watson.

# SHOVELER AND TUFTED DUCK BREEDING IN GLAMORGANSHIRE.

ON page 309 of *The Practical Handbook*, under the heading of "Distribution," the breeding status of the Shoveler (*Spatula clypeata*) in Wales is noted as follows:—"In Wales much scarcer, but nests Anglesey, and once Merioneth."

For over twenty years this species has been known to breed at one particular spot in Glamorganshire, and Mr. T. W. Proger, F.Z.S., has recently informed us that he once found no less than three nests in one day. This year (1922) there appear to be at least six or eight pairs breeding, as each time we have visited the ponds, unaccompanied males have been seen. On June 11th we watched for some considerable time a female accompanied by four young, about ten or twelve days old, and the following week, June 18th, a second female with two young, about two or three days old, was seen. Although suspected, the breeding of the Tufted Duck (Nyroca fuligula) in the county has never been definitely established until this season. For many years past birds have been seen as late as June, and on May 27th, 1922, there were no less than eight pairs on the ponds. On June 11th the presence of four pairs and an odd male seemed suspicious, but it was sheer good luck that enabled us to add this species to the list of birds that have nested in the county. had carefully searched the shores and reed beds of the ponds without success, and were sitting on the bank watching, when a female Tufted Duck appeared from nowhere in particular and joined the unattached male. She was in a great state of excitement, and we came to the conclusion that possibly she had been frightened from her nest, so determined to keep her in sight. Both soon got up and flew off. Watching through glasses we saw the female check herself as though about to alight, the male immediately turning about and

making for the pond. His mate changed her mind however. and also turned and came back, both birds alighting on the water once more. In five minutes they were up again, and off in the same direction, the female this time alighting at the spot where previously she had hesitated—a small patch of bulrushes—while the male returned to the pond.

After giving her time to settle down, we walked across. and within five minutes had put her up from a nest practically under foot. Built in the centre of a tuft of rushes, it was well screened, not only from the sides but from above, and contained ten very elongated, buffish-cream eggs. reposing in a thick mass of blackish down with obscure

white centres.

Although somewhat soft the ground all round was quite dry, and the nest was reached dryshod, the nearest open water being at least 100 yards away. Altogether it was a place we should never have considered as a nesting site if the bird had not shown it to us, for by all accounts this species is usually found nesting within a very short distance of open water.

On June 18th this bird was still sitting, while on the pond another female was leading round a family of seven recently hatched young. The same day we discovered a second nest also with ten eggs. This was built in a most exposed position in a very thin tuft of rushes, and was within a vard or two of open water. On this date four pairs were seen, of which three had either eggs or young. One of the males had assumed nearly complete eclipse plumage.

It may be of interest to note here that on the same ponds a single male Garganey (Anas querquedula) was seen on May

20th, 1922, but has not been observed since.

GEOFFREY C. S. INGRAM. H. Morrey Salmon.

In the Cardiff Naturalists' Society's Birds of Glamorgan (1900), the Tufted Duck is included as a winter visitor only, but the Shoveler is recorded as breeding regularly at Morfa, and we regret to have omitted mention of this in the Practical Handbook.—EDS.].

### FULMAR PETREL BREEDING IN YORKSHIRE.

WITH reference to the note on this subject (antea, p. 57), I was at the Bempton Cliffs on June 12th, 1922. One of the three gangs of "climmers" who work these cliffs told me that they found the first Fulmar's egg on May 26th as already related, and that they had since taken four others.

five in all. They had seen four more, which they had left, as they were fully alive to the fact that the addition of these birds to their ledges was a further inducement to ornithologists to visit them. I tried to count the Fulmars at the cliffs (a very difficult thing to do), and came to the conclusion that there were from fifteen to twenty pairs, and with this estimate the climber of the gang agreed.

S. H. Long.

### RUFF NESTING IN NORFOLK.

On June 11th, 1922, I had the fortune to discover a nest of the Ruff (*Philomachus pugnax*) in a marsh in north Norfolk. I first saw the birds flying together in the early morning over a wet part of the marsh where patches of shallow water lay. They dropped to the ground and the male at once extended its ruff, raised the tufts above its head, put its bill close to the ground and ran round with little steps. For some time I watched them feeding together and the male extended its ruff several times, but never so much as when it alighted after flying; it was a very definitely marked bird with the head and the back of the neck white as far as the shoulders, the ruff being dark brown or black.

On wading to the semi-dry stretch where they had been feeding I found the nest with four eggs, about fifty to a hundred yards away; it was in a slight tussock of grass—quite open to view from above and not at all difficult to see.

One egg unfortunately was cracked and this I removed. As there was a number of Redshanks (*Tringa totanus*) on the marsh, and as I had not actually seen the Reeve on the nest, I sent this egg-shell to Mr. P. F. Bunyard who most kindly verified it. He wrote as follows:—

"It undoubtedly belongs to the Ruff. It is typical in every way, *i.e.*, ground colour, shape and pattern of markings which also have the appearance of flaking off, which is characteristic of the eggs of *pugnax*."

I have been unable to visit the locality since the day on which I found the nest, so cannot say if the eggs hatched later.

On the same marsh I saw a Black-tailed Godwit (*Limosa limosa*) on June 10th and a Wood-Sandpiper (*Tringa glareola*) on June 10th and 11th.

A. W. Boyd.

# RUFFS IN SPRING AND SHOVELERS NESTING IN CHESHIRE.

OF late years the Ruff (Philomachus pugnax) has appeared in Cheshire during the autumn migration on a considerable

number of occasions (cf. Lanc. and Ches. Naturalist, 1916 and 1918, etc.), but it has rarely been recorded in spring.

On a marsh near the River Dee on April 29th, 1922, about half-a-dozen in all allowed us to watch them for some time on a muddy patch; one male (which was accompanied by two Reeves) was quite chestnut in colour on the head and neck, but its ruff was not developed. Again on May 6th there was a solitary Ruff with dark chocolate-brown head and neck and a buff mark round the face at the base of the bill; my wife watched this bird feeding in the mud for fully an hour. The legs of all these were distinctly yellow. Nothing was to be seen of them on subsequent visits; in view of the Lancashire nesting record in 1910 (cf. Brit. Birds, IV., p. 222), we hoped that they might stay to breed.

On the same marsh several pairs of Shovelers (Spatula clypeata) nested this year, and have indeed been found to breed by the keeper for several years. I put a duck from a nest with ten eggs in a large tussock of coarse grass on April 29th; on May 6th another was sitting on six eggs which had increased to eight on May 13th, when I found a third nest—a robbed one, but containing a number of the typical feathers. At least six pairs must have been nesting, judging from the number of birds we saw, but by June 17th the marsh had dried up considerably and there were no Shovelers at all to be seen. Mr. T. A. Coward's Vert. Fauna of Cheshire, published in 1910, contains no actual record of the discovery of the nest, though a few pairs had presumably bred in the county. It is evidently increasing in numbers. A. W. Boyd

### POSSIBLE BONAPARTE'S SANDPIPER IN SUSSEX. On June 15th, 1922, I saw on the Crumbles a bird which I took to be a Bonaparte's Sandpiper (Calidris fuscicollis). I watched it for about half an hour, at a distance at first of about 30 yards through glasses, and I also saw it fly. It was somewhat larger than a Dunlin (one of which birds was present), and it had a distinct white rump and apparently a rather shorter beak. Its general colour was light brown above and white below, and when it raised its wings a dark space was revealed on the part of the back just above the white rump. It was a more graceful bird than a Dunlin. The bird was seen later by a local fowler, who described the note as "tonking." I feel sure that it was neither a Wood-Sandpiper nor a Curlew-Sandpiper—birds which I know well. Its back was not grey enough for the one or black enough for the other, and moreover the white showed more clearly and

the beak was too short. The moment I saw the bird I felt that it was something I had never seen before.

E. C. ARNOLD.

### SANDWICH TERN IN CARDIGANSHIRE.

When walking across Tregaron Bog, some ten miles from the sea, with Mr. Bertram Lloyd, on June 21st, 1922, I picked up an adult Sandwich Tern (*Sterna sandvicensis*), some days dead. Very little seems to be known of this species in South Wales.

Chas. Oldham.

# COMMON TERNS RINGED IN EUROPE FOUND IN SOUTH AFRICA

In the Journal of the South African Ornithologists' Union (Vol. XI., 1915, p. 19) Mr. E. C. Chubb, Curator of the Durban Museum, recorded the finding of a dead Tern (Sterna hirundo), on July 8th, 1915, at Port Shepstone, on the coast of Natal, bearing a ring marked "Vogelwarte Rossitten F22020." Owing to the war and the breaking off of international intercourse this seems to have escaped the notice of the German observers at Rossitten. Recently I have learned, through Dr. Stresemann, of the Berlin Museum, that the individual in question was ringed near Königsberg, in East Prussia, on July 31st, 1914.

The Common Tern is not infrequent along the Atlantic coast of Africa, from Gambia to Table Bay, during the winter (October-March) months, but has rarely been met with farther east towards the Indian Ocean. Nor, so far as I am aware, has a ringed individual ever been previously obtained in South African waters, except for the one reported in the last number of the *Ibis* (1922, p. 603). W. L. Sclater.

[The bird referred to in the *Ibis* was ringed in Sweden in 1913 and recovered on the Berg River, Cape Province, on December 24th, 1921. It may also be mentioned here that in the *Auk* (1921, p. 453) Mr. F. C. Lincoln records that a Common Tern ringed as a nestling on July 3rd, 1913, at Eastern Egg Rock, Maine, U.S.A., was found dead in Aug., 1917, on the River Nun, Niger Delta, West Africa.—Eds.].

### REVIEW.

Songs of the Birds. By Walter Garstang, M.A., D.Sc., John Lane. 6s. net.

Professor Garstang has done a good service to ornithology by attempting to interpret bird-music, and to estimate its biological and evolutionary value. The phrases and rhymes in which he endeavours to reduce bird-songs to language and musical notation are disappointing; the present writer, in common with other reviewers, cannot accept them as catching the real genius of bird-song half as well as such popular phrases as the "Little bit of bread and no cheese," or the few really great bird-song poems, such as Shelley's "Skylark."

But in the introductory essay the author seems to break new ground. He insists on the existence of an æsthetic capacity in birds, and urges the importance of recognising it if we are to estimate the various aspects of bird-life correctly. He points out that the birds' monopoly of the air, so far as the higher types of life are concerned, has given them leisure in which the æsthetic sense has been able to develop. Not all systematists would agree, however, that "the most advanced and modern types of bird (the Turdidæ, or Thrush family) display the greatest complexity and variety in their melodic powers." Recent research has set the Crows in that proud place, and the Raven's beautiful song is notorious.

Professor Garstang defines bird-music as a "language of momentary emotions," and song as the expression not of a momentary excitement "but of an emotional state—a prolonged, if periodic, elevation of the spirit"; and he draws "attention to the fact that the nature of the integrating element lies in a sense of tone-sequence, progression, rhythmic balance and similar æsthetic qualities. "The contest for territory, increasing abundance of food, lengthening days, and brightening skies, all contribute to the male bird's excitement

and delight."

These ideas seem to deserve much more thorough consideration and exhaustive treatment than is given in these pages; and it may be hoped that Professor Garstang will find time to develop his essay into a treatise. Mr. Shepherd's illustrations are bold in outline, but in other respects rather disappointing; the Wrens, on page 62, are definitely bad; some of the others, such as the Greenfinches, on p. 58, and the middle Hedge-Sparrow, on p. 60, are clever "snapshots" of characteristic attitudes. H. G. A.



SUPPOSED PHEASANT AND BLACKGROUSE HYBRID IN NORFOLK.

To the Editors of BRITISH BIRDS.

SIRS,—I am afraid I have inadvertently made it appear as if the remarkable hybrids shot at Hunstanton (B.B., XV., 292, XVI., 60) had been wrongly identified by Mr. Gladstone, who in fact never saw them. I trusted to the identification of Mr. Robartes, Mr. Oliverson, and the head gamekeeper, but the verification of cross-breeds is never an easy task.

Kenuck Hall, Norfolk.

### THE MOULT OF THE COMMON SCOTER.

To the Editors of British Birds.

SIRS,—In A Practical Handbook of British Birds, Vol. II., p. 369, Mrs. Meinertzhagen states of the adult male Common Scoter (Oidemia n. nigra) that there probably is a partial moult in April, involving the feathers of the head and neck and a few of the body. I believe, however, that body-feathers growing in April cannot be ascribed to a spring moult. The examination of the inner skin of about 100 "old" birds (67 males and 40 females) received 'ast winter (November till May), gave the following results:—

Adult male.—November birds, all with growing flight- and tailfeathers, showed a more or less strong moult of the flank-feathers and sometimes some growing feathers on the breast and belly, though this was an exception; the head and neck always showed a certain degree of moult: the back was only in a few cases examined. From December to mid-February a variable number of growing feathers was found on the sides of the body and on the head and neck, while fairly often some of the tail-feathers were growing. About the middle of February, though no males examined had really finished moulting, some of them showed only the last traces of their autumn moult. Others, however, at the end of February were still moulting rather strongly on the flanks and their tail-feathers were growing, and this latter fact indicated that they had not yet finished their autumn moult. I think, therefore, that birds growing feathers on the flanks and on the head and upper neck, but not in the tail, in March, April and the beginning of May, may also be finishing their autumn moult. More material, perhaps, will show that the tail-feathers sometimes moult much later, even until April.

Adult female.—In November birds, all with growing flight- and tail-feathers, the moult of the body-plumage (back not examined) was not restricted to the flanks (and the head and neck) but it often (perhaps mostly) involved many feathers of the rest of the under-parts as well, the breast and belly often showing a strong moult. From December to March all birds were moulting their body-feathers (head, neck, flanks, often the feathers of breast and belly but the latter in varying degree) and now and then birds with growing tail-feathers occurred. Of six females received between February 15th and March 15th, two birds showed no moult and three the last traces of moult on the chin;

the sixth, however (received alive on March 10th), showed strong moult all over the body, and the tail-feathers were growing. If we again assume that growing tail-feathers indicate autumn moult, we find this bird finishing its autumn, and not beginning the spring moult. The only female (bred in 1920) received later, viz. on May 4th, showed a little down moult on the neck and upper head (rest of autumn moult) and new nesting down growing on the lower breast and belly. This female had, like a male received on the same day, some very worn and certainly old unmoulted rectrices.

I found no difference in the moult or moulting-period in females one to two years old and older ones. In males I was not able to establish this difference in age in the usual way by examining their sexual organs. Of course the discrimination of young and old birds only holds good in assuming that *Oidemia nigra* never breeds in its first summer.

IAN VERWEY.

Noordwijk Haan zee, Holland, June 4th, 1922.

### FIRST RECORD OF BREEDING OF THE SCAUP-DUCK.

To the Editors of British Birds.

Sirs,—I read in the July number the notice of my very dear old friend Heatley Noble's death, by H. M. W. In it he says that he thinks Noble was the first to find the Scaup breeding in the British Isles. As a matter of fact, I found these birds, and having watched them for some days saw that they were going to breed. Having made certain of this and located them to a very small area, I wired Heatley Noble. who was some 100 miles away south. I knew he would be keen to see the first really authenticated nest. He came up, and by that time I had seen the female come off a tiny little island in the loch. The difficulty was a boat. However, it was possible to get it before it was required for the fishers. I rowed him out to the island—about half an acre, and bare except for a few rushes on the margin. It only took three minutes to find the nest, with two eggs, and just enough down to identify it. We rowed back immediately, as the fishers were just coming, and we didn't want to be seen by the island. We took the nest, with nine eggs, later, when she began to sit. I gave Noble four eggs and kept five, and we shared the down. There were two females and one male, and I got the nest of the other three weeks after sent by my ghillie. Noble undertook to record the finding of this nest, but somehow my name did not appear to be associated with it. I am no writer myself and let it go; but I most certainly discovered this first occurrence of nesting of Scaup.

R. Sandeman.

CRICKHOWELL, BRECONSHIRE. July 17th, 1922.

[Although Col. Sandeman was referred to as "Captain S——" in the first record (Ann. Scot. N.H., 1899, p. 215), in his article on "Identification of Ducks' Eggs" in British Birds, Vol. II., Heatley Noble wrote under Scaup-Duck (p. 38): "On June 14th, 1899, Capt. Sandeman and I were fortunate enough to find the first authentic nest of this species in Scotland." Eds.].

#### THE BREEDING OF THE PINTAIL ON LOCH LEVEN.

To the Editors of British Birds.

Sirs,—Referring to the statement in the obituary notice of Heatley Noble (antea, p. 58), that he "surprised Scottish naturalists with eggs and down of Pintail from Loch Leven," may I point out that the

breeding of the Pintail on that loch was fully established—several nests with eggs being found—in May 1898, and the facts recorded in the *Ann. Scot. Nat. Hist.* the same year, *i.e.*, the year before Noble took his eggs and down.

WILLIAM EVANS.

Edinburgh, July 3rd, 1922.

#### NOTE OF THE BLACKCOCK.

To the Editors of British Birds.

SIRS,—As regards Mr. W. S. Medlicott's remarks on this subject (antea, p. 56), it is generally recognised that it is most difficult to imitate the note of a bird by a selection of human consonants. Mr. Medlicott asks if the note "Wood-a-wood-wood-worroo" is known and I think that this must be the note which I endeavoured to describe in my Birds of Dumfriesshire (1910, p. 322) as, This "burrling" (as it is called locally) note which, at a distance, sounds like a curling-stone travelling on keen ice. I have often heard uttered within a few feet of me and may be syllabled "terrar-terrar-terrar-terrar-techekikekaterarto." The syllables "techekikeka" (a sort of sneeze) can only be heard when close to the bird and if these are eliminated it will, I think, be agreed that the notes as rendered by Mr. Medlicott and by me are not unlike. I am not prepared to say definitely whether this is "a mating note" or not but on the many occasions and, at the various seasons, when I have heard it the Blackcock has always been HUGH S. GLADSTONE. indulging in some sort of display. CAPENOCH.

#### AERIAL DISPLAY OF THE BITTERN.

To the Editors of British Birds.

SIRS,—Writing in 1919 (Vol. XIII., p. 9), I said that only the female Bittern (Botaurus s. stellar's) was to be seen on the wing during the daytime. I wish to correct this statement. During 1921 and 1922 I have seen from four to six Bitterns, mostly males, playing together in the air over a certain spot. These displays take place at various hours, but generally in the early morning and towards the evening. The Bitterns circle round each other, soaring like Gulls. Sometimes they shoot rapidly upwards and plane down. When they disperse two of them rise high in the air and make a bee-line for another area three miles away. The others also return to distant spots. It would seem as though they collected in various areas in order to indulge in these aerial displays. Sometimes one or two females join in this social dance, but as they take place chiefly in the height of the breeding-season the females do not devote much time to amusement.

I have also seen a male join his mate and accompany her to the feeding ground if she happens to pass over him on her way to and

from the nest.

My earlier statement was correct when written, and at a time when

there appeared to be more females than males.

Similar displays have also been observed in other breeding areas where the Bittern has increased in numbers. At the time of writing these wonderful and interesting flights have almost ceased; the booming too, is, becoming uncertain and broken.

Iune 21st, 1922.

E. L. TURNER.

# BRITSHBIRDS

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# ON THE NEST-BUILDING OF THE LITTLE TERN.

вΥ

I. N. DOUGLAS SMITH, M.B., CH.B.

Writing of the Little Tern (Sterna a. albifrons) several authorities both of the past and present have either stated or implied that the bird makes no attempt at nest-building, and it is only comparatively recently that the occasional



Fig. 1. LITTLE TERN: Nest on bare sand. (*Photographed by J. N. Douglas Smith.*)

presence of shells in the nest has been recorded. But if a careful examination of a number of nests is made, I think that many points arise which are of interest to those who concern themselves with the complicated questions of habit and instinct.

During the past three summers I have had opportunities of observing a small colony of Little Terns which nest on Tentsmuir, one of the few Scottish breeding-stations of the species. The nesting-site is in a small amphitheatre, three

quarters of which are surrounded by sand-dunes, while the remaining part merges gradually into a heather-covered moor. The sea gains access to this area through a narrow gap in the dunes, but during the breeding-season it is only at exceptionally high tides that the water penetrates far into it although in winter it has the appearance of a miniature sea-loch. The centre of the amphitheatre is composed of hard caked sand, dotted about with clumps of coarse grass, and along the edge below the dunes lies a narrow stretch of



Fig. 2 Little Tern: Nest on shingle, showing the circle. (Photographed by J. N. Douglas Smith.)

shingle left by the tide. This shingle-bed is the chief nestingplace of the Little Terns, with the exception of a few pairs which stray to one side or the other and lay their eggs among the shifting sand of the dunes or on the dark ground nearer the centre.

The nests of this colony may be divided roughly into three classes: (1) where the eggs are laid on the sand in a slight scrape or in a natural hollow and the nest contains no building-material; (2) where the eggs are laid on sand that is thinly

covered with shingle and the nest contains a few pieces of broken shells, and (3) where the eggs are laid in a hollow among the shingle and there is a thick layer of shells both in and surrounding the nest.

With the birds whose nests form the first class any depression seems to be suitable, and in one case I found that the eggs had been laid in the heel-print of some passing holiday-maker, but some of the nests on the loose sand show a clearly defined



Fig. 3. LITTLE TERN: Egg ten days before hatching. After this photograph was taken, the shells were moved a few inches from the nest.

(Photographed by J. N. Douglas Smith.)

nesting-hollow (Fig. 1). As a rule, this is deepened on each return of the bird by a few lusty backward kicks, but sooner or later it is obliterated by a storm, after which the process begins again.

But it was chiefly to the nests which contained shells and showed evidences of nest-building that my attention was drawn. At first it was difficult to decide how much was due to the bird and how much to the action of the wind, but in June 1920, during a spell of unusually quiet weather, I found

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a nest which I think gives the key to the problem. The eggs had been laid on the shingle and a large quantity of shells had been built up under them, but the most important point connected with the nest was that it was surrounded by a narrow circle of bare sand from which practically all the shells had been cleared (Fig. 2). Shortly after I found this nest the circle was obscured and many of the shells were scattered by heavy gales, but as soon as the wind fell the nest was renewed and the circle again made its appearance. It was



Fig. 4. LITTLE TERN: Another view of the same egg as in Fig. 3, four days before hatching.

(Photographed by J. N. Douglas Smith.)

then that I realised that at least in this case there was a tendency for the brooding bird to stretch forward and gather in any material which she might be able to move. Since that time I have seen several other nests of the same pattern, but one of such a size is possible only during a prolonged calm. For although a stiff breeze may blow fresh material towards the bird, any change in the direction of the wind causes the Tern to change her position so as to face it, with the result that part of the nest is destroyed in her efforts to prevent the eggs from being covered by the drifting sand.

I have tried many experiments with marked shells in order to determine the strength of this nest-building instinct, but I have met with little success on account of sudden changes of weather. I am inclined to think, however, that it is present in varying degree in all the birds which I have studied and that where there are no shells in a nest the reason is that there is no suitable material within reach of the sitting bird.

I have seen some slight evidence of this nest-building before the eggs have been laid, but it appears to increase as incubation advances, for if the shells are removed a few days before the end of incubation the nest is generally renewed more quickly than if the experiment is carried out when the

eggs are comparatively tresh (Figs. 3, 4).

I have often tried to obtain a photograph of a Tern in the act of nest-building, but although I have spent many hours watching the birds I have seen shells moved only on two occasions. Strangely enough, these were after the eggs had hatched. Last year as I was watching a pair of Little Terns attending to their one-day old chicks, I noticed that the female as she sat brooding them twice picked up small pieces of shell and flicked them under her breast-feathers. Taking this in conjunction with the behaviour of the same Tern (British Birds, XV., p. 51), when she pecked gently at one of the chicks and proceeded to go through the "tucking-in" movement, although both chicks were some distance away from her, it seems probable that the actions of arranging the eggs, "tucking-in" the chicks and gathering shells, which are practically identical, are all very closely related.

Perhaps some observers may have notes on this aspect of the life-history of the Little Tern, and it is possible that more information might be obtained if experiments were carried out in localities where high winds are not so prevalent as

they are in the "kingdom" of Fife.

# PREFERENTIAL MATING IN BIRDS WITH SIMILAR COLORATION IN BOTH SEXES.

ву J. S. HUXLEY.

While investigating the habits of Herons and Egrets on Mr. E. McIlhenny's rookery in Louisiana, I made some observations which, if they prove to be generally substantiated, are of some theoretical importance. I am recording them here in the hope that readers of *British Birds* may make observations on the same subject.

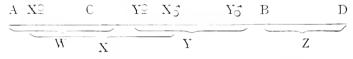
In the Louisiana Heron (*Hydranassa tricolor*), as in all Herons and Egrets, the two sexes are very similar in plumage. On the average, however, the males are slightly larger, slightly brighter in colour, and have better developed epigamic structures (crest, breast-plumes and aigrettes). To take but a few examples:—In males, the aigrette plumes usually project one or two inches beyond the end of the tail while in females they generally do not project at all. The lore in males is usually bright blue, but dull blue in the female. The red of the eye is usually brighter and deeper in males. On the other hand, the sexes overlap in respect of all these characters, the brightest females being brighter than the less bright males, or, if you prefer to put it so, the less masculine males being excelled, as regards the development of epigamic characters, by the more masculine females.

Such facts are, of course, well known in many species. What I was able to discover, however, was that in any one pair the male appeared almost invariably to be the brighter. This was first forced on my attention by two extreme cases. I spent most of each day in an observation punt among the nests on the pond. On the nearest nest to me I noted, the first day I began systematic observation, a bird which I unhesitatingly put down as a female. The aigrettes did not reach to the tip of the tail, and the whole coloration was dull. Next day, however, I observed the nest-relief ceremony of this pair, and found that the mate of the bird I had taken for a female had the sexual characters even less developed. The eve was a washy pink, the lore almost without blue, and the aigrettes only reached to a distance of two or three inches from the tip of the tail; in fact the bird had the poorest development of epigamic structures and coloration of any that I noticed among the thousands present. The converse of this was observed in another nest not far away. The bird first noted here was taken for a male, but later its mate

turned out to be even more brilliantly coloured, with exceptionally well-developed aigrettes, its epigamic characters reaching the maximum development observed by me.

Further observations showed that at least in the great majority of cases there was a distinct but not very great sexual difference between the two members of a pair, a difference much less than the maximum range of difference even between members of one sex. I did not observe a single case in which the two birds of a pair were identical, or even nearly so, in coloration and aigrette-development, nor one in which a very brilliant and a very dull-coloured individual were mated.

It is true that without killing a number of birds, certainty in this matter cannot be arrived at; but it is clear that the simplest way of explaining the above observations is to suppose that (by whatever method the result may be achieved) pairing tends to occur between birds in which the male is slightly but not markedly more brilliant, etc., than the female. A rough diagram will make my meaning clearer



Before passing on to possible interpretations, I might mention another observation bearing on the same problem. The Little White Egret (*Egretta candidissima*) which breeds abundantly in the same rookery, has normally a bright golden lore. I saw four specimens, however, in which the lore was a reddish orange. The difference was very striking, and immediately noticeable. No intermediates were seen, although attention was directed to the matter. *The four abnormal individuals were mated as two pairs*. Here we have an apparent tendency of like to mate with like (preferential mating) which, if it can be substantiated in other cases, obviously is of great importance in helping to fix new varieties.

As to the interpretation of the results, various hypotheses may be put forward. In the first place, pairing between brother and sister is possible; I am informed by various ornithologists that it is probable. This is to my mind the probable explanation of the mating of the abnormally coloured Egrets *inter se*.

This may also be the explanation of the slight but constant superiority of the males in colour, etc., in the Louisiana Heron. On the other hand, these birds have a courtship which is in the main mutual, both birds playing similar rôles. It is perfectly possible (though much work would have to be done to confirm it) that a somewhat similar level of emotional intensity in the two members of a pair, an intensity which would almost certainly be correlated (through the hormones of the reproductive organs) with intensity of epigamic characters, would be the most agreeable to the birds.

However, whether the similarity in either case be due to brother and sister mating or to adjustment through emotional intensity in courtship, the facts remain, and would seem to

be of importance as regards evolution.

The mating *inter se* of the abnormally-coloured Egrets may be found to throw light on the problem of the bridled variety of the Common Guillemot (*Uria troille*). As is well known, this bird has a white bridle round the eye, prolonged backwards in a white line along the cheek. In other respects it is indistinguishable from the ordinary variety. It is frequently found nesting in small "communities" among large numbers of the common form, but also occurs singly, mated with non-bridled birds. (Jourdain, *Ibis*, 1921.)

Presumably the bridle is dependent upon a single Mendelian factor; and the frequent but not universal breeding of bridled birds in small groups would then be due to brother and sister mating. Similar perpetuation of probably Mendelian differences arising in wild species has been noted by Loyd (Growth of Groups in the Animal Kingdom), who found small interbreeding communities of various rodents showing

constant deviations from the normal.

The problem of overlap among the sexes is of importance in another way, for it is very desirable that the field ornithologist should be able to recognise the sexes during life. When measurements are taken from skins, it is important that localities be given, for it is always possible that considerable geographical variation in size may occur; in such case the overlap might hold good for the species as a whole, but not for the birds of any given locality.

My experience with the Great Crested Grebe in the field is that in nine cases out of ten the cock and hen can be easily distinguished by size and by development of ruff and eartufts, and that only very rarely are the two members of a

pair very similar in appearance.



# AN UNUSUAL NESTING SITE OF JAY.

The site chosen for its nest by the Jay (G. g. rufitergum), shows as a rule so little variation that the following instance seems worthy of notice. At Burdelys Manor, Stagsden, in Bedfordshire, a nest was built in 1922 on one of the horizontal branches of a pear tree growing against the side of the house, the nest being placed against the wall and immediately below the projecting eaves and within one foot of a bedroom window.

The nest was robbed, but a brood was subsequently reared near at hand and as a further proof of the familiarity of this family, when I was last at the farm, two of the young were perching on a water tub alongside the house door and there

being fed by their parent.

Perhaps I ought to add that during the earlier part of the year this farm house was empty, and, maybe partly for this reason, a pair of Magpies had selected an oak tree within the garden for their nest, and also a vixen had a litter of cubs in the bank of the moat, under 44 yards and 20 yards distance respectively from the house.

J. S. Elliott.

### LARGE CLUTCHES OF GREENFINCH AND HEDGE-SPARROW.

On June 28th, 1922, in Hertfordshire, I found a nest of Greenfinch (*Chloris c. chloris*) with seven eggs, an unusually large clutch, and on June 16th, 1920, in Cumberland, I took a nest of Hedge-Sparrow (*Prunella m. occidentalis*) with six eggs.

Percy Rendall.

[Clutches of seven are unusual in the case of the Greenfinch, though I have twice met with this number personally, on both occasions in south-west Derbyshire. Messrs. J. M. Goodall and W. E. Renaut have also similar sets in their collections, and the late A. B. Farn had a clutch of eight eggs from Essex. The six set of Hedge-Sparrows' eggs is less rare and has been met with on a good many occasions, e.g., in Berkshire (F. W. Proctor), Denbigh (S. G. Cummings), Herts (A. Ellison), Derbyshire (F. C. R. Jourdain), Gloucester (B. Davies), as well as by D. H. Meares, A. B. Farn and others.

F. C. R. Jourdain.]

### OBSERVATIONS ON THE TWITE IN THE PENNINES.

The Twite (Carduelis f. flavirostris) nests in small colonies in most suitable places on the Pennine Hills of east and southeast Lancashire and the West Riding of Yorkshire; also in smaller numbers in east Cheshire and north Derbyshire. The nesting area is usually on the rough hill-sides and heathy moorlands above the cultivated grass-lands and below the boggy cotton-sedge moorland, at an altitude varying from 700



to 1.200 feet. There, on the rocky outcrops, where the bracken and ling flourish, the nests are built either on or close to the ground in dead bracken or ling; and frequently under the shelter of a stone, or in a stone wall about the old quarries, which are a conspicuous feature of the hills. Eggs are generally laid during the second and third week in May and vary from three to seven in a clutch (I have heard of one of eight), six being the most frequent. I believe the species is often double-brooded, but most certainly not always.

During the past fifteen years I have found about two hundred nests of the species, but only on two occasions have I found the egg of the Cuckoo deposited with it. The first on June 15th, 1918, was recorded in *British Birds* (XII., p. 91), by Mr. Herbert Massey; and the second was found on June 2nd, 1922.

Both nests were found on the same moor in the parish of Saddleworth in the West Riding of Yorkshire. They were placed in identical situations, under stones on old quarry banks, in positions easily overlooked by the Cuckoo, and where it was possible for the bird to squeeze herself in, and sit upon the nest, as can be seen in the accompanying photograph of this year's nest.

Why should the Twite be such a rare fosterer of the Cuckoo? for the Cuckoo is common to most localities where the Twite occurs; and in many places the Twite is even more common than the Meadow-Pipit (*Anthus pratensis*), yet nearly all Cuckoo's eggs in these localities are found in Pipits' nests.

Is it that the Twite feeds its young largely on seeds, which

is unsuitable food for the Cuckoo?

If so, this rarity is easily accounted for; and it is probably only through scarcity of nests of its own fosterer that the Cuckoo is induced or compelled to deposit its egg with those of the Twite; certainly in both years in which I have found a Cuckoo's egg in the nest of a Twite, there have been fewer Meadow-Pipits than in normal seasons.

It would be very interesting to know if any case had occurred where the Twite had reared a young Cuckoo.

FRED. TAYLOR.

[There are about eleven instances known in which the Cuckoo's egg has been found in the nest of the Twite, all in England (the Lake District, Yorkshire and Lancashire), but I am not aware of any instances in which the young Cuckoo is known to have been reared.—F. C. R. JOURDAIN.]

### PIED WAGTAIL USING NEST OF HOUSE-MARTIN.

Ox July 15th, 1922, whilst walking through Pewsey, Wilts, my attention was drawn to a nest of a House-Martin (*Delichon urbica*) under the eaves of a cottage from which a bird was looking out. A closer inspection showed that it was a Pied Wagtail (*Motacilla a. lugubris*), the whole head appearing through the opening. Although it was much interested in my movements it would not leave the nest. I had another look at the nest about 7.30 p.m., when the Wagtail was

evidently off feeding. She was again sitting on the morning of 16th.

Although I know this species exercises considerable ingenuity in its choice of a nesting site, I do not recollect having heard of the use of a Martin's nest for the purpose.

NORMAN GILROY.

### REMARKABLE CONSTANCY OF A NUTHATCH.

In my experience the Nuthatch (Sitta e. britannica) is an extremely close sitter and no interference with the nest entrance hole or eggs ever causes desertion. However, I think the following example of constancy is hard to beat. On May 26th. 1922, in Montgomeryshire, requiring a complete nest and eggs for a museum, I removed a nesting-box containing a nest and six eggs of this species from its supporting nail about twenty feet from the ground, in an oak tree. I laid the box containing nest and eggs on the ground about thirty feet away from the tree and went away for six hours. On my return, to my amazement, I found a Nuthatch sitting in the box on the eggs, in spite of this complete vertical and lateral alteration of the nest. I was only sorry time did not permit me to experiment as to how far the nest could be moved from its original site without causing desertion! Incubation was, of course, advanced. W. M. Congreve.

[cf. Borrer's Birds of Sussex, p. 83.—Eds.]

# FOOD OF YOUNG WHITETHROATS.

I RECENTLY watched a male Whitethroat (Sylvia c. communis) feeding its two young on the cuckoo-spit insect (Aphrophora spumaris). The young birds, apparently a few days out of the nest, were following their parent amongst some bramble-bushes, where the latter picked off the insects at the rate of two or three a minute.

J. B. Watson.

# MISTLE-THRUSH LAYING MORE THAN FOUR EGGS.

In my experience, and that of any ornithologist with whom I have discussed the matter, it is most unusual to find the nest of a Mistle-Thrush (*Turdus v. viscivorus*) containing more than four eggs. I have until this year (1922) only once found a nest of this species, out of many examined, with five eggs, and that was near Ypres in Belgium.

This year at my home in Denbighshire I found six nests in all of this species in April and May. Two of them contained two and four young respectively, but the other four nests all contained five eggs. In one of these with five eggs, incubation began on May 20th, and in the same big ash tree, but on the other side of it about two feet lower down, I ringed four newly-hatched young on April 29th.

Presumably the five were in the second nest of the pair whose young I ringed.

W. M. Congreve.

[Most collectors in the course of their experience have met with a few cases of five clutches of Mistle-Thrush, but the remarkable part of the above record consists in the fact that no fewer than four nests in a limited area and in a single season contained five eggs. Five is not the maximum number recorded as I am aware of five instances in which six eggs have been found in one nest (cf. Zool., 1010, p. 226). The nine eggs found in one nest by Mr. H. S. Davenport were evidently the produce of two birds (Zool., 1885, p. 333), as were also the seven eggs recorded loc. cit.—F. C. R. Jourdain.]

### REDWING IN SHROPSHIRE IN SUMMER.

On August 4th, 1922, a cat was noticed at Aston-on-Clun with a bird in its mouth. It appeared to be a young Thrush, but upon the owner, Mr. E. H. Potts, taking it from the cat he was surprised to find that it was a Redwing (*Turdus musicus*). Although it was in good condition, he noticed that it had at some time been wounded in the leg, so it is probable that the wound prevented its making the usual spring migration.

H. E. FORREST.

### BLACK REDSTART IN LEICESTERSHIRE.

During April and November, 1921, I saw one or two Black Redstarts (*Phænicurus ochrurus gibraltariensis*) at the brick works at Thurmaston and in the latter month captured alive a fine male that had injured one of its wings.

W. H. Barrow.

# HEDGE-SPARROW NESTING AMONG HEATHER.

On June 15th I found a pair of Hedge-Sparrows (*Prunella modularis*) nesting right out in the open moors on the north side of the Hambledon Hills in Yorkshire. The nest, which contained five nearly fledged young ones, was built in a patch of deep ling (*Calluna vulgaris*) and was placed only a few inches from the ground. There were a few mountain ash trees and stunted hawthorns not far away, but the nearest cultivated land was over a mile distant. I have never met the Hedge-Sparrow out on these moors before, and think the incident is sufficiently interesting to be recorded.

E. Arnold Wallis.

### EARLY MOVEMENT OF SWIFTS ON SOUTH COAST.

I was very surprised to note a westerly movement of Swifts (Apus a. apus) on July 16th, 1922. The sky was heavily overcast the whole day, and a fairly strong west wind blowing. I noted no Swifts during the morning, but from 2.30 to 8.30 p.m. many hundreds flew over Bexhill, Sussex, in a westerly direction. They flew slowly, at times only a few being seen, at others a great many, from near the ground up to about 100 feet. At about 6 p.m. the largest numbers were passing, the birds being visible on all sides. I have annually observed the passage of Swallows and Martins in this direction in September and October, but July 16th seems a very early date even for Swifts. Since that date I have only observed the local birds in the normal numbers.

CHARLES G. YOUNG.

### CUCKOO LAYING IN A WILLOW WARBLER'S NEST.

I have seen records of Cuckoos (Cuculus canorus) very occasionally utilizing Chiffchaff's (Phylloscopus collybita) and Wood-Warbler's (Ph. sibilatria) nests, but I do not remember any instance of a Cuckoo utilizing a Willow-Warbler's (Ph. trochilus). It may be of interest to put the following instance on record:—On May 28th, 1922, a Willow-Warbler's nest, not quite finished, was found here (Garstang) and when looked at again, about a week later, it contained three Willow Warblers' eggs (one badly broken) and one Cuckoo's. Besides one egg being broken, the nest was in a somewhat ruffled condition, and appearances pointed to clumsiness on the part of the Cuckoo when depositing its egg. The nest was in a recess in a steep bank and the Cuckoo must have had difficulty in finding foothold, which doubtless accounts for the disturbed state of the nest and the broken egg.

W. FITZHERBERT BROCKHOLES.

# CUCKOO RETURNING TO SAME SUMMER QUARTERS FOR FOUR YEARS.

In the spring of 1922, for the fourth year in succession, a Cuckoo (Cuculus c. canorus) returned to Hungerford Park, Berks. It has a very peculiar call, quite unmistakable—an attempt at "cuckoo," but unlike the note of others, even after their voices break in late summer. Its call remains the same throughout the summer.

It never goes far from a wooded mound close to the house, and drives off any other male Cuckoo that approaches that place.

The above two facts seem to prove that Cuckoos return to the same spot and that the male Cuckoo establishes a territory.

B. VAN DE WEYER.

An almost precisely similar case has occurred close to my home at Appleton, Berkshire, where the very peculiar double note of a male bird has been noticed in the same restricted locality for at least four years.

F. C. R. JOURDAIN,

# TAWNY OWL TAKING A SQUIRREL.

On June 24th, 1922, Mr. T. Mallinson, a neighbour of mine at Raughton Head, Cumberland, who is a trustworthy observer, noticed a Tawny Owl (*Strix aluco*) in daylight, carrying a prey of considerable size. He watched it settle in a tree; and, following it up, startled it by throwing stones, so that it dropped its catch, which proved to be a full-grown squirrel, headless but still warm. As the *Practical Handbook* states that squirrels are only rarely taken by the Tawny Owl, I think it may be worth while to record this definite instance.

E. U. SAVAGE.

### COMMON BUZZARD NESTING IN HAMPSHIRE.

On June 24th, 1922, I came across the Common Buzzard (Buteo buteo) nesting in the New Forest. My attention was first attracted by the persistent crying of the bird from an oak tree on the edge of an extensive but somewhat open tract of immense beech trees. Upon my approach, the Buzzard left the oak and soared round overhead for nearly forty minutes. crying all the time. I soon found the nest, which was in the upper fork of an enormous beech, and was fully 80 ft. from the ground. It was of great size, and by the down on it and the amount of "whitewash" beneath, must have contained young. The Buzzard twice pitched in a tree close to the nest. but did not actually go on to it. We found two old nests in the immediate vicinity, so that the birds must have been there for some years. I may add that the nest-tree was quite inaccessible except to a professional climber with ropes and the necessary appliances. NORMAN GILROY.

[cf. Brit. Birds X., pp. 272, 295, 296.--EDS.]

### SPARROW-HAWK PREYING ON SWIFT.

On July 3rd, 1922, I watched a Sparrow-Hawk (Accipiter nisus) carrying a Common Swift (Apus apus) in its talons. The Hawk had some difficulty in carrying its prey, but whether this was because of the strong breeze or because of

the Swift's struggles I could not be sure. Unfortunately I did not see the actual capture of the bird. There was a number of Swifts about, all flying high.

WILLIAM P. S. TAYLOR.

### SHOVELER BREEDING IN LEICESTERSHIRE.

Two pairs of Shoveler (*Spatula clypeata*) have frequented one of the Reservoirs at Bradgate all the spring and early summer of 1922. The keeper tells me that they have nested, though I have not myself seen either nest or young birds.

W. H. Barrow.

### TUFTED DUCK BREEDING IN CUMBERLAND.

From the occasionally observed presence of both sexes on suitable inland ponds and loughs during spring and summer. it is probable that the Tufted Duck (Nyroca fuligula) has been breeding in Cumberland for some time, but the record in the Zoologist (1888, p. 330) by the late Rev. H. A. Macpherson. and referred to in British Birds (Vol. II., p. 84), is the only one I can find. The record reads: "The hope that this species might nest in Cumbrian waters has at length been realized. A fine brood was reared in 1888 at no great distance from the Solway." In 1892, Macpherson published the Vertebrate Fauna of Lakeland and again mentioned this occurrence, but appears to have had the information secondhand as he added "I cannot vouch for this." Later, doubts apparently arose in his mind on the authenticity of the record. for in the article on Birds in the Victoria History of Cumberland, published in 1900, he wrote: "Proof of its having reared young in our midst is still to be obtained." The actual breeding of the species in Cumberland was also unknown to Mr. L. E. Hope when he wrote his paper on the "Ducks and Geese of the Solway" in the Transactions of the Carlisle Natural History Society, Vol. II., published in 1912

In view of the above, it is satisfactory to be able to report that two nests were inspected by me this season in the neighbourhood of Carlisle. One with ten eggs was built among rushes in a small, deep pond on the east side of the town. This pond was known to have been frequented by Tufted Ducks during the two previous seasons, so when a pair were observed there on May 25th last, my son waded through and examined the numerous tufts of rushes with, however, a negative result. On June 17th we made another search, and discovered the nest high up among a thick growth of rushes, surrounded by water about two feet in depth. The duck

was not seen to leave the nest, but she suddenly appeared on the bank, having dived the ten yards or so which separated the site of the nest from the bank. Although high up among the rushes the nest was well concealed, and the eggs were covered with the usual dark down, among which were a few small white feathers.

The second nest was among a rank growth of sedge (Carex) on the swampy margin of a small, deep pond a few miles to the south of Carlisle. It was inspected on June 19th and contained seven eggs, and, as in the other nest, there were a few white feathers among the down. I might add that the sites of both nests were within a few yards of public highways.

### COMMON SCOTERS INLAND IN CHESHIRE IN SUMMER

On July 9th, 1922, I saw a flock of seven adult drake Common Scoters (Oidemia n. nigra) on one of the Witton Flashes near Northwich; they were wild and uneasy and flew about in a compact bunch from time to time. For previous summer occurrences see Brit. Birds, Vol. VII, pp. 118 and 173, X. p. 120. On April 26th, 1922, a brown bird with pale cheeks was on the same flashes. In neither case did the birds stay for more than a day.

A. W. Boyd.

# COMMON SCOTERS IN CARDIGAN BAY IN SUMMER.

During the past few summers I have visited the north of Cardigan Bay, and have invariably found the Common Scoter (*Oidemia n. nigra*) present in large numbers. They may be seen every day at a distance of 200 to 2,000 yards from the shore, in flocks extending for about two miles along the coast. In 1922 I first noticed them on July 10th.

On no other part of this or any other coast have I seen such large numbers of this species, and in Wales their distribution appears to be entirely local. Viewed through binoculars the majority seemed to be adult males.

J. B. Watson.

[cf. similar records for north coast of Wales and Carnarvonshire, Vol. VI., p. 158; VII., pp. 118 and 144, and Forrest, Fauna of N. Wales, p. 252.—Eds.]

### INCUBATION-PERIODS OF SOME "WADERS."

The following has just come to my knowledge: A shepherd reported a nest of Curlew (*Numenius a. arquata*), the fourth egg being laid on May 4th, 1922, with two young hatched on the 26th; thus it hatched on the 22nd day. On being

instructed to note the cause of the other two not hatching, he reported that he broke the two eggs to see, on the 30th, and one contained a young bird still alive, while the other egg was "bad." As a reason, I suggest that, owing to the frosts prevailing about the first week in May, the bird incubated upon laying her first egg, thus causing the eggs to hatch irregularly; the cause of the bird being alive in the other egg five days after the first two had run being that the temperature at that time was very high. The other egg was probably "frosted." I may also add that this year I noted a Redshank (*Tringa t. totanus*) to hatch on the 23rd day, a Golden Plover (*Charadrius a. oreophilos*) was still unhatched on the 22nd day and two Lapwings (*Vanellus vanellus*) went over 26 days each—the weather at that time being very backward. Usually the Lapwing hatches on the 24th day.

As an instance of range of breeding periods it may be noted that I saw the nest of a Suipe (Gallinago g. gallinago) on March 30th, 1907, containing three eggs, whereas on August 4th, 1916, I fired at a Snipe which rose from four eggs. This fortunately was missed and the eggs were hatched before the 12th, at which date I revisited the spot.

E. RICHMOND PATON.

# BREEDING OF COMMON SANDPIPER IN OXFORD-SHIRE—CORRECTION.

In Brit. Birds XI., p. 189, details are given of three cases of breeding of the Common Sandpiper (Tringa hypoleuca) in Oxfordshire. A recent inspection of the original data tickets shows that the dates mentioned are incorrectly stated. The eggs taken between Sandford and Nuneham were found on May 28th, 1907 (not 1904 as stated). The nest with two eggs found by Mr. Tickner at Nuneham was taken on May 22nd, 1904, and that between Pinkhill Loch and Bablockhythe on May 13th, 1903, and not in 1910 and 1912 as stated.

F. C. R. JOURDAIN.

# GREEN SANDPIPER IN SHROPSHIRE IN JUNE.

On June 18th, 1922, a Green Sandpiper (*Tringa ochropus*) was flushed on a brook near Condover, Shrewsbury, by a keeper named Jesse Cartwright. He knows the bird well, having shot several at different times in this neighbourhood, where I also have seen the species in winter. The date is remarkable and might be construed as an indication of breeding but for the fact that only one bird was seen. It is

a coincidence, however, that the late Henry Shaw found a pair in summer about 1870, in the very same locality, and their behaviour led him to think that they had a nest. Unfortunately he was not aware that the Green Sandpiper deposits its eggs in the nest of some arboreal bird, so his search on the ground proved fruitless. I have records of this species in Shropshire in every month of the year, but the majority are in autumn and winter. The above is the only instance in June, though I have several in May, July, and August.

H. E. Forrest.

### GREEN SANDPIPER IN ANGLESEY.

On July 15th, 1922, my wife and I saw a Green Sandpiper (*Tringa ochropus*) at Llyn Llywenan, in Anglesey. It is possibly worth recording, as I gather from Forrest's *Fauna of North Wales* and his *Handbook* (1919), that it has not been recorded for that county.

A. W. Boyd.

### WHISKERED TERN IN CHESHIRE.

A WHISKERED TERN (Hydrochelidon l. leucopareia), a bird new to the Cheshire fauna, visited the Northwich district from

July 8th to 12th, 1922.

On July 8th I saw three Terns at a considerable distance flying over Marbury Mere, and noticed that one showed some black on the under-parts, but could see no more details of its plumage. On the following day they had left the mere, but I found them over Witton Flashes, a mile distant. One was an adult Common Tern (Sterna hirundo); the second seemed to be an Arctic Tern (Sterna paradisaa), but it did not fly close enough for me to be definitely certain; the third was a Whiskered Tern. This my wife and I watched for a long time as it flew up and down, fly-catching, with a buoyant graceful flight, after the manner of a Black Tern (H. n. nigra). After resting for a time on a stump in the middle of the flash it passed close to us several times, in company with the Common Tern. and was a noticeably smaller bird. It had forehead, crown and nape black; face white below the black cap; back and wings grey—much darker than the Common Tern; throat and breast light-almost whitish; belly and flanks black (or practically so), this black apparently extending as far as the tail, the short forks of which were white on the underside; bill and legs red; wings white on the under-surface except for a triangular brown patch on the under-side of the carpal joint.

I felt certain of its identity as soon as I saw the colour of its bill and legs, as it is a bird I had seen on one or two occasions

in Egypt.

On the following day (July 10th), Mr. T. A. Coward and Mr. R. M. Garnett accompanied me and we found the Arctic Tern only at Witton Flashes; the Common and Whiskered Terns had returned to Marbury Mere. Mr. Coward confirmed my identification and pointed out when first we saw it at a great distance that from its flight it was obviously one of the "Marsh-Terns." A fairly strong breeze was blowing from the west and it acted exactly as I have seen a Black Tern act in similar circumstances: it flew slowly up wind, fly-catching and then turning flew rapidly back on the wind, turning again and flying slowly up wind as before.

On July 12th I saw two Common Terns only on the mere, but Dr. C. Cairnie who visited the locality on July 11th and 12th to look for the bird, wrote to me to say that he saw it on both days; on the second he got a very close view of it and noticed all the details of flight and plumage that we had seen; in addition he added that "when it stooped and spread its tail feathers it displayed a dark transverse band bent in the middle,

with the apex of the angle at the fork of the tail."

We could find in the Dresser collection no bird showing exactly the same markings on the under-side of the carpal joint and the under-side of the tail, so that it was probably not

fully mature.

During the few days before there had been extraordinary fluctuations of the barometer and a high wind, which may account for its occurrence at this time and place. It is probably worth mentioning that when I visited a large Ternery in Anglesey on July 17th I saw no Terns at all and learnt from the watcher that they had all disappeared a week before—just about the time that these birds appeared at Northwich.

A. W. Boyd.

[The Whiskered Tern does not in any plumage have a dark mark on the under-side of the wing. On the other hand, other details prove that the bird was of this species.—H. F. W.]

### PUFFIN IN SHROPSHIRE.

An adult Puffin (*Fratercula arctica*) was found alive four miles west of Shrewsbury on August 2nd, 1922. It had evidently been blown inland by the strong wind of the preceding night.

H. E. FORREST.

REPORTED CARRION-CROWS NESTING AT LAMBAY ISLAND, Co. Dublin, now stated to be Ravens.—The Hon. Cecil Baring now reports (*Irish Nat.*, 1922, p. 34) that the birds recorded for several years as Carrion-Crows, breeding on Lambay Island (see *Brit. B.*, XI., p. 141, XIV., p. 166), have been wrongly identified and are certainly Ravens.

Waxwings in Yorkshire.—Records of the occurrence of Waxwings (*Bombycilla garrulus*) in various parts of Yorkshire in November and December 1921, which are additional to those already noticed in our pages (see Vol. XV.), are given in *The Naturalist*, 1922, pp. 163–4.

Early Arrival of Cuckoo in Yorkshire.—Mr. R. Fortune states (*Nat.*, 1922, p. 163), that Mr. H. Mortimer Batten saw a Cuckoo (*Cuculus canorus*) on the moors near Hutton-le-Hole on March 29th, 1922.

GREENLAND FALCONS IN FORFARSHIRE AND OUTER HEBRIDES.—Mr. G. G. Blackwood records (Scot. Nat., 1922, p. 49), that he saw a Falco r. candicans on January 23rd, 1922, near Dundee, while Mr. G. Beveridge states (p. 94), that he saw one in the Island of Vallay on March 21st, 1922.

Hobby in Forfarshire.—Mr. D. G. Hunter states (Scot. Nat., 1922, p. 49), that a keeper shot an adult male Falco s. subbuteo at West Balmirmer, near Arbroath, on June 21st, 1921, while in the middle of August he shot a rather smaller bird of the same species on the same farm. While this is indicative of breeding in the district it must be pointed out that the second bird was not preserved (the first was) and may not have been a young one or indeed even a Hobby.

Fulmar Petrel Breeding on Rathlin Island, Ireland.—Mr. J. A. Sidney Stendall announces (*Irish Nat.*, 1922, p. 56) a new breeding place in Ireland for the Fulmar Petrel (*Fulmarus g. glacialis*), viz., at Rathlin Island, Co. Antrim, where seven birds were seen "last season" (1921), one pair hatching out. Colonies are already known at Horn Head and Tory Island, Donegal, besides those in Mayo and Kerry.

SLAVONIAN GREBE AND SPOTTED CRAKE IN LEICESTER-SHIRE.—Mr. W. H. Barrow informs us that a female *Podiceps auritus* was shot on the river at Wanlip on January 1st, 1922, and a male *Porzana porzana* at the same place on August 20th, 1921.



THE WHITE-BILLED NORTHERN DIVER AS A BRITISH BIRD.

To the Editors of British Birds.

SIRS,—In his recent article on the White-billed Northern Diver (antea, pp. 9-12) Mr. H. F. Witherby definitely identifies the Norfolk record now in the Booth Museum, Brighton, as Colymbus immer. That a mistake had been made in identifying this bird as C. adamsii was recognised by Mr. W. R. Oglivie-Grant as far back as 1898; I saw the bird in December of that year and soon afterwards, when examining the series of Divers from the Seebohm Collection in the British Museum, with Mr. Oglivie-Grant, he referred to this record as a case of mistaken identity, saying that the culmen line was always straight in C. adamsii; this proved true in the series in the British Museum. Professor Collett had already given the straight culmen as a diagnostic character in his article in the Ibis (1894, pp. 260-283), and there seemed no reason to



Tracing of beak of No. 12925, Victoria Memorial Museum, Ottawa; sex indeterminate; taken on Prince of Wales Strait, 23rd September, 1916, by J. Hadley.

doubt it, till a year or two later I was able to examine three adult C. adamsii in the collection of Dr. Dwight of New York—birds collected by Mr. E. A. McIlhenny in Alaska; the test of a straight culmen line applied to two, but in the third case it did not, the culmen line being as in C. immer. I recalled this on reading Mr. Witherby's article, and wrote to Dr. Rudolph M. Anderson of the Victoria Memorial Museum, Ottawa, asking him to examine the series of C. adamsii he had brought back from his Arctic expeditions. He replied that he too had read the article and had finished a careful examination of the seventeen adults and one immature in the museum and enclosed the The culmen line in eleven adults is perfectly straight, in six the culmen line is depressed at the tip from one-eighth to one quarter of an inch—hardly enough to materially alter the diagnosis of a straight The one immature bird (12925 V.M.M.) has the culmen noticeably curved downwards as shown in Dr. Anderson's sketch; it too has the quills whitish nearly to the tips like all the adults examined I. H. FLEMING. by Dr. Anderson.

[As the Great Northern Diver breeds in Banks Land it seems not unreasonable to suggest that this bird might be either a *C. immer* with atypical quills or a *C. adamsii* with an atypical bill.—H. F. W.]

### THE VELOCITY OF FLIGHT OF BIRDS.

To the Editors of British Birds.

SIRS,—During the summer I have endeavoured to estimate the velocity of the flights of birds by comparing them with the speedometer of my car.

On June 4th, 1922, on Winterbourne Down, a Cuckoo (*Cuculus c. canorus*) flew along a fence by the side of my car for quite 400 yards before it swerved to the left. During this time the needle of my speedometer rested at 23 miles per hour.

A Pied Wagtail (Motacilla a. lugubris) on June 28th flew off its nest under a railway bridge at Sutton Mandeville, Wilts, and continued over the middle of the road. Keeping pace with the bird for over 100 yards, I found its speed was exactly 25 miles per hour.

FOVANT, Nr. SALISBURY. R. C. C. CLAY.

### THE SUMMER FLOCKING OF STARLINGS.

To the Editors of BRITISH BIRDS.

SIRS,—The Rev. E. U. Savage's notes (antea, p. 77), on the flocking of Starlings are of considerable interest. To judge from my own experience, however, I should think that flocks of thousands of non-breeding birds, such as the one he describes, must be rather exceptional.

While in Edinburgh, in 1921, I was interested to note that while some of the local birds were building in March, small flocks of adults were noted up to April 28th. These were apparently in breeding condition, with bright yellow bills, but from the lateness of the date must have been non-breeding birds, certainly those seen after April 15th or thereabouts. Again on May 23rd I saw a small flock of adults which must also have been either young of the previous year or unmated birds.

These are the only cases I have known of non-breeding Starlings.

Charles G. Young.

BEXHILL-ON-SEA, August 4th, 1922.

# BRITISHBIRDS

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# ABILITY OF THE OYSTERCATCHER TO OPEN OYSTERS, AND ITS BEARING UPON THE HISTORY OF THE SPECIES.

вv

J. M. DEWAR, M.D.

THE experiment, which is described in the present paper, was made with the object of determining the ability of the Ovstercatcher (*Hæmatobus o. ostralegus*) to open ovsters. The problem arose as a continuation of field-work on the Oystercatcher, and also as a result of the contradictory statements found in the literature of the subject. Of the success of the experiment there is ample evidence of a circumstantial nature. Unfortunately, owing to the persistent shyness of the birds, the actual opening of an oyster could not be observed. But I was able for over an hour to watch one bird make numerous attempts to open the shells.

In 1731 Catesby reported that, in his belief, the Oystercatcher, which he found in the estuaries of Carolina, fed "principally, if not altegether," upon the oyster and that the stomach of one bird which he examined contained "nothing but undigested oysters." Catesby's discovery was confirmed by Audubon (1835), who observed through a telescope the birds feeding upon the contents of oysters, and more recently by Fleisher (1920), who has furnished details from his observations sufficient to prove that the ovster is the principal food of the Ovstercatcher on the shores of North Carolina. There the birds frequent the intertidal clumps of oysters, and open the smaller oysters on the edges of the clumps (Fleisher, in litt. See Brit. Birds, XIV., 215). No one in America, however, appears to have published anything on the mode of opening the shells, nor does anyone seem to have witnessed the act, with the exception of Audubon, who, it seems, was unfortunate enough only to see the birds feeding upon the contents of sun-dried and gaping shells.

The Oystercatcher, to which these observations refer, is a subspecies of Hæmatopus ostralegus (H. o. palliatus). In the time of Catesby, and for long afterwards, the American Ovstercatcher was regarded as identical with the European form, which is now separated as H. o. ostralegus. Possibly, the assumed identity of these two forms was the cause, in part at least, of European writers including the ovster in their food-lists of the European Ovstercatcher. But there is some evidence that the opening of oysters may have been witnessed on the coasts of Europe. In any case the oyster did not begin to be mentioned by European writers until some time had elapsed after the appearance of Catesby's *Natural History*. Albin, the reprint of whose work is dated 1738, has no word of the oyster. Brisson, however, in 1760, quoted Catesby's observation, and left it to be understood that what applied in America also held good in Europe.

After Brisson, at least two European naturalists were able to add something new to the subject, but whether as the result of their own observations or not, I am unable to say. In 1766, Pennant asserted that on the coast of France the Ovstercatcher had access to ovsters at low water, and was able to force the valves apart with its beak. Latham (1785) held that the Oystercatcher opens up oysters only when they are gaping sufficiently to admit the tip of the bill. This assimilates to Audubon's view that the Oystercatcher removes the mollusc when the valves are gaping. But, as I understand Audubon's account, it means when the valves are gaping widely as the result of dessication by the sun's heat, so that the bird is not called upon to exert any torce in separating the valves, nor even to separate them at all, while Latham implies that force has to be used after the beak is inserted between the valves. Latham's statement is probably a correct account of the process.

Vieillot (1803) included the oyster in the food of the Oyster catcher, and it is possible he had direct evidence of the fact, since he was well enough acquainted with the habits of the bird to know that, in suitable localities, it extracts *Pholades* 

from their borings.

On the German shores of the North Sea, Schilling (1822) made the interesting observation that Oystercatchers were overturning oysters in search of worms and crustaceans. He suggested that this habit might have had something to do with the origin of the supposed habit of feeding upon oysters. It is, however, fairly certain that most of the older authorities got their information from Catesby, and not from the sea beach.

Of the other species and subspecies of the Oystercatcher not much appears to be known regarding the food habits. According to Grinnell (1918), who reviews the available material, chiefly from stomach-contents, nothing from direct observation, *H. niger bachmani* of the Pacific coast of North America does not feed upon the oyster, the more so as accessible oysters are rare in, or absent from, the habitat of the bird.

Schilling's account shows that, in his time, ovsters were still present in the littoral zone of the German coast of the North Sea. More than half a century later oysters were apparently still members of the littoral fauna near Heligoland, as Gätke (1801) wrote of Waders regularly visiting an oyster bed near the island. In Schilling's time oysters had ceased to occupy the littoral zone of the Baltic Sea. By the middle of the nineteenth century, whatever may have been the case when Pennant wrote, oysters were not to be found within tidal limits on the northern coast of France (Toussenel, 1859), when the principal food of the bird on this coast appeared to be species of Anomia and Venus (Gerbe, 1867). In Britain the oyster retreated below low-water-mark at a much earlier period, and it does not appear to have been plentiful within tidal limits since the early part of the Iron Age. Within historic times there is, possibly, evidence of retreat in actual process. Jeffreys (1863) gives the vertical range of the oyster as 0-45 fathoms, while recent authorities place the upper limit at three, or even as low as five, fathoms.

The oyster is one of those species which have been unable to resist climatic deterioration and other changes consequent upon the optimum climatic phase following the last glacial period, and it is possible that in that optimum phase—the period of the Littorina Sea—the oyster was an abundant littoral species within the geographic range of the Oystercatcher, and therefore accessible to it in plenty. This view is borne out by the following matter. At present, the oyster is plentiful within tidal limits only in low latitudes. Examples are Ostrca virginica on the coasts of Carolina, and O. cucullatus on those of New South Wales. As the latitude increases the oyster becomes more scarce. O. virginica shows this very well. In Carolina it is found in great abundance in the tidal estuaries, and there forms the staple food of the Ovster-In New Jersey the oyster is much less common and, in the opinion of Blanchan (1899), it there gives way to the mussel as the principal food of the Ovstercatcher.

The evidence, therefore, points to the conclusion that in former times the oyster was more widely distributed and more abundantly present in the littoral zone than is now the case, and would be available to the Oystercatcher in the whole, or almost the whole, of the latter's geographic range.

At the present time the type-form,  $H.\ o.\ ostralegus$ , appears to be more restricted in this respect than almost any other form of the genus. It is not improbable that formerly the principal food of the European Oystercatcher was the oyster

and that the mussel (Mytilus edulis) took the place of the oyster only when the latter ceased to exist in the littoral zone.

The view which I have given lies admittedly within the region of hypotheses. Yet, if it can be shown that, at the present time  $H.\ o.\ ostralcgus$  is able to open oysters and, still more so, if it can be shown that it exhibits the same methods of doing so as it employs to open mussels, the theory would receive some factual support, and the principal objection, that the European Oystercatcher cannot open oysters, would be removed.

Through the kindness of the Director of the Scottish Zoological Park, I was enabled to make the test upon birds living in captivity in the Park. The oysters which were used in the experiment were all less than 7 cm. in length. A size-limit was necessary in the event of the test leading to a negative result, since Fleisher observed that the oysters opened by the American Oystercatcher were less than three inches (7.5 cm.) in length, and this dimension was never exceeded in mussels and other shellfish, which I found, after they had been opened by the European subspecies. Had larger shells been used, a negative result might have been due to size alone.

In the winter of 1920–1921 I had one bird under observation. It had been in the Park for six or seven years. For the experiment, the bird was removed from the large enclosure, where it was kept, to a small one in which it might be more easily observed. The oysters were exposed, among stones, in a pan containing a solution of Tidman's sea-salt made up to equal the specific gravity of sea-water. The pan with its contents was left in the bird's enclosure for several days without result. There was no indication that the Oystercatcher touched the shell-fish, or even went near the pan.

In the winter of 1921–1922 a new waders, aviary was completed. At the time the second test was made (January, 1922), the aviary contained, in addition to three Oystercatchers—the original bird and two birds of the year recently caught on the sea-shore, several species of Plover and soft-billed Waders, and also a Coot (Fulica a. atra) and a Purple Gallinule (Porphyrio caruleus). There were no signs that any of these birds meddled with the oysters. This was hardly to be expected of the Limicolae, but was a possibility in the case of the last two species named, to which I paid particular attention, without, however, detecting any sign of either bird visiting, or having visited, the oysters. Nor did the keepers

in their frequent visits to the aviary notice either of these birds at the oysters.

The new aviary contained a permanent stream of fresh water running over gravel set in cement between clay banks. The oysters were placed in the stream and left there, half a dozen or so being put out at intervals of several days, until the whole stock was exhausted. I may mention here that immersion in fresh water cannot be regarded as an objection to the experiment. It has long been known that oysters can live quite well in fresh water. In the course of the experiment none of the shellfish gaped widely, nor were any found dead. In all, twenty-seven oysters were exposed, and, of these, twenty-four were recovered shortly after they were opened. Of the remaining three, one was never found again, and the other two were only discovered long after they were opened and after they had been knocked about the aviary by the birds.

The average size of the twenty-four shells, which are in my possession, is  $5.0 \times 4.7$  cm., the smallest shell being  $3.4 \times 3.6$ cm., and the largest  $6.2 \times 6.2$  cm. None of the shells were actually broken across; all bear evidence of having been opened by force. Entry was gained at some part of the posterior border of the shell (border furthest removed from the hinge of the shell). In seven, the whole of the posterior border was broken up; in thirteen, the point of entry was at the postero-dorsal or postero-ventral angle (the angles at the ends of the posterior border); in one both angles are equally damaged; in three, the shell was entered at the mid-point of the posterior border. Removal of shell-margin was sufficient in ten of the shells to leave a permanent gap in the closed shell, chiefly by loss of wedge-shaped pieces of shell, one piece being 12 mm, long, 5 mm, wide, and, along the line of fracture, 2 mm, in thickness. In the other shells smaller pieces had been broken away from the margins of the valves. All the shells, therefore, show definite evidence of having been opened by force; in not a single instance can it be said that the mollusc had been removed without the necessity of previously separating the valves. And, since the point of entry was confined to the posterior border, there being, in no case, injury to the dorsal and ventral borders or the hingeline of the shell, adaptation of the Oystercatcher to the oyster was complete at the first attempt to open a shell. The condition of the shells proves that the bird acted as if it knew, without trial, that to force the beak between the posterior margins of the valves yields the greatest leverage with the least exertion.

This result disposes of an alternative solution of the problem that the Oystercatcher will open all kinds of shellfish of suitable size, because the bird is adapted to feed upon shellfish. In form and in apparatus for closing the valves, the oyster differs considerably from other kinds of bivalves that are opened by the Oystercatcher. This fact, together with the absence of "trial and error" search for the most suitable place of entry to the shells in the experiment, proves that personal or ancestral experience is involved in opening the oyster. And, since personal experience may safely be excluded from the birds used in the experiment, I am inclined to believe that reaction to the oyster is, in the European Oystercatcher, an inherited habit. The preference of the American Oystercatcher for oysters against mussels may be recalled in this connection.

One shell was opened within twelve hours of being put out; two were not found opened until the morning of the eighth day; six, including the first shell, were opened within two days; six more were found opened on the third morning; while the remaining ten were opened between the third and

seventh days after they were placed in the stream.

Most of the opened shells were found lying free in the stream; some had been wedged into the vertical clay-banks of the stream; others were found lying open in a vertical position in the mud of the pool into which the stream flowed.

There is not much in the way of direct evidence to put forward that the Oystercatchers actually opened these shells. The evidence from the shells is, however, to my mind quite conclusive, since the shells were manifestly opened by force, and they bear the marks of damage that are typical of the Oystercatcher. The birds proved to be very shy of being observed at work, and no one appears to have witnessed the actual opening of an oyster. But, during the period in which unopened oysters remained in the stream, the birds were scarcely ever away from the spot, while, before and since the experiment, they visited the stream only on occasion. They also, at that time, showed increased activity and eagerness to a greater degree even than that shown during some tests with mussels that preceded the trials with ovsters, and quite different from their ordinary placid behaviour as captive birds. For over an hour one morning I watched the old bird make between twenty and thirty efforts to open the shells, but in these it was not successful. It made periodical journeys up and down the stream to test each oyster in turn. Three different ways of trying to force open the shells were

observed: (1) The point of the bill was firmly applied to the margin of a shell, and the bill was then shaken vigorously from side to side through a narrow angle, while apparently firm pressure was maintained on the shell; (2) As the point of the bill was pressed on the margin of a shell, the head was lowered quickly to one side through a wide angle; and (3) A series of blows was delivered obliquely on to the margin of the shell, at one spot, with the point of the bill. The three methods were used in irregular order, and more than one of them were usually applied to each shell. The bird was greatly handicapped by the shells moving about under the pressure of the bill—a disadvantage which would not arise under natural conditions, since the oyster is commonly fixed to the substrate. I have given what I observed of this bird in some detail, because it furnishes convincing evidence of the determined efforts made by the bird to open the shells, and because the methods, which I saw being applied to the ovster. I have already seen applied to the mussel and to other shellfish (Dewar, 1908, 1913).

It is probable from these observations, and from the long time that elapsed before the shells were opened, that the Oystercatcher is unable to open oysters when the valves are tightly closed. The shell needs to gape a little before the bird can insert its beak between the margins of the valves. This is, I believe, the case for all other kinds of bivalves known to be opened by the European Oystercatcher, with the possible exception of some forms not yet studied, and with the exception of some examples of Mytilus and Modiolus, on the rare occasions when the bird has access to the ventral border, in which the byssal fissure provides a place of entry for the bill, even when the valves are closed, and of *Pholas* which cannot entirely close its valves. On this point, one of the keepers volunteered the information that he found one of the ovsters gaping about an eighth of an inch (3 mm.) shortly before it was discovered to have been opened and emptied of its contents. While it is tolerably certain that the shells must have been gaping slightly before they were opened, there can be no doubt that the oysters, when they were opened by the birds, were not dead and relaxed, since the appearance of every shell proves that considerable force must have been used to separate the valves.

### Conclusions.

The European Oystercatcher can open oysters. Latham's account of the process is probably correct. Adaptation of

Oystercatcher to oyster is initially complete. Hence, opening oysters is probably an inherited habit in the Oystercatcher. Formerly, the oyster was more abundant and more widely distributed in the littoral zone of temperate latitudes than now. The oyster then formed the principal food of the European Oystercatcher. Mussels were substituted for oysters when the latter became scarce in the littoral zone.

### REFERENCES.

Albin, E., 1738: A Natural History of Birds, London, Vol. I., p. 74.
Audubon, J. J., 1835: Ornithological Biography, Edinburgh, Vol. III.,
Art. Oystercatcher.

Blanchan, N., 1899: Birds that Hunt and are Hunted, etc., New York, p. 251.

Brisson, M., 1760: Ornithologie, Paris, T.v., p. 42.

Catesby, M., 1731: The Natural History of Carolina, Florida and the Bahama Islands, Reprint 1771, Vol. I., p. 85.

Dewar, J. M., 1908: Notes on the Oystercatcher (Hæmatopus ostralegus) with Reference to its Habit of Feeding upon the Edible Mussel (Mytilus edulis), Zoologist, Ser. 4, Vol. XII., p. 201.; id., 1913: Further Observations on the Feeding Habits of the Oystercatcher (Hæmatopus ostralegus), Ibid., Vol. XVII., p. 41; id., 1921: American Oystercatchers Feeding on Oysters, Brit. Birds (Mag.) Vol. XIV., p. 215.

Fleisher, E., 1920: Notes on the Birds of South-eastern North Carolina, Auk, Vol. XXXVII., p. 569.

Gätke, H., 1891: Die Vogelwarte Helgoland, Braunschweig. Engl. Trans. Edinburgh, 1895.

Gerbe, Z., 1867 : In Degland and Gerbe :  $Ornithologie\ Européenne$  , etc., T. II., p. 152.

Grinnell, J., 1918: The Game-Birds of California, Art. Oystercatcher. Jeffreys, J. G., 1863: British Conchology, etc., London, Vol. II., p. 39. Latham, J., 1785: General Synopsis of Birds, London, Vol. III., p. 220.

Lesson, R. P., 1828: Manuel d'Ornithologie, Paris, T. II., p. 300.

Pennant, T., 1766: The British Zoology, London, Vol. I., p. 127.

Schilling, W., 1822: In Brehm and Schilling: Beitrage zur l'ogel-kunde, etc., Bd. III., s. 57.

Toussenel, A., 1859: Le Monde des Oiseaux; Ornithologie Passionnelle, Paris, 2 ed. T. 1, p. 428.

Vicillot, 1803: In Nouveau Dictionnaire d'Histoire Naturelle, etc., T. XI., p. 438.

### THE WOOD-LARK AT NIGHT.

вΥ

#### HENRY S. DAVENPORT.

The status of the Wood-Lark (Lullula a. arborea) as a nocturnal songster has exercised my mind for upwards of half a century, but not until more or less recently have I been favoured with an opportunity of personally studying the question in a region where the species is anything but a Information acquired from books—and I am conversant with many—has never imparted a deep sense of satisfaction. Eleazar Albin, whose work on Birds was published so long back as 1738, seems to me to have a foremost claim to credit for his observations, brief though they are. The vast majority of writers either skip all reference to the subject, or content themselves with producing stereotyped formulas that have become drear and commonplace from constant use. More especially is this somewhat harsh criticism true of the nesting site of the Wood-Lark, as a cursory glance at books of reference will testify. Gilbert White, of Selborne, whose Natural History was published in 1789, confined himself to a somewhat Jaconic pronouncement to the effect that Wood-Larks sang during hot nights in summer. Bellamy, in his Natural History of South Devon, published in 1839, states that he heard three Wood-Larks singing at 11 p.m., on January 14th, 1835, "while perched on trees within about a gunshot of each other." Murray A. Matthew, joint author of The Birds of Devon, also states that he once heard a Wood-Lark in full song during a cold night in March. Such records, however, are hardly exhaustive of what can be said of an indigenous species whose strains, whether heard by day or night, always represent perfect melody. It may also be noted in passing that though sundry who are acquainted with Bellamy's work may jibe at what has been quoted on the grounds that the author claimed the Grey Ployer (Squatarola s. squatarola) as a breeding species on Dartmoor, and, further, clearly evinced some lack of acumen in differentiating between a Cuckoo and a Hawk; nevertheless, the errors are scarcely of a type to vitiate a very precise statement as regards a matter of fact within his own knowledge.

During the past three years I have spent a month in the springtime at Budleigh Salterton, whereabouts Wood-Larks foregather in some abundance at all seasons. My host and

companion on each occasion was Sir Frederick Fowke, and as a result of our wanderings at night we arrived unhesitatingly at the conclusion that Wood-Larks do not as a species, as has so often been implied, sing at night after the manner of Nightingales, but that the habit is confined to just a solitary Wood-Lark here and there on such nights as the requisite conditions are forthcoming. Such conditions, according to our experience, imperatively are—bright moonlight, fine weather, a warm atmosphere, and an entire absence of wind; whilst, even then, the tinkling strains of a Wood-Lark in a Wood-Lark region, so sweet, so plaintive, and withal so wondrously captivating, may not be destined to fall on every ear that would hear them at dead of night.

An observer who has resided in the Budleigh Salterton district for. I understand, some eight or ten years, told me that he had never heard the Wood-Lark's song at night: nevertheless, though the month of April, in 1920, was only associated with negative evidence, on May 27th, 28th, and 20th of the same year a solitary Wood-Lark sang from midnight till dawn, and again and again was up aloft for half-an-hour and more at a stretch, within a hundred yards of my friend's house. With this experience in hand, it was decided that my visit in 1021 should be fixed for May instead of April. but not a Wood-Lark was to be heard at night, though we were aware of half-a-dozen haunts where the species was breeding. My visit, however, was not without an ornithological triumph or two, as in addition to the discovery of a Nightingale in a local woodland, my friend and I chanced on a Melodious Warbler (Hippolais polyglotta), watched it for a quarter of an hour through glasses at a distance of twelve vards, and were enthralled by its glorious song.

To return, however, to the Wood-Lark:—again in May this year, when I was down in South Devon, nothing came of our "scoutings" at night around Budleigh Salterton, though birds were nesting in the neighbourhood. Incidentally, as showing the confiding nature of the species, I lay flat by the side of one nest, containing four beautiful eggs and quite fresh, for five minutes, with my face not twelve inches from the sitting bird! A local gardener witnessed the proceeding. Nevertheless, on May 10th tidings came of a night-singing Wood-Lark at Hay Tor, Dartmoor, and thither my friend and I quickly repaired for a stay of several days. I ascertained that the bird in question had been singing every night from midnight onwards since May 8th, and I had the great pleasure of listening to it myself within

about a stone's throw of my bedroom window on the night of May 13th.

To conclude:—whether it is a case of caprice, or individual temperament, or what, that causes a Wood-Lark here and there to sing at night, and for others to maintain a complete silence, must necessarily be a matter of opinion; on the other hand, I am as well assured that the great majority of Wood-Larks do not sing when Nightingales are supposed to be at their best as I am that an occasional Wood-Lark, given suitable conditions, will mount into the heavens and sing virtually without intermission the whole night through.

# FIELD NOTES AND OBSERVATIONS ON THE GREENSHANK.

BY

#### NORMAN GILROY.

It was as far back as 1902 that I went north with the serious purpose of studying the Greenshank (*Tringa nebularia*) in its nesting haunts, but it was not until 1906 that I achieved my first success, and that in spite of four seasons' downright hard work. For the Greenshank is not a bird whose acquaintance is readily made—although in the particular area visited there were abundant pairs. The country is so vast and so difficult to work, the birds themselves are so extraordinarily wary and the information at one's disposal concerning them so crude and meagre that at times I was quite desperate as to how to begin. I had read for instance that "The nest is often against a stone" (which is perfectly true—as far as it goes!) or that "It (the nest) is generally near the edge of a loch or other fresh water" (which is absolute nonsense).

In the course of four seasons I must have searched many thousands of stones and explored miles of the edges of lochs! I watched twenty different Greenshanks—feeding, sleeping, flying at an immense height and disappearing! And yet these years taught me a little—amongst other things that the Greenshank fed by preference either at the larger sheets of water or by a stream of considerable size, and that when a feeding, or resting, or unoccupied, Greenshank rises from one of the larger lochs and flies right away, often out of sight; he has gone to a point reasonably close to the nest.

I had also definitely concluded that the nest was generally, if not invariably, a long way from such larger lochs. Subsequent events proved that I was absolutely correct in my conclusion, although it was not until long afterwards that I learnt that if a Greenshank be met with, apparently unattached, by a small pool or at a peat-runnel, or in a squashy bit of "flow" ground—in fact, anywhere in a remote spot that is not a large sheet of water, he is in the immediate neighbourhood of the nest. So that nowadays, if I meet with a Greenshank, or a pair of them, to all intents and purposes at a loose end in the wildest flow in Sutherland, I am perfectly confident that I shall find the nest sooner or later—with due patience and on the right kind of ground. But of this I shall speak later.

In the four successive seasons to which I have referred I had noted a single Greenshank feeding at a loch of moderate

size about ten miles from the hotel, and on May 14th, 1906, in a blinding storm of wind and rain, I tramped out alone to this loch to find the Greenshank asleep on a grassy "spit" on the shore. I did not disturb him, but passed on to a vast and very wet "flow" about one and a-half miles beyond.

Now I had long since determined instinctively the nature of the ground on which I should finally find the nest, and this flow conformed fairly exactly to my ideas. It was particularly squashy, but on it were a number of dry, rather flat hillocks, covered with short gray moss, with a few tussocks of withered grass and thin heather and a stone or two here and there. There were two or three "dhu-lochans" on the flow on which the Red-throated Divers bred yearly—a remote, desolate spot! I stood still on one of the dry hillocks for a moment to look at a Grouse which had apparently just been killed by a Peregrine, when quite suddenly I heard, loud and clear, a Greenshank call overhead. I saw her pass on at a great height, and wondering what had made her call, I looked slowly round. And about four feet from where I was standing I saw the nest with three eggs.

The nest itself was remarkably shallow, but was quite substantially built of withered grass, a heather stalk or two and a few dead bilberry leaves. It was placed right against a half-buried stone of moderate size with a wisp of heather growing beside it. It was nearly two miles from the feeding loch—but not 300 yards from a "dhu-lochan." On visiting the flow again on May 16th, there was neither sign nor sound of the Greenshank at the larger loch—but I found him at the little "dhu-lochan" in the immediate neighbourhood of the nest.

The second bird was sitting and was so drenched with the rain that her plumage looked almost black. She remained absolutely motionless, facing me, and alongside the stone—her head lowered almost to the ground and her beady black eyes watching me intently. She allowed me to touch her before she rose from the eggs—when she was immediately and mysteriously joined by the male. After flying round for perhaps two minutes, making a deafening clamour, both birds went off in the direction of the large "feeding" loch.

There were now four eggs—large and remarkably handsome—and I left them so that I might carefully observe the birds' method of return and her general behaviour at the nest.

It was nearly ten minutes before she came back—skimming over the ground at a tremendous pace. She pitched first on a stone about twenty yards from the nest, where she preened her feathers and shook herself. She then started callinga loud, penetrating, insistent "Tchook-tchook-tchook!"—a note I had never heard before and which I have since ascertained is only and always uttered immediately before the Greenshank goes to her eggs—even when she leaves and returns to them of her own free will. This calling she kept up for four minutes exactly—then she shook herself again, ran lightly off the stone and on to her eggs, which she touched gently with her bill before settling down. This first success after so many fruitless years was naturally very gratifying, in spite of the very considerable element of luck attending it —and I became a degree more confident as to the future.

During 1906 I tound three more nests, all in ground of a precisely similar nature, and calling for no particular comment, but I was far from being satisfied as regards a definite system or method to be observed. The conclusions arrived at were,

roughly:-

That probably the best method of locating the nesting area of the Greenshank is to arrive in the district early in the season, before laying can possibly have commenced. At this period the birds are noisy and easily located, and by careful watching the actual ground chosen for the site of the nest may be marked by the periodical visits of the birds to its near neighbourhood.

That, as is the case with nearly all the allied Limicolæ, it

is a great thing to disturb the birds from dry ground.

That suitable ground is the key to the whole situation—and that must be within a reasonable distance of a pool or squashy place to which the young can be taken immediately they are hatched, and to which the non-sitting bird can repair when it is expedient for it to be close to the nest.

But these conclusions did not fully materialize until many years afterwards, nor until many new facts had come to my

knowledge.

In 1907 and again in 1908 I paid further longish visits to the north. The results were somewhat disappointing—and without adding appreciably to what I had already learnt, did a good deal towards weakening some of the theories I had established.

In 1997 I found a nest on May 16th, at 9 o'clock at night, after watching a bird (presumably the male) from 10.45 a.m. until 7.50 p.m. in a bitter nor'-easter with blinding rain. During that time he fed periodically, slept, preened his feathers, stood quite still on one leg, but not asleep, became very restless once or twice, running along the bank and through the reeds rapidly—and called occasionally, sometimes in a startled fashion, sometimes softly and contentedly.

He was once very angry when a drake Wigeon which was swimming in the loch landed on the bank beside him. The Greenshank attacked him vigorously and drove him back to the water. At 7.45 the Greenshank became very noisy and excited—left the loch altogether and ran up on to a high. bare bank. Then without warning he rose and flew quite silently at a moderate height in a westerly direction for nearly two miles, when I lost him in the clouds. I immediately followed, and found him at another very small tarn, quite stagnant, reed-fringed and squashy. He was now curiously alert, and I determined to devote another hour to I was about to lie down behind a rock half-buried in the hillside when I was startled by hearing close to me the clear. piercing and insistent cry which I had already learned possessed such an intense significance—"Tchook-tchook-tchook!" it rang out, never ceasing for a moment.

The light was horrible, but I soon picked her up on the top of a large boulder—very bedraggled and wretched looking.

In five minutes she was on the nest—a raised platform between two stones, on a dry, bare hillside 300 yards from the water. It was quite a considerable structure of withered grass, heather stalks and bilberry leaves, carefully matted together—but this was accounted for by the undoubted occupation of the previous year's site—the old materials being there and a large fragment of shell. The four eggs were perfectly fresh.

I had discovered sufficient of this particular pair to satisfy me for the time being—I reached home at 11.30 p.m. But—I watched them in 1908 and again in 1920 in precisely the same way and at 9 o'clock p.m., the male was fast asleep!

A second Greenshank's nest was shown to me in 1907 near Bettyhill. It was at least three miles from any water—was on the extreme top of a hill about 400 ft. high, and the eggs were laid without any provision or protection whatever amongst rough, gravelly stones, like those of a Ringed Plover. The sitting bird (I did not see a second one at all) could be seen from a distance of 400 yards clearly against the sky-line.

In 1908 I found two nests by searching likely ground and without any assistance from the birds at all. I had no further opportunity of pursuing my researches until 1919, when I made two interesting discoveries. The first of these was that the Greenshank occasionally, but very rarely, will nest on wet ground, and the second that as long as her nesting-site pleases her she is quite careless of the human presence.

With regard to the first-mentioned, I had watched a pair of birds leave a feeding loch on three separate occasions and

disappear out of sight always in the same direction. Immediately after the third occasion, in the course of a casual conversation with a gamekeeper, I learned that when out watching for foxes on the previous night he had disturbed a Greenshank which was exceedingly noisy. He took me out to within a mile or so of the spot, and to my surprise I found that it was almost exactly where I had lost my birds. accordingly followed the line as nearly as possible, and sure enough I found the Greenshanks on a very wet flow nearly four miles from the feeding loch. Both birds were very cautious and alert and at once took to wing on my approach. However, one of them came back swiftly and silently about twenty minutes afterwards and after calling in the now familiar fashion, ran on to her eggs. She had only two, and the nest was a mere hollow scraped out in a dry, hard peat tussock in the middle of a very wet flow. On visiting this nest three days afterwards I found that bird, eggs and nest had been destroyed—presumably by a fox.

On the way home I made my second discovery—for I flushed a Greenshank from a pit on the side of the main coach road to Lairg, in which the stone-breakers had recently been at work and in which there was a heap of metal ready for removal. There was a mound in this pit, thinly grown with gray moss, with a couple of burnt heather stems, and on this mound I found the nest with one egg. This was on May 21st. On May 26th I went out again on a motor bicycle and stopped dead by the pit. The bird was now sitting on four eggs and did not move until I touched her with my stick.

In 1920 the weather was so appalling that after ten days' fearful work I gave it up and went off to the Orkneys-but I found four nests with young just hatched on my way back

on Iune 3rd.

But it was in 1921 that, in a new area, I practically completed my observations—and in 1922 that I brought them to a victorious conclusion. In 1921 I spent three weeks in a very remote part of Inverness-shire—on the shores af a very large

loch on which I located seven pairs of Greenshanks.

I may say at once that the seventh pair beat me! One of these days I may describe how I beat the other six—and how in 1922 I found a Greenshank's nest on the top of a hummock over 30 inches from the ground—but I think that for the present I have said enough to show that the Greenshank is not a species to tackle with a light heart. Even now, after all these years, I consider the nest to be the most difficult to find of any species breeding in the British Islands.



### "BRITISH BIRDS" MARKING SCHEME.

"Ringers" are requested to send in to the Editor as soon as possible their schedules, together with a list showing the number of each species ringed.

### AUTUMN EMIGRATION AT SELSEY BILL.

I STAYED at Selsey Bill, Sussex, from July 29th to August 3rd, 1922, fortunately in a house very close to the sea. I have always thought that Selsey Bill would prove to be one of the best points for observing migration along the South Coast, and I was much interested in the amount I saw during 4½ days' observation, before it is generally expected, except perhaps in the case of the Swift. Swifts (A. apus), Swallows (Hirundo rustica), and Sand-Martins (R. riparia), were often seen flying E. to W., always parallel with the shore, within fifty yards of the beach or a few yards out to sea, and nearly always against a fairly strong W. or S.W. wind. I never saw one of them flying in the opposite direction and I did not see a House-Martin (Del thon urbica).

On two occasions I saw birds go directly out to sea, right out of sight, near the surface. They went at right angles to the shore at the very point, and so not at all in the direction of the Isle of Wight. These were one Swift at 10.15 a.m., and five Swallows at 11.15 a.m.

The only other migrants I saw were a Whitethroat (Sylvia communis) and Willow-Warbler (Phylloscopus trochilus) on August 2nd.

NORMAN H. JOY.

### ABERRANT SONG OF A CHIFFCHAFF.

On April 23rd, 1921, my attention was attracted by a rather loud and melodious song of a Willow-Warbler (*Phylloscopus t. trochilus*) in one of the Chines at Bournemouth, which

ended up "chiff-chiff" in a high key.

In order to investigate further I entered the Chine, and sat on a seat under a birch tree, being accompanied by my wife and daughter. We had not been there very long before an undoubted Chiffchaff (*Ph. c. collybita*) alighted in the birch tree, no more than three feet from us, and poured forth the usual series of typical Chiffchaff notes. A silence of a few minutes ensued, when it started to pour forth a typical Willow-Warbler song, except that it was much louder and

richer in tone and ended up by the notes "chiff-chiff" in a high key, instead of dying away into a low key as does the typical song of the Willow-Warbler. We sat perfectly still, and the performance was repeated many times, and I had an ample chance of comparing the song, as a Willow-Warbler was singing not more than a dozen yards away.

This bird interested me very much, and I visited it on many occasions during my fortnight's stay, at all times of the day, and never failed to find it singing its strange song

in its accustomed spot.

I visited the same Chine again on the 6th May, 1922, and found both the Chiffchaff and Willow-Warbler at the same place. The Willow-Warbler-like song was uttered at the same intervals as last year, ending with "chiff-chiff," not so loudly, but more continuous. The true Chiffchaff song was also uttered. The lower tone I assumed to denote that the female was sitting, especially as the intervals of song were occupied in driving away the male Willow-Warbler, which was singing close by. It still frequented the same birch tree, and I had many opportunities of watching it at close quarters and for quite a long time. I may mention the aberrant song was in no way like the subdued throaty notes mentioned by Mr. Astley (Brit. Birds., Vol. XII., p. 44), which I have also heard used in the autumn.

C. W. COLTHRUP.

### RING-OUZEL IN NORFOLK WRONGLY RECORDED AS ALPINE RING-OUZEL.

Having recently had the opportunity of examining the supposed Alpine Ring-Ouzel (*Turdus torquatus alpestris*) in the collection of Mr. T. E. Gunn, which was obtained in Norfolk on September 18th, 1894 (*Zool.*, 1895, pp. 56, 99), I came to the conclusion that it had been wrougly identified. I have now been able, through the kindness of Mr. Ernest Gunn, to show this bird to Dr. C. B. Ticehurst, who agrees with me that it is merely an example of *Turdus torquatus torquatus*.

B. B. Riviere.

#### TUFTED DUCK BREEDING IN CUMBERLAND.

About fifteen years ago I had some hand-reared Tufted Ducks (Nyroca fuligula) which I kept full winged. Since then a few pairs of Tufted Ducks have nested each year in tufts of rushes in the ponds near Solway Moss and are very good at rearing their young ones. About seven eggs appear to be the usual number.

RICHARD GRAHAM.

#### TUFTED DUCK BREEDING IN NORTH LANCASHIRE.

WITH reference to the Tufted Duck (*Nyroca fuligula*) breeding in Cumberland (*antca*, p. 109) it may be of interest to state that a pair nested near Lancaster in 1922.

H. W. Robinson.

#### MANX SHEARWATER IN NORTHAMPTONSHIRE.

On the morning of September 2nd, 1922, I was told that a boy had brought a Sea-Gull found that morning in their fowl house; when I looked at the bird I found it was a Manx Shearwater (Puffinus p. puffinus); it was alive when brought to me, but died soon afterwards; a strange bird to be found so near the centre of England as Byfield, Northants. I suppose the bird was on passage across the country and came down exhausted. The night of September 1st to 2nd was, I think, calm and still.

B. D'O. APLIN.

#### LARGE CLUTCH OF OYSTERCATCHER'S EGGS.

ON July 7th, 1922, when in company with Mr. H. E. Lynne-Jones, 1 found a nest of the Oystercatcher (Hæmatopus o.



ostralegus) on Lundy Island, North Devon, containing five eggs. One of these was badly smashed in on one side, and contained a hard dried-up yellow substance; three other

eggs were unfertile, and the fifth appeared much incubated. The bird was sitting on all five eggs, and in my opinion they were all one laying. The nest was situated on the top of a rock, some 25 ft. above the level of high water.

C. J. Pring.

[Although the normal clutch of the Oystercatcher is three, this number is frequently exceeded. Sets of four eggs are not uncommon, but higher numbers have rarely been recorded, though a five-set from Hiddensöe is mentioned in the *Ornitholog. Jahrbuch*, 1912, p. 174, and six eggs in one nest were found in Norfolk in 1913 (cf. *Zool.*, 1914, p. 172), and on the shore of the Clyde on May 17th, 1921 (*Scot. Nat.* 1921, p. 134), in each case probably laid by two hens.—

F. C. R. JOURDAIN.]

#### RUFF IN SHROPSHIRE.

On August 26th, 1922, I had brought to me for identification a bird which had been shot on the northern outskirts of Shrewsbury. It proved to be a Ruff (Philomachus bugnax) and, judging by the bright buff edges to the feathers on the back, a young bird. I was struck by the colour of the legs, which were of a dull grey hue. According to most authorities they are yellowish. The only author who says otherwise is Montagu. He writes: "Neither the colour of the bill nor the legs is to be depended upon; the former is of all shades. from dusky to a pale dull yellow, and black at the point; and the latter is sometimes of a dingy green. Others have their legs flesh-colour, or pale dull yellow." He goes on to say that those with dark plumage have dark bill and legs, and vice versa. The above is only the third record of this species in Shropshire. H. E. Forrest.

#### SPOTTED REDSHANK IN NORTH LANCASHIRE.

In Mitchell's Birds of Lancashire (second edition) the Spotted Redshank (Tringa crythropus) is given as a rare visitor, occurring irregularly on passage. Six records only are given of its occurrence in Lancashire, and an immature specimen shot in the Ribble Estuary in September, 1909, brings these records up to seven.

On August 11th, 1922, there was one at the mouth of the Lune which remained there until the 16th. It frequented one or other of three pits of stagnant water, sometimes in company with three Common Redshanks (*T. totanus*).

H. W. Robinson.

#### THE SANDWICH TERN AS A NORFOLK BIRD.

Five and twenty years ago the Sandwich Tern (Sterna s. sandvicensis) was quite an uncommon bird even in the autumn on the Norfolk coast; but of recent years it seems to have frequented the harbours more and more at that season. In the spring it was almost unknown except as a passing migrant at sea, until some half-dozen years ago a few began to frequent the ternery at Blakeney Point, and statements were occasionally made that nests had been found there. Prior to 1920, however, no definite proof of nesting was forthcoming, though I once saw a clutch of three supposed Sandwich Tern eggs from the point, which were, however, only very abnormally large Common Terns.

In 1920 one or two pairs of Sandwich Terns settled down at Blakeney, and nested among the Common Terns on the shingle; and in another locality in north Norfolk there was

at least one nest that year.

In 1921, so far as I know, there was only one pair of Sandwich Terns nesting at Blakeney. A single egg was laid in the sand on the furthest ridge of the point, and was one of the few eggs that escaped destruction by the great tide early in

June.

In the present year, 1922, it is therefore of great interest to record that the Sandwich Tern has nested in considerable numbers in Norfolk; in one colony alone 80-100 pairs were estimated to have laid. It is believed that many of these birds turned up after being disturbed at the Farne Islands or elsewhere, as they were late in arriving in Norfolk. At one Norfolk colony I saw about fifteen nests early in June, but these had increased to seventy-three by the end of the month and ninety by the middle of July.

On all sides one hears of the sites of terneries being altered or abandoned this year, and an investigation into the causes of this would seem to afford a most interesting field of enquiry.

CLIFFORD BORRER.

#### INCUBATION PERIOD OF ROSEATE TERN.

Has the incubation period of the Roseate Tern (Sterna d. dougallii) been determined? Dr. Louis Bureau in his interesting monograph on this species thought it was about eighteen days, but had not proved it.

On June 10th, 1922, I found a Roseate Tern sitting on one egg. Incubation had commenced, as I marked the bird on to the egg several times. On the evening of July 5th the egg

was slightly chipped, and on the morning of July 6th the chick was calling loudly in the shell. It evidently could not free itself, as some hours later, when I expected to find it hatched, it was dead, cold and deserted by its parents. In this case, which however, is not quite normal, the period was at least twenty-six days. I understand that the other closely-allied species of Terns hatch in about twenty-one days.

F. L. BLATHWAYT.

[Professor Lynd Jones has recorded the period as observed in N. America as twenty-one days.—F.C.R.J.]

#### HERRING-GULLS HAWKING FOR WINGED ANTS.

On September 6th, 1921, at Margate, Herring-Gulls (*Larus a. argentatus*), Starlings (*Sturnus v. vulgaris*), and House-Sparrows (*Passer d. domesticus*), were hawking in the air for blackwinged ants, which were swarming everywhere.

C. W. COLTHRUP.

# NEW COLONIES OF LESSER BLACK-BACKED GULLS IN NORTH LANCASHIRE.

Although new colonies of Black-headed Gulls (*L. ridibundus*) are fairly plentiful in North Lancashire, the same does not apply to Lesser Black-backed Gulls (*L. fuscus affinis*). In 1922 I found a new colony of the latter on a moor not far from Carnforth amounting to 20–24 pairs. In 1921, several pairs nested on Walney Island, but the unemployed men at Barrow were allowed to take their eggs for food, on account of rarer species nesting close to their site.

H. W. Robinson.

### GREAT BLACK-BACKED GULL NESTING IN WESTMORLAND.

As there is no authentic case of the Great Black-backed Gull (*Larus marinus*) nesting in Westmorland, it may be of interest to state that I found a pair nesting on a moss in the southern part of the county and marked their two young ones with rings on July 18th, 1922. They probably nested there also last year, for I saw the two parents in exactly the same place on July 31st, but had no time to look for the young, which were in all probability on the wing.

Macpherson, in his Fauna of Lakeland, states that several pairs nested on the fells at Rusland in 1889 and one pair in 1890, but Rusland is well in Lancashire.

H. W. Robinson.



#### THE VELOCITY OF FLIGHT OF BIRDS.

To the Editors of British Birds.

SIRS,—I recently timed a Swallow (*Hirundo r. rustica*) for about 200 yards in the straight. The motor registered at, or about, twenty-five miles. The bird was hawking the other side of the thorn hedge along which we were running, and seemed going well within itself with the boldly undulating flight of a Swallow taking food. There was no appreciable wind.

H. M. Wallis.

READING, Sept. 3rd, 1922.

#### THE SUMMER FLOCKING OF STARLINGS.

To the Editors of British Birds.

SIRS,—Your correspondent, Mr. C. G. Young, states in his letter that this flocking of thousands of non-breeding Starlings in summer must be rather exceptional. I can assure him that for the last six years it has been far from exceptional, as I know of several cases in the North of England where it has taken place.

In Lancaster there has been a flocking in some elm trees for at least five years in succession. As far as I can remember they come and go with the leaves. This year I estimate their number at between four or five thousand, but four years ago there must have been twenty thousand or more of them. They are there all the summer.

H. W. Robinson.

#### OBSERVATIONS ON THE TWITE IN THE PENNINES.

To the Editors of British Birds.

SIRS,—With reference to Mr. Fred Taylor's observations (antea, pp. 103 and 104), eggs of the Cuckoo (Cuculus c. canorus) have been several times found in nests of the Twite (Carduelis f. flavirostris) within a radius of eight miles of Wilsden, Yorks. In the Zoologist for 1904, p. 315, I recorded such an instance having been found by my youngest son on Baildon Moor. It seems, however, somewhat strange that such eggs, so far as I am aware, have been found only when the Twites' nests were built on the ground among matgrass or bracken, in which situations the Twite usually nests in small companies. I have never found the nest, like your correspondent, under the shelter of a stone, or in a stone wall about old quarries, but always in open places, and in one case the eggs were pure white.

Mr. Taylor asks why should the Twite be such a rare fosterer of the

Cuckoo?

I have often asked why the Cuckoo so rarely deposits its egg in the nest of the Skylark (Alauda a. arrensis) in this district, where it is perhaps our most abundant species, and yet it has been known to deposit its egg three times in the nest of a Ring-Ouzel (Turdus t. torquatus).

E. P. BUTTERFIELD

BANK HOUSE, WILSDEN, September 4th, 1922.

# BRITSHBIRDS

WITHWHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST." EDITED BY H. F. WITHERBY, M.B.E., F.Z.S., M.B.O.U.

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#### SOME NOTES ON THE ICTERINE WARBLER.

#### ВУ

#### E. M. NICHOLSON.

There is no apparent reason why the Icterine Warbler (Hippolais icterina) should be such a rare visitor to Britain. A fair-sized, spirited Warbler with long wings, I have seen it at Dieppe, only sixty miles from Beachy Head, while in the Rhineland immediately around Cologne, it is the commonest Warbler, arriving with the Wood- and Garden-

Warblers early in May.

Although a pushing, active bird with plenty of personality and a loud harsh song, the Icterine Warbler is, compared with the flaunting Whitethroat or trustful Willow-Warbler, very rarely seen. He loves to sit, grinding out his scratchy. unmusical notes, just within the outer-most fringe of leaves of some high tree, especially one a little apart from the rest. While singing he is not so restless as a Blackcap or a Chiffchaff; when he does move he slips among the branches like a Grasshopper-Warbler among brambles. Like the Throstle he repeats each note of his song three or four times before going on to the next and, except in the case of a few individual birds, not many of these sounds are even passable, most being very scratchy and harsh. He is an indefatigable singer, continuing till July; I have seen one singing vigorously as he hovered in front of another which he had been fighting for some time and had just driven into a tree.

In 1922 I found nests ready for eggs early in the fourth week in May. One of these, about four feet up in an alder, was destroyed before laving began. A few days later, the other, five feet high in the fork of a sycamore sapling and unattached except by a single loop round a branch underneath it, contained one egg with black and ochre spots fairly evenly distributed over its pink ground. The nest, built of wool with fibres bound round it horizontally like barrel-hoops, was in shape very like a Reed-Warbler's and almost as deep as any I have seen belonging to that species. The hen, whom I disturbed from laying the second egg, slipped away quietly when almost touched and began to sing near by. Her song was not in the least like the cock's, but reminded me of that low inward warble of the Blackcap and Lesser Whitethroat which seems rarely to be uttered except in late summer and can only be heard at close quarters even then. She soon stopped singing, but occasionally uttered a reproachful "titt-tuee," or "titter-wee." In this respect she behaved like all the others whose nests I found later, none of whom used the vigorous language poured out in such circumstances by the Blackcap and Garden-Warbler.

On May 29th I found another securely attached by loops of fine grass to the fork of an elder about five feet up. The lining of this nest was of very fine grass, among which three



ICTERINE WARBLER: The young immediately before leaving the nest.

(Photographed by E. M. Nicholson.)

small feathers were visible; owing to the depth of the nest the sitting hen holds her head very high.

The next day I found another, which contained a full clutch of five eggs, about four feet above the ground in a horse-chestnut sapling within thirty yards of the last. Shallower and less artificial than the others, of which I had failed to get a convincing photograph on account of the lack of detail and fuzziness of the wool, it was built of grass with plenty of wool

worked in. By the 10th of June all the young were hatched and on the 16th I photographed them clamouring for food. By this time they were almost covered with sprouting feathers and their huge orange bills were always wide open when there was any hope of food. They now grew very rapidly, on the 17th they were half feathered, creamy-straw colour on the breast but still steely above, while as soon as I touched the nest on the 19th one fluttered out and ran to the cover of some trailing brambles. One flew away directly afterwards, but the others, in spite of the old birds' calls, remained at home.

From the four nests found by me in this abandoned and tree-covered German magazine on the outskirts of Cologne this brood only was safely hatched, none of the other builders even succeeding in hatching their eggs.

The Icterine is above all a bird of the garden, from the little patch behind a suburban house to the more pretentious grounds of the bigger houses and the public parks. He also favours the thick scrub of acacia and elder which masks the ring of forts surrounding Cologne, in two of which I found nests built in elder, about five and twelve feet up, respectively.

Being so active and so full of mannerisms he appears very different when seen in different lights and positions. The long wings give him an un-warbler-like appearance in the air; he flies generally like a Spotted Flycatcher or parachutes down from a tree like a singing Pipit. In some lights he is a warm brown above, in others a dark olive-green; while sitting among the smaller twigs, legs wide apart like a Reed-Bunting's on a reed, the rather short tail squared with an air of awkward self-assurance and the short crown-feathers erect, he is very unlike the elusive, self-effacing little insect-hunter slipping among the sycamore leaves.

#### THE EAST WOODHAY WARBLER.

BY

HUGH S, GLADSTONE, M.A., F.Z.S.

Professor Alfred Newton, writing to J. A. Harvie-Brown in 1904, criticized some tendencies of modern nomenclature and jokingly proposed to take some common species, such as *Emberiza citrinella*, and divide it into fifty sub-species to correspond with as many English counties. Nowadays systematic ornithologists have themselves been divided into two classes, styled respectively "Lumpers" and "Splitters," but even the most ardent of the last named category does not appear to have paid any attention to the "species *Silvia* (or rather *Curruca*) *Bidehensis*" which it was proposed in 1833 to establish.

The first mention of this bird is to be found on p. [3] of the "Additional Remarks" in Robert Sweet's *The British Warblers*: 1823-[1832]:—

- "In a letter from the Honourable and Reverend William Herbert, he informs me, that 'two years ago, \* he saw beside a green lane, near Highclere,† in Hampshire, a pair of Sylviadeæ in May, shaped like the Whitethroat, but nearly as large as a Nightingale, the under parts of a glossy ashy-whiteness, rather whiter than the belly of the Larger Whitethroat; upper parts entirely rufous, with a dark streak over the eye; they lighted frequently either on the fence, or on some of the lower branches of some oak-trees, close to the fence, not concealing themselves, but continuing exposed to the sight, and remaining long in the same posture.' From the above account, I believe it to be a species that I observed plentiful one Summer, a great many years since, in the gardens of Richard Bright, Esq., of Hamgreen, near Bristol, where they came to feed on the fruit and insects, particularly on the Raspberries; they always came in with great velocity, and generally several together, and were rather more shy than the Blackcaps, and other Warblers that were feeding there at the same time. I did not happen to catch either of them, nor was I particular about them at that time, not supposing but they were regular, or, at least, frequent visitors, but I have never seen one of them since that season."
- \* Sweet published his first edition of *The British Warblers* in 1823, figuring but six birds, as stated on the title-page, and in this edition there were no "additional notes"; he afterwards added fresh parts as he informs us, until he had figured sixteen birds. Neville Wood (*The Ornithologist's Text Book*: 1836, p. 37) gives the date of the last and third part as 1832, and it is interesting to note that this date is confirmed by the "letter" above referred to, for, when contributing a similar footnote to Rennie's edition of *The Natural History and Antiquities of Selborne*, which was published in 1833, "W.H." practically repeats his story, but says "three years ago."

† Highclere, the manor and residence of Henry Herbert, first Earl of Carnarvon, who succeeded his uncle in the property in 1769, shares its name with the parish which adjoins that of East Woodhay, in Hampshire.

The next mention of this bird is in a footnote by [The Hon. and Rev.] W[illiam] H[erbert] on pp. 129-130 of James Rennie's edition of Gilbert White's *The Natural History and Antiquities of Selborne*, 1833:—

\*" Three years ago, I saw beside a wide green lane in the parish of East Woodhay,† in Hampshire, a pair of Silvia of the fruit-eating division, or Curruca, being individuals of a species which has never been described. Mr. Sweet mentions, in his British Warblers, that he saw several one summer attacking the fruit in the garden of Mr. Bright, near Bristol, exactly answering to the description of my birds, and he adds that he never saw any of them but in that one season. Those which I saw were formed much like a Whitethroat, but as large as a Nightingale, the upper-parts rufous, with a dark line over the eye, the under-parts of a glossy silver colour, which shone very conspicuously in the sun. My attention was first attracted at a considerable distance by one of these birds sitting on a low branch of the hedge with its breast towards me. It did not stir till I came close to it, when I perceived that there were a pair, exactly alike in colour and size. They were not in the least shy, but sat very still, either on a low branch of an oak tree, or on some part of the fence, and were quite mute. I remained examining them above a quarter of an hour, being at times very close to them. It was in the month of May, at which time the foliage was thin in the hedges, and very little on the oaks. They were undoubtedly breeding in the neighbourhood, but I left the country the next morning and could not investigate their habits any further. There were gardens at a very short distance from the spot where I saw them. I propose to call the species Silvia (or rather Curruca Bidehensis, East Woodhay Warbler,—W.H. (For the figure of this bird see title-page.) "

The title-page bears a woodcut which is entitled: "East Woodhay Warbler—W. Herbert, del.," and four years later, on pp. 177–178 of Edward Turner Bennett's edition of Sclborne, 1837, the footnote, above quoted, again signed [The Hon. and Rev.] W[illiam] H[erbert] is repeated and a woodcut is appended, but it has no title nor is it signed. This cut, it may be observed, is, as compared with the "figure" on "the title-page" of Rennie's work, somewhat darker as regards the shading on the bird's throat, but I am not at all sure that it is not actually the same woodcut, though altogether darker in Bennett's edition of Sclborne. As regards the artist who drew the portrait of this new species, we are told that a few

<sup>\*&</sup>quot; W.H." therefore saw the bird in 1830, but it was apparently unknown to Rennie in 1831, when he edited the *Ornithological Dictionary of Colonel G. Montagu*.

<sup>†</sup> See footnote p. 145.

<sup>‡</sup> I am unable to derive the term "Bidehensis," which may be the Latinised form of an English place-name: I understand that "Biden" is a surname of frequent occurrence in Hampshire and it is possible that some hamlet or homestead of that, or some such, name may have been pressed into service.

of the illustrations in Rennie's work "were contributed by Mr. W. H. Herbert, [sic] the son of the gentleman whose notes formed so valuable an addition to the text."\* It is perhaps worth pointing out that the woodcut in question is signed "W. Herbert" as are also two others appearing in the book† and that only two are signed "H. W. Herbert"; tit would therefore seem presumable that the Honourable and Reverend gentleman was not only responsible for the description but also for the picture of the East Woodhay Warbler.

I think that this is all that is known about "Silvia (or rather Curruca) Bidchensis," but I have an idea that I have seen some further allusion to it, but I cannot remember where, nor can the authorities whom I have consulted render me any assistance, though they have expressed much interest in my quest. If this "species" has been decently buried it must not be thought that I am trying to gain credit by reviving the attempt to obtain specific rank for it, and I believe the bird in question to have been but the Garden Warbler (Sylvia hortensis of many authors). The latest systematists have adopted Motacilla borin of Boddaert as the correct name for the Garden-Warbler, and, by way of laying a possible ghost, it may perhaps be pointed out that as Boddaert's name was published in 1783 it clearly antedates Silvia Bidehensis. If farther information is wanted as regards the Hon. and Rev. William Herbert (b. 1778, d. 1874), third son and fifth child of the first Earl of Carnaryon, it can be found in the *Dictionary* of National Biography, as also a life of his elder son, Henry William (b. 1807, d. 1858), who met with a singularly sad end in New York.

<sup>\*</sup> E. T. Bennett: ed. of The Natural History and Antiquities of Selborne, 1837, p. xvi.

<sup>†</sup> tom. cit., pp. 53, 55.

<sup>‡</sup> tom. cit., pp. 58, 126.

<sup>§</sup> A Practical Handbook of British Birds, ed. by H. F. Witherby: Vol. I., 1920: p. 364.

# OBSERVATIONS ON THE BIRDS OF LUNDY, MAY AND JUNE.

BY

#### LEWIS R. W. LOYD.

The following notes on the Birds of Lundy were collected during a stay extending from May 6th to June 29th, 1922. To them are added, for the sake of comparison of the status of each species, references from the following papers and books. Birds of Devon, W. S. M. D'Urban and M. A. Mathew. 1895; "A Visit to Lundy" (May 5th-11th, 1900), F. L. Blathwayt (Zool., 1900, pp. 375-380); "Notes on the Fauna of Lundy Island" (June 3rd to 10th, 1909), Bruce F. Cummings (Zool., 1909, pp. 442-444); "Nature Notes," A. H. Rousham (Devon and Exeter Gazette, June 25th, 1908); "The Birds of Lundy," A. H. Rousham and A. J. Ross (A Paper read at Exeter before the R.A.M. Field Club and Nat. Hist. Soc., March 13th, 1909); A List of the Birds of Lundy compiled by J. R. Chanter from information furnished by H. C. Heaven (Trans. Devon. Assoc., Vol. IV., 1871).

A lamentable ignorance of Ornithology is the general rule on the Island. Guillemots, Razorbills, and, on occasion, even Puffins, are referred to indiscriminately as "murres," the first named being sometimes distinguished as "Longbills." The Manx Shearwater is for the most part regarded as a mystery in spite of Howard Saunders' assertion that it is (or was) well known on Lundy as the "Cuckle." And indeed taking it all round, hardly any interest in birds is apparent except in so far as the collecting of their eggs for food is concerned, many dozens being "put down" in lime and

water-glass for future consumption.

RAVEN (Corvus c. corax).—At least four pairs nested in 1922, and probably five. Recently a number were killed owing to the damage they did amongst the lambs. Previous to this they are spoken of as "being about like a flock of Rooks." Even in their present numbers a great increase is noticeable. No reference is made to them in Birds of Devon, neither does Mr. Cummings mention them. Mr. Blathwayt remarks that "a pair or two of Ravens are said to nest on Lundy," but he failed to see any. Mr. Rousham tells us that a pair hatched out in 1908, but that the young were shot on the nest.

HOODED CROW (C. c. cornix).—The late Rev. H. G. Heaven informed Mr. Blathwayt that a few years previous to 1900 one or two of these birds remained and apparently interbred with Carrion-Crows. Mr. Blathwayt saw several birds which he believed to be hybrids in 1000 on the Island.

Carrion-Crow (*C. c. coronc*).—Not more than half a dozen pairs at the most. A nest with young found only eight feet up a cliff, May 14th. Breeds; not uncommon (Blathwayt). Resident; nests in cliffs (Cummings). Several families

(Ross).

Jackdaw (Colœus m. spermologus).—"In fair numbers, breeding on the high cliffs" (Rousham). D'Urban and Mathew, Blathwayt and Cummings refer to the Jackdaw as a rare visitor. I did not see it on the Island myself and it is

unknown to the Islanders of the present day.

CHOUGH (*Pyrrhocorax pyrrhocorax*).—"The beginning of the end" of the Lundy Choughs is locally attributed to the blasting operations of 1872, though a remnant were still to be found up to 1890. It is practically certain that none have been seen for at least a quarter of a century. Quite exterminated in 1900 (Blathwayt). Fairly numerous "thirty years ago" (*Birds of Devon*).

Starling (Sturnus v. vulgaris).—Reported very numerous on migration. None seen personally. Identified (Blathwayt). Established on the Island "within the last twelve years" but not more than two pairs in 1909 (Cummings).

HAWFINCH (C. c. coccothraustes).—"Has been found breeding on one occasion" (Ross). Occasional visitor (Birds

of Devon).

Greenfinch (Ch. ch. chloris).—Two pairs seen and heard daily up to May 12th, after which they disappeared. Fairly

common (Ross).

British Goldfinch (Carduclis c. britannica).—One pair only seen. The young were brought off successfully, the nest being built in an elder bush in a sheltered combe at the S.E. corner. Identified (Blathwayt). One pair (Cummings). One family (Ross).

LINNET (C. c. cannabina).—Very numerous throughout the S.E. part of the Island. Common (Blathwayt, Cummings

and Rousham). Fairly numerous (Ross).

CHAFFINCH (Fringilla c. cælebs). About eight pairs; confined to S.E. Comparatively numerous (Ross). Identified (Rousham).

House-Sparrow (Passer d. domesticus).—About five pairs; confined to S.E. corner. A flourishing colony by Manor

Farm (Blathwayt). Established "within the last twelve years" (Cummings). "In their usual large numbers" by the farm (Ross). Identified (Rousham).

YELLOW BUNTING (Emberiza c. citrinella).—Six or eight pairs; confined to S.E. corner. Identified by Blathwayt and

Rousham. Cummings saw no Buntings.

CIRL BUNTING (E. cirlus).—Identified by Blathwayt.

Snow-Bunting (*Plectrophenax nivalis*).—A female with well developed eggs shot at the end of May, 1858 (*Birds of Devon*).

SKYLARK (Alauda a. arvensis).—Very numerous throughout high ground. One of the commonest (Blathwayt and

Cummings).

MEADOW-PIPIT (Anthus pratensis).—Very plentiful throughout. Of many nests found and watched it is remarkable that only one contained four eggs, each of the remainder holding but three. Amongst the most numerous (Blathwayt, Cummings and Rousham). In fair numbers (Ross).

ROCK-PIPIT (A. spinoletta petrosus).—Nests all round the Island, occasionally 300 feet and more above sea level. Amongst the most numerous (Blathwayt, Cummings and

Rousham). In fair numbers (Ross).

Yellow Wagtail (Motacilla flava rayi).—One reported to me as seen at extreme N. end, June 6th. The only Wagtail identified by Blathwayt. Cummings saw none at all, nor are they mentioned by either Rousham or Ross. Said to breed occasionally (Birds of Devon).

GREY WAGTAIL (M. c. cinerea).—A hen seen near farm

buildings, May 9th.

PIED WAGTAIL (M. alba lugubris).—Several pairs found

nesting in the gardens, farm buildings, etc.

BRITISH GOLDCREST (Regulus r. anglorum).—A pair successfully reared their brood in a conifer in the grounds at the S.E. corner. Ross states that he was informed that this bird (as also the Firecrest!) was a native.

RED-BACKED SHRIKE (Lanius c. collurio).—A hen seen,

June 1st. Has bred (Ross).

Spotted Flycatcher (Muscicapa s. striata).—Numerous up to May 18th, when the last left. A frequent visitor (Ross). (It will be noticed that on May 18th, when a heavy mist prevailed with a very light breeze from the west, there was a marked exodus of small birds.)

CHIFFCHAFF (Phylloscopus c. collybita).—Stated to breed

by Ross.

WILLOW-WARBLER (Ph. t. trochilus).—Numerous up to May 18th, when all seem to have moved on. One heard

singing (Cummings). One seen (Rousham). Breeds Ross).

GARDEN-WARBLER (Sylvia borin).—Stated to breed by Ross.

BLACKCAP (S. a. atricapilla).—A hen seen, May 8th. A cock reported seen, June 16th. A pair probably nesting (Cummings).

WHITETHROAT (S. c. communis).—Very numerous on sloping cliffs and in combes up to May 18th, when the vast majority moved on, only a few pairs remaining to breed.

Identified (Blathwayt). Breeds (Cummings).

British Song-Thrush (*Turdus philomelus clarkei*).—Four or five pairs nest in and around the pleasure grounds. Identified (Blathwayt, Cummings and Rousham). Comparatively numerous (Ross).

BLACKBIRD (*T. m. merula*).—More generally distributed than the last-named, a pair being found in almost every sheltered spot. One bird confused me much during the first days of my stay by exactly imitating the note of the Oyster-catcher. Identified (Blathwayt and Rousham). "In larger numbers than the Thrush" (Cummings). Comparatively numerous (Ross).

Wheatear (*Enanthe &. &manthe*).—Very numerous up to May 24th, but only four, or possibly five, pairs remained to breed. Six fresh eggs, June 11th; fully fledged young, June 15th; young about two days old, June 16th. Amongst

the commonest (Blathwayt and Cummings).

Whinchat (Saxicola r. rubetra).—An odd pair or two to be seen almost daily, giving the impression by their behaviour of having every intention of nesting, up to May 18th, when all disappeared. Identified by Blathwayt, June, 1900, and three pairs seen by Ross, June, 1908, in reference to which last Cummings writes: "I have never seen the Whinchat in North Devon, where, if it occurs, it must be a very rare bird, nor did I observe it on Lundy." Given in Chanter's List, but suggested in Birds of Devon that he may have confused it with the Stonechat.

British Stonechat (S. torquata hibernans).—About twenty pairs breeding; evenly distributed. Amongst the commonest

(Blathwayt, Cummings, Rousham and Ross).

British Redbreast (Erithacus rubecula melophilus).—Several pairs in cultivated and sheltered spots. Identified (Cummings and Rousham). "In its usual large numbers" (Ross).

British Hedge-Sparrow (Prunella modularis occidentalis).
—Apparently only two pairs, both at S.E. corner. One nest

was found. This bird is not mentioned elsewhere as being known on the Island.

Wren (Troglodytes t. troglodytes).—Several pairs in pleasure grounds and amongst rocks on the cliffs. The Lundy bird gives the impression of being somewhat darker than the typical form, but egg measurements correspond with the average. Identified (Blathwayt, Cummings and Rousham). Ross was informed that the bird was a native.

Swallow (*Hirundo r. rustica*).—Very numerous on passage. A pair nest yearly in the church porch, but no others appear ever to breed on the Island, although a second pair was to be seen up to June 29th, when I left.—Identified (Blathwayt and Cummings).—A few (Rousham).—Common (Ross).

MARTIN (Delichon u. urbica).—Very numerous throughout May, but said never to have remained to breed. Although one pair was about up to mid-June, no sign of a nest, old or new, was found. Identified (Blathwayt and Cummings). A few (Rousham). Common (Ross).

Sand-Martin (*Riparia r. riparia*).—Fairly numerous on some days up to May 25th. Identified (Blathwayt and Cummings). A few (Rousham). Common (Ross). Breeds (*Birds of Devon*).

Swift (Apus a. apus).—Except singly not seen after May 18th. Before then numerous. Identified (Blathwayt and Cummings). Believed to nest in dry-built granite walls (Rousham), and in crevices in rubble dykes (Ross, from H. G. Heaven).

NIGHTJAR (Caprimulgus cu. curopæus).— One heard "churring" in Gannets' Combe (N.E.), 10.30 p.m., May 30th. Identified (Cummings). One flushed (Rousham). Has been found (Ross). A common breeder! (Birds of Devon).

WOODPECKERS.—All three "have been established on the Island at different times" (Ross).

Cuckoo (Cuculus c. canorus).—Heard on May 7th and again throughout May 23rd and 24th. Birds, taken to be females, seen May 15th and 21st, and June 2nd. From the behaviour of the bird seen on the last named date there would seem to be no doubt whatever of her intention to lay; all efforts to discover whether she actually did so were, however, unfortunately, unavailing. Young birds are said to have been seen on the Island in August. Heard by Blathwayt, Cummings and Rousham. Stated by Ross to be found "in comparatively large numbers."

SHORT-EARED OWL (Asio f. flammeus).—"There is a very interesting native in the Short-eared Owl. It is found in

fairly large numbers" (Ross). Several (Rousham). In *Birds of Devon* this species is listed as a winter visitor only to

TAWNY OWL (Strix a. aluco).—" Night is made weird by the frequent cry of the Tawny Owl" (Ross). No other

mention found as regards Lundy.

PEREGRINE (Falco p. peregrinus).—A pair laid in an easily accessible spot on the east side and the young were hatched previous to May 7th. Two of these were taken for training on June 1st, but a third was apparently overlooked and happily got through. A second pair gave every indication of breeding at the north end, but eyrie not found. Two eyries, 1891 (Birds of Devon). One eyrie found and another suspected (Blathwayt). One eyrie (Cummings). Young taken, 1908 (Rousham). Eyrie almost annually invaded (Ross).

MERLIN (F. columbarius æsalon).—One seen in the centre of the Island. May 21st. Listed as "occasional winter

visitor " in Birds of Devon.

KESTREL (F. t. tinnunculus).—Apparently only two pairs, both towards the south end. Nests (Cummings). Fairly common (Blathwayt). Fairly represented (Ross). Common (Rousham).

COMMON BUZZARD (Butco b. butco).—Certainly two pairs bred and probably three. Early in the year a male was killed by a farm hand with a stick in the act. with its mate, of devouring a chicken. "Could not be sure that there were more than one pair" (Blathwayt). Identified (Cummings). Common (Rousham). Fairly represented (Ross).

Sparrow-Hawk (Accipiter n. nisus).—One pair only and that, oddly enough, at the extreme north-west corner—the furthest point from what few trees there are on the Island. "There are no Sparrow Hawks" (Rousham). "A strange absentee " (Ross). No mention elsewhere.

MALLARD (Anas p. platyrhyncha).—Four, in "eclipse" plumage, put up from a small moorland pond, June 9th. Three pairs of "Ducks" (presumably Mallard) are said to have nested in 1921 and the year before in some boggy ground near the centre of the Island.

CORMORANT (Phalacrocorax c. carbo).—About a dozen pairs, eight of them on the east end of Gannets' Rock, and the remainder in the immediate vicinity. Identified (Blathwayt, Rousham and Ross). Breeds, especially on Gannets' Rock (Cummings).

Shag (*Ph. g. graculus*).—Also about twelve pairs, all on the west side but one, which nested at the west end of Gannets' Rock, not fifty yards from the Cormorants. As above.

GANNET (Sula bassana).—Bred on Lundy until 1900 at any rate. On May 8th, 1922, one settled on Gannets' Rock and spent most of its time in the same spot until May 11th when it left. Returned May 19th and commenced building operations immediately above a colony of Kittiwakes, just north of the Rock, but left after continuous fogs, disturbed, no doubt, by the North End horns. Returned May 24th and again commenced to build, this time on the Rock itself, but left finally during the early days of June owing, apparently, to another spell of thick fogs. Every possible effort was made to encourage the bird by leaving it undisturbed (for which the thanks of Ornithologists are largely due to the interested co-operation of the lessee of the Island, Mr. C. Herbert May of Barnstaple), and, given favourable weather, there appears to be no reason why the Gannet should not return to Lundy. Indeed, had it not been for the unfortunate sequence of fogs and consequent roar of the North End horns, there seems little doubt that a commencement towards their re-establishment would have been effected this year. One of the Lightkeepers this season received a letter offering him a ridiculous sum (I believe ten pounds!) for a Lundy-taken Gannet's egg, but a standing reward has been posted for division amongst the men of the Island in the event of a young bird successfully leaving the nest, and little need be feared from this unpleasant person, whose name the Light-keeper was unwilling to divulge. Odd birds were constantly to be seen out to sea (presumably from Grasholme) and an immature specimen was noted off the south end on June 13th. Although Gannets' Rock was no doubt the site of the original colony. the last breeding haunt of the birds on Lundy was considerably further north. Capt. W. Dark of Appledore avers that two birds attempted unsuccessfully to build in 1905.\* About 70 pairs, 1890 (Birds of Devon). About 30 pairs, 1893 (Blathwayt). Three or four pairs, 1900 (Blathwayt). Locally extinct (Cummings, Rousham and Ross).

STORM-PETREL (*Hydrobates pelagicus*).—Included here only owing to repeated assertions (Howard Saunders *et al.*) that a few pairs "are believed to," "may possibly," or "probably" breed "on a small Islet off Lundy." There are only four

<sup>\*</sup> Three pairs were present in 1900 and seven pairs in 1901. No reports for 1902, but five pairs laid in 1903, though none hatched off. No eggs were laid in 1904.—F. C. R. Jourdain.

"small islets" on which it would be possible for these birds to breed—Rat Island, Goat Island, Gannets' Rock and the Great Shutter—almost every yard of which has been systematically and repeatedly examined without the least sign of a Storm-Petrel being observed. During the whole of my stay on the Island I neither heard a sound nor saw so much as a feather of one of this species myself, nor was I able to discover anybody who had ever done so, although Mr. Robert Hall, the keenest and most intrepid "egger" on the place (and incidentally one of the few men who may be absolutely trusted at the "top end" of a rope) is well acquainted with the bird in the Scillies. It may breed in some years, as D'Urban and Mathew in their Birds of Devon state that it "breeds occasionally on Lundy" (Trans. Devon. Assoc. VIII. p. 308). "The same remark" (it probably breeds) "very possibly may be applied to the Storm Petrel" (Blathwayt). Perhaps the Storm Petrel also breeds, but a careful search was unsuccessful in revealing any signs of it " (Cummings). On the other hand we find, "the Storm Petrel is never seen there "(Rousham).

Manx Shearwater (Puffinus p. puffinus).—A considerable colony numbering perhaps half a hundred pairs. The old nesting ground at the extreme north end of the Island was well known to the Light-keepers five and twenty years ago. This has now been deserted and another chosen. A dead bird picked up under the North End hoist cable, which it had evidently struck, May 31st. "Only" discovered nesting by Mr. A. J. R. Roberts a few years previous to 1909 (Cummings). Well known on Lundy (Blathwayt). Numerous and breeds (Birds of Devon). Not numerous, breeds

(Rousham).

Fulmar Petrel (Fulmarus g. glacialis).—A single bird observed flying off the North End landing place in company with Kittiwakes on June 11th, by Surg. Lieut.-Comdr. W. P. Vicary, M.B.O.U. Commander Vicary has spent many months in the Orkneys and elsewhere where the bird abounds, and the possibility of any mistake in his identification is extremely remote.

WOOD-PIGEON (Columba p. palumbus).—A few pairs nest in a small plantation near the south east corner. Not mentioned by Blathwayt, Rousham or Ross, and only one was seen by Cummings.

Turtle-Dove (*Streptopelia t. turtur*).—Very numerous up to the end of May, flocks of as many as thirty being met with. An odd pair or two were to be seen well into June but their

note was never heard. "Has occasionally nested" (Birds of Devon). One pair seen, which left next day (Cummings).

Oystercatcher (Hamatobus o. ostralegus).—About fifteen pairs nesting at intervals all round. A number of "nests" Identified (Blathwayt and Rousham). Breeds found (Cummings).

RINGED PLOVER (Charadrius hiaticula).—A single bird seen on high ground at South End, May 11th. An occasional

breeder (Birds of Devon). Identified (Cummings).

GOLDEN PLOYER (Ch. apricarius).—Seen in breeding plumage (Blathwayt).

LAPWING (Vancilus vancilus).—One seen daily May 14th-

18th, and again on June 4th. Identified (Blathwayt).

DUNLIN (Erolia a. alpina).—Seen in breeding plumage (Blathwayt). A clutch of Dunlins' eggs from the collection of Major W. H. Milburn sold at Stevens' Rooms on January 11th, 1922 (Lot 563), is catalogued as having been taken on Lundy, June 1st, 1904.

COMMON SANDPIPER (Tringa hypoleuca).—One pair seen S.W. May 12th, and one S.E. May 13th. Both at sea level.

COMMON CURLEW (Numenius a. arquata).—From one to four pairs seen almost daily, chiefly on cultivated ground at the south end. They are said to have nested, but the evidence is inconclusive. Identified (Cummings and Rousham).

WHIMBREL (N.  $ph. ph \alpha o pus$ ).—An odd bird or two generally

to be seen at the north end throughout May.

BLACK-HEADED GULL (Larus ridibundus).—Nine adults seen

feeding in a root field, June 9th.

[COMMON GULL (L. c. canus).—Stated in both his papers, in error, to have been found nesting, "in large numbers," by

Rousham.

HERRING-GULL (L. a. argentatus).—Very numerous. On May 17th a set of four eggs was found and on June 23rd four young in a nest. The damage these Gulls do amongst the eggs of Guillemots and Razorbills—particularly those of the former owing to their being generally more easily accessible is colossal. It is no uncommon sight to see one Herring Gull eat as many as seven eggs in succession in the space of half an hour. They are frequently eaten "in situ," rarely pierced and carried away on the beak, far more often carried crosswise between the mandibles, and once (May 25th), a Gull was seen by a companion and myself to swallow a Razorbill's egg entire and fly away with the shape distinctly visible in the gullet. Neither the Great nor the British Lesser Blackbacked Gulls were ever observed to be guilty of these depredations. This predatory habit of the Herring-Gulls is referred to by Rousham, who asserts that they dig the lower mandible into the egg and so carry it away. He mentions also that the Kittiwakes' are the eggs to suffer most, but my own experience is that these are, comparatively, but very rarely attacked indeed. Several miniature eggs of the Herring-Gull, a number of a pale blue variety, and a pair with a pink or, rather, pale lavender appearance were found. Two nests examined on June 14th are perhaps worthy of note. In each case the young, a few days old, were lying just outside the nest, one of which contained quantities of very small winkles, the other the remains of a large number of blackbeetles. Colonies all round the Island (Blathwayt). Prodigious quantities (Cummings). A great breeding station (Birds of Devon). In large numbers (Rousham).

British Lesser Black-backed Gull (*L. fuscus affinis*).—Also very plentiful though by no means so numerous as the last named. Nearly as numerous as the Herring-Gull (Blathwayt). Common (Cummings). In small numbers

(Birds of Devon). In large numbers (Rousham).

Note.—On two rocks much favoured as a breeding resort, by the Herring-Gull especially,—namely Goat Island (S.W.) and S. James's Rock (W.)—great numbers of "otoliths" were to be found. These one would suppose to remain from fish brought by the Gulls, but, if that is so, how comes it that they are to be found nowhere on the Island but on those two Rocks?

Great Black-backed Gull (*L. marinus*).—About a dozen pairs. Two nests were in close proximity on the Great Shutter Rock and I knew of seven others. "Probably not more than six or seven pairs" (Blathwayt). "Very rare and will probably be locally extinct shortly. Perhaps not more than two pairs are now left" (Cummings). A pair or two nest (*Birds of Devon*). Two or three pairs (Rousham).

KITTIWAKE (Rissa t. tridactyla).—About twenty colonies, varying in strength from 30 to 300 pairs. It was noticed that without exception where Kittiwakes nested, there too, would Razorbills and Guillemots be found. "By far the most numerous of the Gulls on the Island" (Blathwayt). Prodigious quantities (Cummings). Breeds in large numbers (Birds of Devon and Rousham).

RAZORBILL (Alca torda).—In hundreds all round the Island. Commenced to lay ten days before the Guillemots. Enormous numbers (Blathwayt). "In their accustomed legions" (Cummings). Countless numbers, principally found on the

north-east, but also on the west side with Guillemots (Rousham). In some numbers (Birds of Devon).

COMMON GUILLEMOT (*Uria t. troille*).—Lays in enormous numbers from the north end to three-quarters of the way down on both sides of the Island, and said to be extending southward each year. The "Bridled" variety is not uncommon, and one of them was actually caught on her egg on June 25th. Enormous numbers (Blathwayt). "In their accustomed legions" (Cummings). Immense numbers (*Birds of Devon*). Confined to west side (Rousham).

No mention can be found of the fact that the Guillemot rolls the egg onto the feet with the bill and broods it held between their upper surface and the breast. That this is the case ample ocular demonstration has again and again been given this season (attention was first directed to it by Mr. Robert Hall), and it is to the fact of the feet being under the egg that a large percentage of the losses caused by falling from ledges in undoubtedly due—the bird not taking the time

when alarmed to remove the feet before flight.

British Puffix (Fratercula arctica grabæ).—Breeds in great numbers at the north end, but said by men who have spent many years on the Island to be decreasing season by season. Enormous numbers (Blathwayt). "In their accustomed legions" (Cummings). Great numbers (Birds of Devon). Confined to north and north-east (Rousham).

N.B.—One of the largest colonies is now north-west, and a few birds may be found breeding south of the centre of the

Island on both sides.

Landrail (*Crex crex*).—A single bird flushed on high ground near the centre of the Island, May 7th. Identified (Blathwayt). Constant breeder (*Trans. Devon. Assoc.*, 1876, VIII. p. 300). Summer visitant (Chanter). Has been found (Ross). Many seen (Rousham).

MOOR-HEN (Gallinula ch. chloropus).—A pair used to haunt wet ground in the south-east combe, and others two ponds on

the top of the Island. No signs of them this year.

PHEASANT (*Phasianus colchicus*).—Recently introduced by the lessee, Mr. C. H. May, and at least two broods hatched.

QUAIL (Coturnix c. coturnix).—In 1870, Rev. H. G. Heaven knew of thirteen or fourteen nests (Birds of Devon). A large flock once remained over the breeding season (Rousham).

Partridges and Red Grouse have from time to time been turned down, only to be devoured by the rats (*Birds of Devon*). The White-tailed Eagle is said to have formerly bred, the

Osprey to have bred until 1838, and the Great Auk irregularly until the same year (Birds of Devon).

In the above notes and references many statements which are almost contradictory cannot fail to be noticed (see for instance, Landrail). As a possible explanation of the reason for some of these it may be pointed out that—

- (i) Chanter's List, appended to his "History of Lundy," was compiled from information supplied by Rev. H. G. Heaven, as to whose competence as an ornithologist but little seems to be known
- (ii) D'Urban's and Mathew's *first-hand* knowledge of the Island was obtained during a short stay during the winter of 1860.
- (iii) The visits of *not one* of the other four gentlemen quoted exceeded seven days (Blathwayt, May 5th-11th, 1900. Rousham and Ross, June 6th-12th, 1908. Cummings, June 3rd-10th, 1909).

I do not hesitate to submit as a fact, the impossibility of more than a portion of the information these gentlemen obtained having been acquired by personal observation. Nobody that I know of—not excluding myself—has spent sufficient time on Lundy to be in a position to give more than an incomplete list of the birds to be found there. I hope later to spend a considerable time on the Island, to offer some notes on the Spring and Autumn migrations, and to make more complete those on the birds of May and June.



#### LATE NESTING OF THE LINNET.

A LINNET (Cardwelis c. cannabina) is now sitting on five eggs in a pear tree in my garden at Blackheath, Kent (September 13th, 1922), which is later than the nests mentioned in the Field of 9th instant, viz., August 26th. The number of eggs appears large for this species, so late in the season.

PERCY RENDAIL.

The latest date on which eggs of the Linnet have been found, as far as I am aware, is October 28th, 1887, when a nest with four eggs was found near Brighton (Zool., 1888, p. 105). Young birds have been met with in the nest in September, both in Oxfordshire and Yorkshire, but of course such cases are quite exceptional.— F. C. R. JOURDAIN.

#### FOOD TAKEN BY HOUSE-SPARROW IN A GARDEN.

A good deal has been written on the harm that the House-Sparrow (Passer d. domesticus) does, so that it may be as well

to put on record my experience to the contrary.

No doubt there is a good deal to be said against the bird in the cornfield, when the grain is ripe, but in my garden it effectually keeps down the green fly or aphis on my rose and rambler rose trees, besides catching on the wing, the small codlin moth (*Carpocapsa pomonella*), whose larva does so much havoc among apples.

I have watched them on many occasions systematically taking the larvæ of the small cabbage white butterfly (*Pieris rapæ*) off cabbages, and the larvæ of a small moth (*Pyrausta purpuralis*) from the terminal shoots of mint, and from

between spun-up leaves of the apple.

On one occasion this year, in the early dry spring, they did the only piece of damage I have yet come across, by snipping off the juicy flower shoots of a small clump of cloves. This, however, was owing to my omitting to put out the usual pan of water. As soon as I did so the remaining clumps of cloves were left untouched.

After a good feed of bread crumbs I watched them fly straight to the ramblers, there to feed on the green aphides, the juices of the rambler imbibed by their prey no doubt being the attraction.

C. W. COLTHRUP.

#### PROBABLE CRESTED TIT IN SURREY.

On April 24th, 1904, I watched a Crested Tit (*Parus cristatus*) flying about the tops of some tall trees near Croydon, with crest erect and uttering the notes "tur, ree-er, reerre." I had never previously seen one alive, but knew it well from stuffed specimens. It was certainly a Tit and the crest was quite pronounced; the other species I am, of course, well acquainted with.

C. W. Colthrup.

#### LESSER GREY SHRIKE IN NORFOLK.

A fine specimen of the Lesser Grey Shrike (*Lanius minor*) was brought to me for preservation on September 19th, 1922. It had been shot by a boy with an air-gun at Sea Palling on the same day. It was easy to distinguish from the Great Grey Shrike by its smaller size and the wing-formula, as illustrated in the *Practical Handbook*.

I have taken the following particulars: weight 2 ozs. exactly, length 8.25, wing 4.6, tail 3.75, tarsus 1, tibia 1.35 inches; sex, immature male. The bird was very fat and the stomach contained the remains of black beetles.

F. Ernest Gunn.

#### ABERRANT SONG OF THE CHIFFCHAFF.

Ox April 2nd, 1920, near Tring, I was watching a Chiffchaff (Phylloscopus c. collybita) in the hedge, when he suddenly began to sing, and several times uttered a medley of notes which I described at the time as "exactly like the splintered fragments of a Willow-Warbler's song." This little medley ended with the usual "chiff-chaff" notes, to which the singer soon devoted himself exclusively. Possibly this particular bird was only travelling; but in any case I never heard the variation again though I frequently visited the same spot, which is occupied every year by a pair of Chiffchaffs. For some years past I have been making observations on the Chiffchaffs' song, and have listened to a great number of individual singers, but this is the only occasion on which I have heard the Willow-Warbler-like song which Mr. Colthrup was fortunate enough to hear so often repeated by his Bournemouth Chiffchaff (antea, p. 134). Howard does not notice this variation in his British Warblers (1907-14); and the only references to it with which I am acquainted are by Kirkman (British Bird Book, II., 1911), and Coward, who in his Birds of the British Isles, (I., 1919) mentions having heard a Chiffchaff "utter a sweet little warble, suggestive of a feeble Willow-Wren." Nevertheless, I fancy that this variation (or possibly, mimicry) will prove, after more careful observation, to be less rare than is generally supposed.

BERTRAM LLOYD.

[cf. also Capt. H. Lynes, *Ibis* 1914, pp. 304–309, on the song of the Chiffchaff in Spain.—Eds.]

#### EVERSMANN'S WARBLER IN NORFOLK.

On September 4th, 1922, near Blakeney, I shot a small warbler in the scrub, a single slight wing-bar extending over three feathers only, having caught my eye at a distance of nearly twenty yards. This bird was kindly identified by Mr. Witherby, and, as I expected, it turned out to be an Eversmann's Warbler (Phylloscopus b. borealis). It is a typical specimen. The first primary is no longer than the wing-coverts: the second comes between the 5th and 6th: the ard to 5th are emarginated on the outer webs and not the 6th; the wing measures 63 mm.; the eye-stripe is long and conspicuous, and the beak larger than that of an ordinary Willow-Wren. The wind was north-west with fog and fine rain in the morning. This is the first record for England. the three previous occurrences of the bird having been in the Orkneys and Shetlands. E. C. Arnold.

#### EARLY FIELDFARES IN WILTSHIRE.

Whilst Partridge shooting at Westbury, Wilts., on September 2nd, 1922, we saw a large flock of Fieldfares (*Turdus pilaris*). Is this not early for these birds in this western county?

W. Shore-Baily.

[The earliest recorded date appears to be September 7th, see *Practical Handbook*, p. 395.—EDS.]

#### UNUSUAL NESTING-SITE OF MISTLE-THRUSH.

With reference to Major W. M. Congreve's note on the number of eggs laid by the Mistle-Thrush (*Turdus v. viscivorus*), I enclose a photograph of a nest of that species which may be of some interest for two reasons—in the first place, it contained five eggs, and secondly, it was built in an unusual position, on an old wooden crate, 2 or 3 feet from the ground, in a small garden adjoining the house where I was staying in Anglesey. The garden was also used more or less as a builder's yard—workmen were continually passing within a few feet of the nest, school children visited it frequently, and other people were constantly in its vicinity.

At times heavy loads of builder's materials were unloaded within a few feet of the nest with much noise, but in spite of

this the bird did not leave the nest, and was successful in hatching three of the five eggs. I am afraid the children were the cause of two of the eggs disappearing. The photograph was taken just before the young birds left the nest.

HILDA TERRAS.

In 1901 and 1903, I photographed two nests of Mistle-Thrush at Ewhurst, Sussex: one was built on a horizontal beam against the inner side of the wall of a large barn; the other was built on the top of three inverted wooden hurdles



that had been stacked against an iron rail-fence crossing an open grass field; in the first case the height from the ground was about twelve feet and in the second about three.—N. F. TICEHURST.]

[Major W. M. Congreve has a set taken from the shell hoist of a big gun at Pembroke Dock. Nests have also been recorded from the gable of a ruined cottage (S. G. Cummings), under the eaves of a house (G. A. B. Dewar), and on stone walls in moorland districts.—F. C. R. JOURDAIN.]

# OBSERVATIONS ON THE SIZE OF CLUTCHES OF SONG-THRUSH AND BLACKBIRD.

I was much struck during April, 1922, which was a very dry month in Cumberland, by the number of nests of the

Song-Thrush (*Turdus ph. clarkei*) which contained clutches of four eggs or less.

Of those situated on high ground, at some distance from streams, 93.3 per cent. had clutches of four or less, while only 6.6 per cent. had clutches of five eggs. On the other hand, every nest situated near running water contained full clutches of five or more. In May the rainfall was double that of April and the effect of the increase of moisture was shown by the fact that 54.5 per cent. of the nests at a distance from water contained full clutches as compared with 6.6 per cent. in April. Curiously enough, nests near water which, in April, showed 100 per cent. of full clutches only showed 40 per cent. in May.

In the case of the Blackbird (*Turdus m. merula*), 80 per cent. of the nests near water had full clutches in April as compared with 17.8 per cent. of those away from water. In May the figures were 100 per cent. of those near water with full clutches of five or more and 50 per cent. of those away from water with clutches of four only.

E. U. SAVAGE.

#### SIZE OF SWALLOW BROODS, 1922.

The past summer of 1922 was almost as bad for Swallows as those of 1920–21. As usual I send my table, giving the figures for other years for comparison:—

	Nests Visited,	Broods of Six or More,	Broods of Five.	Average Full Broods,	Average Brood,		
1909	ΙI	O	O	O	3.27		
1910	45	O	15	33.3	3.89		
1911	60	3	24	45.0	4.4		
1912	20	О	8	40.0	3.95		
1913	22	O	3	13.6	3.27		
1914	None						
1915	38	5	14	50.0	4.65		
1916	42	O	12	28.5	4.0		
1917	70	4	28	45.7	4.3		
1918	51	4	14	35.2	4.19		
1919	59	O	23	38.9	4.11		
1920	14	I	7	57.14	4.5		
1921	16	I	3	25.0	3.81		
1922	22	0	8	36.3	4.13		
				H. W. 1	H. W. Robinson.		

#### NORTHERN GREATER SPOTTED WOODPECKER.

Although the Greater Spotted Woodpecker has long been recognized as an autumn immigrant to the coast of Norfolk (Stevenson, Birls of Norfolk, Vol. I., p. 289), I believe that no identified example of D. major major obtained in the county has yet been recorded, though Mr. Witherby informs me that he has a note of three Norfolk examples, dated November, 1881, November, 1887 and November, 1889, as having been examined by Dr. C. B. Ticehurst. Through the kindness of Mr. Ernest Gunn, taxidermist of Norwich, who has allowed me to examine a series of Greater Spotted Woodpeckers in his collection, I am now able to record another typical specimen of the Northern form, a female killed at Sheringham on October 10th, 1915.

B. B. Riviere.

#### CUCKOO LAYING IN WILLOW-WARBLER'S NEST.

Although the Willow-Warbler (Phylloscopus trochilus) is not one of the commoner foster-parents of the Cuckoo (Cuculus c. canorus), it is not nearly so scarce as might be supposed from Mr. Fitzherbert Brockholes's note (antea, p. 107). It is included in the lists of fosterers given by Newton, Dresser, (Birds of Europe, V.p. 210), Wells Bladen (including an instance from Surrey), Bidwell (Ibis, 1896, p. 398, where ten cases are mentioned as exhibited), as well as in the lists of Continental writers such as Rey, Capek, etc. F. B. Whitlock found Cuckoo's eggs twice in Willow-Wrens' nests in the Trent valley (Nat., 1895, p. 67), an instance from Repton is recorded in the Zool, 1909, p. 109, Mr. C. J. Pring has one in his collection from Somerset, and Mr. T. G. Powell writes that in May, 1920, a newly built Willow-Wren's nest near Yeovil contained one egg only, and that a Cuckoo's. Many other cases might be cited from private collections in different parts of the country. F. C. R. JOURDAIN.

#### UNUSUAL NESTING-SITE OF SPARROW-HAWK.

On May 16th, 1922, at Ashby Magna, Leicestershire, I found the nest shown in the accompanying photograph of a Sparrow-Hawk (Accipiter n. nisus). The nest was unusually low down, being no more than six feet from the ground. It contained three eggs when I first found it, and four on the 18th; these, however, never hatched, as the nest was deserted a week later and I did not see any more of the Hawks.

I find that I have notes of two somewhat similar cases. In 1918 on August 5th, I found a Sparrow-Hawk's nest with three

eggs (deserted) in a spruce fir, nine feet from the ground, and in 1919 on August 6th, another nest with one egg (addled), also in a spruce fir, in the same plantation, ten feet from the



ground. Both these nests were less than 200 yards from the nest of 1922, and it seems likely that they were in each case built by the same pair of birds.

H. B. COTT.

# COMMON BUZZARD AT DULWICH AND IN HAMPSHIRE.

On the afternoon of August 27th, 1922, I watched two Common Buzzards (*Butco butco*) over my house at Dulwich. They were very high up, and sailing round in intersecting circles, travelling W. to E. like the pair I noted at Abbott's Wood, Sussex (*British Birds*, Vol. X., p. 272). I also saw one bird soaring at Christchurch, Hants, on April 16th, 1921.

C. W. COLTHRUP.

#### TUFTED DUCK NESTING IN WESTMORLAND.

With reference to the nesting of the Tufted Duck (Nyroca fuligula) in Cumberland and North Lancashire (antea, pp. 109, 135, 136), I might add that two pairs nested on a mountain tarn in North Westmorland in 1920. Unfortunately the nests were robbed.

E. U. Savage.

#### SHAG IN WILTSHIRE.

A young Shag (*Phalacrocorax g. graculus*) was brought to me on October 4th, 1922, that had been found not quite dead under the telegraph wires between Marlborough and Ogbourne. This is, I believe, the fourth record for the county, as I can find as previous records only Avebury, 1876. Mildenhall, 1871, and Corsham Court. It is interesting to note that three of the four occurrences lie within a total distance of some nine miles.

Guy Peirson.

#### LITTLE STINT IN DERBYSHIRE.

On September 9th, 1922, I obtained a Little Stint (Erolia m. minuta) at the Williamthorpe Reservoir, Heath. When first flushed, it rose quickly in zigzag flight to about 120 feet up and joined a flight of Swallows that chanced to be passing over. They objected to its presence and immediately darted at it, continuing to do so until they finally drove it down to the water's edge again. Messrs. Hutchinson, taxidermists, Derby, inform me that the bird is a young male. Mr. Jourdain informs me that there are three definite previous records of this species from the county.

C. B. Chambers.

# THE TENACIOUSNESS OF THE CURLEW OF ITS BREEDING-GROUND.

In Cumberland, the Curlew (Numenius a. arquata) commonly nests on the moors, fells, and mosses, but a number of pairs nest on rough pasture land, thus, as the Rev. H. A. Macpherson in his Vert. Fauna of Lakeland, p. 407, aptly puts it "preserving the traditions of the race of Curlews which were wont to nestle in the same spot when the now enclosed meadow formed part of an extensive moorland."

During the winter of 1919-1920, I was working on a farm near Gamblesby, and we had recourse to plough out a field which had been down in grass for the last twenty-five years (and is called the "Moor Field"). On April 21st of the following spring, I was harrowing down the lea ploughing of this field, when I came across a Curlew's nest with the full

complement of eggs. The nest was a rounded depression in the hollow between two furrows and was lined with a few pieces of straw. We finished sowing the field the following noon and the bird was troubled by us no more, except one day when the field was rolled. The last day I visited the nest was May 12th when there were only three eggs in the nest, and unchipped.

I think there can be no doubt that this pair of Curlews had previously nested in the field, and when they returned to their breeding-ground in late February and found the field ploughed, they decided to cling to the old site, rather than seek a fresh one. Only a few hundred yards away was an extensive rough pasture where several pairs of Curlews annually breed.

R. H. Brown.

#### FLOCKING OF CURLEWS IN SUMMER.

In June, the Curlew (Numerius a. arquata) is supposed to be engaged in family affairs on the moors, yet on June 22nd, 1922, I saw, on Walney Island, North Lancashire, a "stand" which must have numbered over 500. They were not on the sea-shore, but on a green surrounded by thick bracken. On July 15th, I saw even a larger "stand" in the same place. I counted them carefully a dozen times and arrived at the same number each time, viz. 900. Allowing for others hidden by a ridge and some among the bracken, there must have been over a thousand of them. Unlike the wildness of flocked Curlew in winter, these birds were comparatively tame.

H. W. Robinson.

# FAILURE OF THE MALAHIDE, CO. DUBLIN, TERN COLONY.

The complete failure of the breeding season of 1922, as far as the Tern colony at Malahide, co. Dublin was concerned, may be worth placing on record. The birds arrived as usual toward the end of May, and set about nesting in fine calm weather. As the month of June advanced, this fine weather gave place to dull cloudy days, characterised by lower temperatures and persistent westerly winds which often blew strongly. Mr. Hope Johnstone, who visited the nests towards the end of the month, found that fewer eggs were laid than usual, and that incubation was little advanced. On or about the 26th of June, and following a spring tide which inundated a considerable portion of the nesting ground, the Ternery was suddenly abandoned by the whole colony, and the now defenceless territory was quickly cleared of its eggs by the

ever vigilant Herring Gulls and rapacious Rooks. The Terns did not leave the locality, but they were not seen on the breeding ground again till a change to calm easterly weather supervened after a storm on the 8th of July.

On the 12th of July, a partial attempt to resume nesting was made, several females alighting and scratching nests. No eggs were however, laid. A renewed and determined attempt by the whole colony followed on the 22nd of July, and succeeding days, nests being scraped throughout the length and breadth of the breeding ground. But in no case to my knowledge was an egg laid. Apart from examinations of the ground made by me, a sure sign of this lay in the frequent absences for hours of the whole colony. If there had been eggs the nests would never have been left thus defenceless. For several days this playing at nesting continued. But westerly winds again resuming their sway, interest in these nesting antics waned, and the Terns retreated to the sandbanks at the mouth of the estuary, from whence at high tides they would break up into small parties and proceed to sea to fish. From now on individual Terns only occasionally revisited the breeding ground. Less and less frequent became these visits till on the 8th or oth of August the colony left the locality for good, or, let us hope, only till a more lucky breeding season next year.

The abnormal behaviour above described must be attributed to lack of nourishment consequent on a dearth of small fry and sand-eels. Under such conditions the Tern that managed to secure his hard-earned fish or sand-eel was lucky if he was able to enjoy his catch. Fiercely pursued by a screaming pack of his kind he would twist and turn, shoot high into the blue, anon dive swiftly to within a foot of the waves, and again throw himself aloft in his endeavours to shake off his hungry and persistent pursuers. These aerial evolutions were exciting to watch, and well displayed the splendid powers of flight this family possesses.

In calm weather it seemed as if weakened reproductive systems revived. Food was undoubtedly more easily procurable in these circumstances. The renewal of the breeding impulse was illustrated by the return to the breeding ground, the sight of which, acting as a further stimulus, led to preliminary nesting activities. The manufacture of eggs from an impoverished blood supply, however, was more than ill developed ovaries could accomplish.

The Malahide Colony consists mainly of Common Terns (Sterna hirundo) with a good sprinkling of Arctic Terns

(S. paradisæa). A few pairs of Little Terns (S. a. albifrons) breed on the flanks of the main colony's territory. In recent years some pairs of Roseate Terns (S. dougalli) are said to have nested, and I believe a pair or two of Sandwich Tern (S. s. sandvicensis) have been seen. A good opportunity to estimate the number of individuals composing the colony was afforded by this year's abnormal conditions. A rough computation put this at between 3,000 and 4,000.

H. A. F. MAGRATH.

### BLACK-HEADED GULLS' METHOD OF OBTAINING WORMS

On September 23rd, 1917, at Fareham Creek, Hants, I noticed some Black-headed Gulls (*Larus ridibundus*) adopting a rather novel method of obtaining worms. They were stamping or dancing on the soft ooze left uncovered at low tide. This had the effect of disturbing the worms which, coming to the surface to escape, became an easy prey.

C. W. COLTHRUP.

#### REVIEW.

Some Scottish Breeding Duck. Their Arrival and Dispersal. By Evelyn V. Baxter and Leonora Jeffrey Rintoul. Edinburgh, Oliver & Boyd. 5s. net.

This little book issued in a paper cover was worthy of elaboration. The authors have carefully gathered into its pages all the records they can find concerning the exact distribution of the Ducks which breed in Scotland, and the facts, so far as ascertainable, regarding the increase and spread of certain species. The probable or possible causes and direction of dispersal are discussed in some detail under each species, while in a final chapter we have a few pages of more general conclusions on this interesting subject. If the authors have not been able to arrive at any very definite conclusions they have in any case provided an invaluable basis of facts upon which this important subject may be further argued, and we heartily commend this little work to the student of dispersal.

The direction from which a recorded spreading arises is always an exceedingly difficult matter to trace, and how valuable it would have been to have had one or two records of ringed birds even if they served only as checks—a practical point mentioned by the authors, which

should be specially noted by readers of British Birds.

In comparing the status of each species with the accounts given in the *Practical Handbook* we note under Common Pochard that our phrase "breeds most parts" (Vol. 11., p. 317) is too sweeping, since the bird is more local than this implies and the suggested reason that it prefers for breeding those lochs which are fringed with reeds, etc., is probably correct. In Solway we find that it has been recorded as breeding only from Wigtownshire, in Argyll and Dee there are no records, in the north-west Highlands only one and in the Inner Hebrides

only on Tiree. The extension of the Eider as a breeding bird to Portpatrick in Wigtownshire (apparently from Colonsay) during the last two or three years is very interesting, and has not, we believe, been previously recorded. The authors give reasons for stating that the record of the Common Scoter breeding in Tiree should not be doubted. The ranges of the Goosander and Red-breasted Merganser given in the Practical Handbook should be extended at their south-eastern limits to the northern part of the Forth area, since both species breed in southwest Perthshire, and Mr. W. Evans has supplemented this point by showing (Scot. Nat., 1922, pp. 105–108) that several breeding records from this district have been overlooked by even such careful workers as the authors of the book under review.—H.F.W.

#### LETTERS.

# THE GREATER SPOTTED WOODPECKER IN ENGLISH POETRY.

To the Editors of British Birds.

Sirs,—All lovers of poetry about birds will be interested in Mr. Massingham's discovery of the lines from John Bartlett's A Booke of Avres (1606), recorded in British Birds, Vol. XV., page 192. But is it possible to accept his suggestion that the "hic-quail" of the poem is "the first—and perhaps the only-reference to the Greater Spotted Woodpecker (Dryobates major) in our poetry"? This, I fear, can only be regarded, at best, as "non-proven." The verses which he quotes:—

"The little daw, ka-ka, he cried;
The hic-quail he beside
Tickled his part in parti-coloured coat,
The jay did blow his hautboy gallantly."

unfortunately apply at least equally well to the Green Woodpecker (Picus viridis). Mr. Massingham grounds his belief mainly on the fact that the hic-quail is called "parti-coloured": but that is an epithet that no Elizabethan or Jacobean poet would have hesitated to use of the Green Woodpecker. The latter was a well-known bird at that time, and there are numerous forms and spellings of its popular names. Florio in his New World of Words (1611) gives Hickwall for Woodpecker, while other old variations besides those mentioned by Mr. Massingham are hechewal, hickwaw, highwale, hewall, hewhole, etc. In 1544 Turner, describing the only two British Woodpeckers known to him, calls the Greater Spotted the "Specht" or "Wodspecht," but the Green he terms "Hewhole." The various series of names (perhaps mostly originally based on the familiar "call" of the Green Woodpecker) were, however, doubtless used indiscriminately; and in 1678 Willughby and Ray apportion these popular English names among all three species, for in The Ornithology of that year the Green is called High-hoe or Hewhole, the Greater Spotted Witwall and the Lesser Spotted Hickwall—a distribution which seems to be quite arbitrary.

Lastly, Mr. Massingham's remark that the case for his identification of the "hic-quail" of the poem with the Greater Spotted Woodpecker is strengthened because "its double chirp follows upon the 'ka-ka' of the daw" can scarcely be called helpful; for it might just as well be contended that since the bird" in parti-coloured coat "immediately

precedes the hautboy-blowing Jay, he is intended to be a particularly loud performer—which at once suggests the familiar and vociferous Green Woodpecker, rather than the little-known and decidedly taciturn Greater Spotted.

I may add that I also have for years past searched sixteenth and seventeenth century poetry without being able to discover any passage which might be taken to refer to either of our smaller Woodpeckers. Hampstead, Jan. 20th, 1922. Bertram Lloyd.

#### HABITS OF THE RED-THROATED DIVER.

To the Editors of British Birds.

Sirs.—Having read the extremely interesting account of the remarkable behaviour of a Red-throated Diver in Spitsbergen, published in the July number of British Birds (pp. 34–46), it occurs to me that the behaviour of an individual of the same species in Orkney might be worth recording. In July, 1912, when in the Island of Rousay, with Mr. Ogilvie-Grant, we saw one sitting on her nest on the bank of a loch some 300 yards below us, the ground falling away steeply towards the loch. We walked straight down to her, but she never moved and we both stood within not more than four feet of her sitting on her eggs. The nest was within two yards of the water, and the bank steep and about one foot high. After we had watched her for some minutes the bird suddenly sprang from the nest and flew straight away over the loch and out of sight. She sprang from the eggs quite as easily as a Wild Duck would have done.

We then went back to the spot from which we had first seen her, to watch her come back. She came in about a quarter of an hour, settling on the further side of the loch. After washing and pluming herself for some time, she swam to the side by the nest, jumped on to the bank and ran on to the eggs. She carried her body almost upright, but with head and neck pointing down, the point of her beak being probably not more than four inches from the ground, she passed round her nest, and settled down on the eggs with her head towards the loch. The young of this species must be much more active on land than the adults, as they apparently find no great difficulty in walking from one loch to another long before they can fly. Indeed, unless they were able to do so they would be almost helpless on the diminutive pools by which they are hatched, and which contain no food whatever. Hever, Sept. 20th, 1922. E. G. B. Meade-Waldo.

# BRITISHBIRDS

WITH WHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST."

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# THE GREAT AND ARCTIC SKUAS IN THE SHETLANDS.

ву

#### FRANCES PITT.

#### PART I. THE GREAT SKUA.

In this paper I do not propose to deal fully with the Great and Arctic Skuas in Shetland, but merely to give a summary of notes made on both species during a recent visit to the islands, which notes were in many cases written while actually watching the birds. The two species so commonly occur together that the results may be given in one paper, but it will be more convenient to divide it into two parts, taking the Great Skua first.

The Great Skua (Stercorarius s, skua) is now fairly common as a breeding species in the Shetlands—thanks to the sanctuaries established by the Royal Society for the Protection of Birds—and has several strong colonies, the most noted of which is that at Hermaness, on Unst, but I will leave this to be dealt with later, and begin with Noss.

This island, which lies off Bressay, a bigger island that forms one side of Lerwick harbour, is marvellous in the number and variety of its bird life. The lower, moorland part is occupied by a large colony of Arctic Skuas (S. parasiticus), the Great Skuas, or, as the natives call them, the "Bonxics," keeping to the higher, less heathery, and more grassy ground. Miss Bost and I found that this held good everywhere; the Arctic Skuas keep to the lower ground and the Great Skuas to the higher. On Noss there were eight or nine pairs of breeding birds during this last season (1922), which the watcher said was an increase, but the species has multiplied steadily since it began to breed there a few years since. It is probable that the first arrivals were overflows from the large Hermaness colony. But now they are firmly established.

When we paid our first visit on June 20th, we were soon greeted by the guttural cries of the "Bonxies," though these were mingled with the clamour of the "Scouties," i.e., Arctic Skuas, which raised a perfect babel of noise. As we got near their nests the "Bonxies" got more and more frantic swooping down as if to attack; indeed one did hit us. apparently delivering the blow with its feet. They are most impressive birds on the wing, giving an impression of great power and strength, and even on the ground, for they alighted as soon as we retreated a little, they are handsome and

imposing. Though not showing the marked dimorphic types met with in the smaller Skua, they showed a good deal of variation, and I noted some that were lighter than others, and some that had a yellowish cast in the grey of their plumage.

We found several nests—mere "scrapes" in the short herbage—with a few bents arranged round the hollow, which, with one exception, contained eggs. In the one instance the young had hatched, but we found them within a few feet of the nest, big, awkward chicks, clad in grey-green down with blue-grey feet and legs, similarly coloured bills, and waterylooking grev eyes. From subsequent experience I infer that though the young leave the nest within a short time of hatching yet they do not wander far, but stop near it, even, possibly, returning to it at night, for it retains a used look for some time, and its neighbourhood is littered with fish bones and other remnants of food. It was while examining these chicks that one of the old birds made an attack, but those whose eggs were not yet hatched were nearly as frantic. especially a pair which, instead of the customary couple of eggs had only one, and this, as it happened, was no good, for it had a small hole in the side. However, the owners made quite as much fuss about it as if it contained a chick.

It was close to this pair that we put up a tent, and as might be expected with such a bold species, they gave little or no trouble from a photographic point of view, except that they were almost too tame! When they had got accustomed to the tent they ceased to pay any attention to noises inside it. Having made some exposures on the bird on her nest 1 tried to get her to leave it, so as to get other attitudes when she returned, but go she would not. In vain did I shout, poke a stick through a hole in the canvas, and make every noise I could think of. The Skua only screamed back, at which her mate came up and screamed too. By the way, I am only using the words "he" and "she" as a matter of convenience. having no idea if the bird that covered the egg was really the female. She left the nest at last, for 1 thoroughly startled her by raising the front of the tent and exhibiting to her gaze a pair of feet clad in hob-nailed boots; he, however, made a plunge as if to attack them, and I had to withdraw them hurriedly. Skua No. I was on the nest again in a few seconds, but not before she had afforded me the opportunity to photograph some of the attitudes I wanted. When she returned to the nest she was invariably accompanied by her mate, who not only saw her on to the egg, but spent a good deal of time watching from a slight rise in the ground near by.

Each pair of Great Skuas seemed to have its own little area, and the nests were some little distance apart. It was very amusing watching them from the hide, for they waddled about and made guttural quacking noises so that they reminded one of big ducks. On the ground their utterances are chiefly of the quacking description, but in the air they give a loud screaming cry.



GREAT SKUA ALIGHTING. (Photographed by F. Pitt.)

The next place in Shetland where we met with the Great Skua was on a moor in the north of Mainland, but I do not give the locality more precisely as the district is a difficult one to protect. The colony is a small one, numbering but two or three pairs, but it is not a new one, as the species has nested there for many years. Arctic Skuas also breed there, and in considerable numbers, but again the two species keep apart. The Great Skuas occupy somewhat higher ground, but their respective nesting territories do not differ so sharply

in character as they do on Noss and at Hermaness. When we visited these birds on July 2nd we found a pair of fairly big, but still down-clad, chicks. They were near the nest, which looked well used, and the ground was littered with fish bones, droppings, and feathers of the old birds. Many of the fish bones appeared larger than one would have expected the Skuas to obtain by robbing gulls of their food, and J may



GREAT SKUA SITTING. (Photographed by F. Pitt.)

add that the R. S. P. B. watcher was convinced that they must do some fishing for themselves. He also gave both species a very bad character for robbing the nests of gulls etc., especially bewailing their ravages among the eggs of the Red-throated Divers (*Colymbus stellatus*). There are many Divers' nests on the small lochs around, and the Skuas take heavy toll. When we picked up one of the chicks mentioned

above, it immediately vomited a half-digested mess of fish fragments. It was noticeable how well the grey-green down of these young birds harmonised with the stunted heather, sphagnum and harsh grass that constitute the vegetation of these wind-swept moorlands.

It was on Hermaness, the most northerly point, not only of the island of Unst, but also of Great Britain, that we really saw the Great Skua at home, for this wonderful breeding colony numbers many hundreds of birds. Hermaness consists of a long promontory, that slopes gradually upwards to a



A GREAT SKUA CHICK NEARLY FULL GROWN.

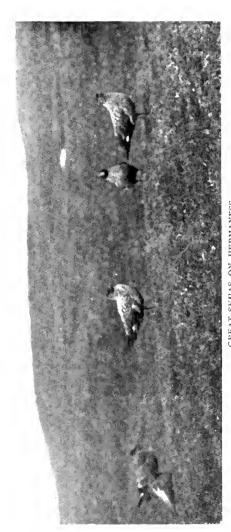
(Photographed by F. Pitt.)

height of 657 feet. The lower ground consists of a damp heather-covered moor, and is the territory of a great number of Arctic Skuas, while the high grassy knoll, that drops steeply to the rocky cliffs which abut on the North Sea, is the stronghold of the Great Skuas. On the south side of the summit stands the hut of Edwardson, the watcher. Here he lives throughout the breeding season, having kept guard over the birds for thirty-three years. He told us that when he came there were only a few pairs of Great Skuas, but this spring he found over eighty nests, after which he lost count.

When he led us over the top a wonderful sight was revealed. The great birds rose literally in hundreds, and swooped to and fro across the landscape, until the air was alive with But the disturbance did not last long: they were far too bold, being indeed singularly fearless, to be much upset, and soon dropped down to alight on some one of the many little grassy mounds. Here they stood in little parties and watched us while we watched them. They quacked to each other in guttural voices, and now and again one would rise with a scream. Whether these parties were non-breeding birds, or those whose responsibilities were now light, I could not determine, but I think the latter, for we found some almost full grown young birds, such as that shown in the accompanying photograph. We also found some quite small chicks which shows that there is considerable variation in the date when laying begins. Apparently, and barring accidents, only one clutch is laid. As usual the old birds were much annoyed when we interfered with the young, and stooped at us repeatedly, though without actually touching But the majority still stood about on the hillocks taking little interest in our proceedings. Certain mounds seemed to be favourite stands, for they were littered with feathers. castings, fish bones, and droppings. A tiny pool of fresh water was evidently particularly attractive to them, and there was ample evidence of the use they put it to as a bathing place.

We remained for some time watching the Skuas, either standing about, wheeling overhead, or flying in the distance above that white speck on a grey rock which was Muckle Flugga lighthouse. But time was limited and we had to leave what is now one of the strongest colonies of this fine bird in Shetland, from all accounts surpassing that on Foula, which we were unable to visit.

The Great Skua's methods of hunting and harrying gulls is well known, but an account of a pair I watched at work may be worth giving. I was watching gulls following a boat, when a pair of "Bonxies" appeared high above them. One of these dropped down, making for a certain Gull, which gave a scream, separated from its fellows, and began to climb up into the air. The two Skuas immediately began to circle up, too, adopting the same tactics employed by a Merlin with a "ringing" Lark, *i.e.*, they flew up an invisible spiral, but often in the opposite direction to the quarry, so that from below they seemed to be turning their backs on it. I distinctly saw one "Bonxie" looking over its shoulder so as not



GREAT SKUAS ON HERMANESS. (Photographed by F. Pitt.)

to lose sight of the Gull. They thus climbed to a considerable height, for hunters and hunted appeared quite small, when suddenly the Gull gave up and dived seawards, disgorging its food as it did so. Down dashed a Skua and caught the falling fish in mid-air, after which it dropped gently to the water, leaving its mate to continue hunting. The latter then had a fruitless chase after a Gull, which apparently had nothing to disgorge.

The Great Skuas harry the Herring and Lesser Black-backed Gulls, whereas the Arctic Skuas keep to smaller quarry. But both achieve their object by the same means, i.e., by the exercise of relentless persistence. No stoat upon the trail of a rabbit is more relentless than a Skua in the wake

of a Gull.

(To be continued.)

# STRAY NOTES ON CERTAIN DORSETSHIRE BIRDS, MADE PRINCIPALLY IN THE NEIGHBOURHOOD OF WEYMOUTH.

BY

MAJOR W. R. THOMPSON, M.B.O.U.

In the middle of the last century my grandfather, William Thompson of Lytchet near Poole and afterwards of Weymouth, a keen naturalist and careful observer, compiled a Fauna of Dorsetshire. This was never published because, unfortunately, no one could read his writing, and the manuscript has since been dissipated, some of his observations being incorporated in Pleydell's Birds of Dorset. Recently, however, whilst overhauling some of his papers I came across several natural history notes which do not appear to have been previously published, and from those dealing with birds I have extracted most of the following information, the remainder being made up of extracts from the Shooting Diaries kept by my father, James Yarrell Thompson, and by my uncle, Stanley Thompson, together with observations made at various times by my brother, Major R. N. Thompson, and myself.

Where I have made use of other sources of information,

the fact has been acknowledged in the text.

Chough (Pyrrhocorax pyrrhocorax).—The Chough was apparently at one time quite a common bird on the Dorsetshire coast, but has now entirely disappeared, and the only ones of which I myself have any record and probably the last pair to breed in Dorset, met with a sad fate. This pair nested in the cliffs near Lulworth Cove and, so far as I know, usually brought off their broods in safety until the year 1890 or thereabouts—when an ignorant collector went off in a small boat and shot both birds at the nesting site. He then attempted to get the eggs, but this he was unable to do as the hole, in which the nest was, ran too far into the cliff, was small in diameter, and difficult to approach.

Rose-coloured Pastor (Pastor roscus).—The following is from one of my grandfather's notes: "August 25th, 1873. The Rev. George Port told me that when he was doing duty in Portland in the years 1828 to 1830, he was sitting in his house when he heard what he thought was the cry of the Corn-Crake in a small field of about a quarter of an acre. He went with his gun to kill it, when a bird got up which he shot. The bird proved to be the Rose-coloured Pastor. He sent it to the Rev. Mr. Hodmot"—I think this is the

name, but the writing is difficult to read—" of Sherborne, who was a collector of birds. The newspapers of the day

published the occurrence.'

Snow-Bunting (Plectrophenax nivalis).—Occasionally met with in winter during hard weather, but, like the Brambling, usually leaves when the weather moderates. I have often seen it and have shot one or two, but the following specific instances of its occurrence from my grandfather's notes may be worth giving: "Five specimens brought me Dec. 28th, 1869"—these would appear to be the birds mentioned by Pleydell. "One on a stone fence on Ridgeway Hill, March 21st, 1870. Two on Lodmoor, March 21st, 1871, one on Nov. 13th, 1875, and one on Nov. 16th, 1877. One shot by Stanley, Oct. 24th, 1874, and one by James, Dec. 1st, 1874. Four on Chesil Beach, Oct. 28th, 1874," where also my father shot one on Nov. 6th, 1894.

Shore-Lark (Eremophila alpestris flava).—An occasional visitor during the winter months. Besides the two mentioned by Pleydell I find the following instance of its occurrence amongst my grandfather's notes: "Three shot in Feb., 1870." I shot one near Sandsfoot Castle in the autumn of the year

1895, and took its skin, which I believe I still possess.

PIED FLYCATCHER (Muscicapa h. hypoleuca).—Occasionally to be met with during the spring migration. A male was shot at Bellfield, Weymouth, on May 6th, 1874, by Captain Pretor.

BLACK REDSTART (*Phænicurus ochrurus gibraltariensis*).—A few usually to be met with during the winter months in suitable localities. I observed one on several occasions near Wyke, during the month of February, 1922.

Kestrel (Falcot, tinnunculus).—A common resident. My grandfather records a cream-coloured variety of this bird

shot near Weymouth on March 24th, 1873.

White-tailed Eagle (Haliactus albicilla).—My grandfather records it as follows: "A single specimen was shot in the year 1844 at Fleet, near Weymouth, by a man named Brewer, and was purchased from him by Richard Rolls, an animal preserver residing at Weymouth, and from him passed into the possession of Mr. Horner of Mells Park, Somerset." It this is the bird mentioned by Pleydell, there appears to be some discrepancy in regard to dates.

HEN-HARRIER (Circus cyancus).—Occasionally to be met with during the spring and autumn migrations. My grand-father notes its occurrence near Weymouth as follows: "May 6th, 1873. Russell of Wyke brought me a Harrier

and a Partridge chick he had taken from it, apparently not out of the shell. Chubb (the local taxidermist) bought the bird; it is a female. I find it to be the female of the Hen Harrier (Circus evaneus) of Gould (the Ringtail)."

OSPREY (Pandion h. haliaetus).—An occasional visitor in spring and autumn. One was shot on the Weymouth Backwater by a man named Gillingham in 1875, and another on Fleet Waters by a man named Russell in September, 1897.

The latter is in the collection of Mr. Wallis.

Sourceo Heron (Ardeola r. ralloides). - A rare visitor. Besides the specimen killed at Wyke on July 1st, 1867, as mentioned by Pleydell, I can find only the following notes of its occurrence. One was shot on Lodmoor by a local gunner named Brewer between the years 1850 and 1865. I am uncertain of the date, but my grandfather had it in his collection. One was shot under Whitenose by C. Andrews in the autumn of 1870.

Flamingo (Phænicopterus ruber antiquorum).—An adult male was killed at Langton Herring by Mr. Carter of that place on August 26th, 1916. It passed into the hands of Mr. Wallis, who presented it to the British Museum. This

appears to be the only record for Dorsetshire.

Bewick's Swax (Cygnus b. bewickii).—My grandfather notes its occurrence as follows: "One shot on the Fleet Waters on Feb. 24th, 1871 and sold to me for 10s. length 3 ft. 11 in. Weight about 16 lbs. Sent it to Burton of Wardour Street to preserve, and notified Mr. Gould." This is no doubt the bird mentioned by Pleydell as shot at Chickerel, on Feb. 20th, 1871.

GARGANEY (Anas querquedula).—Not uncommon during migration, usually appearing in the month of March. It occasionally occurs in winter. One was shot on Lodmoor

on December 10th, 1874—a female.

Tufted Duck (Nyroca fuligula).—  $\Lambda$  few are to be met with nearly every winter, but they are not numerous, and usually only one or two are seen together. Local name "Buffle-headed Curre." Pleydell says it is more numerous than the Scaup, but this is certainly not now the case.

SURF-Scoter (Oidemia perspicillata).—My uncle shot a female in Weymouth Bay on October 20th, 1880. I do not think there can be very much doubt about the identification of this bird. The note occurs in my uncle's copy of Jenvis, where he always kept them, and against the paragraph describing the Surf-Scoter. He was specially familiar with the Ducks, as he had a sailing vacht from which he was constantly shooting. Moreover, he had in his possession

at the time Gould's Birds of Great Britain.

FULMAR PETREL (Fulmarus glacialis).—On November 5th. 1808. I picked up one of these birds on the Chesil Beach. It was still stiff and could only have been dead a few hours. Its breast had been eaten away and one eye was gone, probably the work of Rayens or Gulls. Its plumage was in good order otherwise, and it had not been in the water. It was doubtless driven ashore by the wind or had met with some accident. I have the head in my collection.

BLACK-NECKED GREBE (Podiceps n. nigricollis).—This is a scarce bird, and I have only come across it on two occasions. I killed one many years ago in Weymouth Bay, but have mislaid the date, and on December 8th, 1899, my brother killed one on the Backwater, which I have in my collection.

GREAT NORTHERN DIVER (Colymbus immer).—A regular winter visitor in small numbers; nearly always immature birds and adults are rarely seen. Local name "Great Rug"

—pronounced in the Dorset dialect, of course.

CURLEW-SANDPIPER (Erolia ferruginea).—A few usually occur as birds of passage in the autumn, but not usually in the spring. I have killed several at various times, and have one in my collection which I shot on Lodmoor in the autumn of 1895. The following two instances of its occurrence prove it to be also an occasional winter visitor.

(1) A note by my grandfather, which I give in full, as the context has some bearing on the case. "Feb. 19th, 1853. The remains of the snow of the 12th inst. on the ground. Walked up the Backwater (Weymouth). . . . Sanderlings and Dunlins feeding on edge of sand and in the water. Ringed Plover feeding on edge of bank. Three Curlew Sandpipers feeding and paddling in the water. Ringed Ployer runs with head slightly lowered for three or four feet, stops suddenly, makes a dart of a few inches and seizes its food. The Dunlin and Sanderling walk rather leisurely with back perpendicular, and probe constantly all round them in search of their prey. The Pigmy Curlew seeks for its food in the same manner as the Dunlin, but is not so quick in its movements."

(2) My uncle shot one on Lodmoor on February 1st, 1882. LITTLE STINT (E. m. minuta).—Occasionally occurs as a bird of passage. My father shot one on Portland Mere on

September 8th, 1892. I have it in my collection.

TEMMINCK'S STINT (E. temminckii).—Besides the specimen mentioned by Pleydell as killed by my father on September 2nd, 1872, my uncle killed one on October 24th, 1870. Both birds were killed on Lodmoor.

Greenshank (*Tringa nebularia*).—Of a specimen shot near Weymouth by Brewer on January 18th, 1878, my grandfather remarks that "it was running after winged insects on which it was feeding."

Avocet (*Recurvirostra avosetta*) — Besides the specimen mentioned by Pleydell as shot by my grandfather on Lodmoor in November, 1867—a very late date for this bird—one was shot on Lodmoor by Brewer in the autumn of 1892.

BLACK-TAILED GODWIT (Limosa limosa).—One was shot by Brewer on Lodmoor on October 2nd, 1877. My grandfather had it in his collection.

BLACK TERN (Hydrochelidon n. nigra).—A few are to be met with most years during migration, and usually in autumn. I have often observed it and have shot two—one on Lodmoor and the other in Portland Roads.

Sabine's Gull (Xema sabini).—In the autumn of 1896 I shot one of these birds on Weymouth Backwater. There were two of them and they were feeding with the Terns. I have the skin in my collection. Mr. Wallis tells me that he has since seen several.

LITTLE GULL (Larus minutus).—Not uncommon in winter in small numbers. I have shot them on several occasions and have one mounted. It is usually seen during or after heavy gales, when it comes in from the Channel, for shelter. I think the statement in the B.O.U. List of British Birds, that it is an occasional visitor only is scarcely correct. It appears to me to be a fairly common winter visitor, at any rate to the Dorsetshire coast, but prefers the open sea and is thus not often met with.

COMMON GULL (*L. canus*).—This bird is rapidly decreasing in numbers. It was at one time quite common in winter, but is now seldom seen at this season, and only a few are to be met with in spring and autumn, and in summer. I saw five together on a sandbank in the Fleet Waters on June 17th, 1920.

GLAUCOUS GULL (L. hyperboreus).—I have two records of this bird for Dorsetshire. On January 3rd, 1870, one was shot on Lodmoor by Brewer; this was an adult, and is doubtless the bird mentioned by Pleydell. In January, 1897, I shot an immature specimen off the mouth of Weymouth Harbour, and have it in my collection.

ICELAND GULL (L. lcucopterus).—One of these birds was shot on February 6th, 1893, in Poole Harbour by Mr. G. R.

Peck of Muston Manor, Poole, who is now residing in Cornwall. He has it in his collection, and has kindly allowed me to mention the occurrence, which is the only one I can find for Dorsetshire

IVORY-GULL (Pagophila churnea).—My grandfather, writing on February 19th, 1853, says: "Some few days since a specimen of Larus churneus, the Ivory Gull, was shot on the beach a mile from Weymouth. It unfortunately fell in the sea, and no boat being available, was lost. In the year 1843. a specimen was obtained very near the same spot." The latter occurrence is mentioned by Pleydell.

Spotted Crake (Porzana porzana).—I shot one of these birds on Lodmoor on October 3rd, 1910. It is now in the British Museum. One was also shot by my uncle on Lodmoor on September 28th, 1872.



#### THE BIRDS OF LUNDY.

I AM much interested in Mr. Lewis R. W. Loyd's article (antea, p. 148) on the "Birds of Lundy," because I have visited the island twice, beetle-hunting. I was there three days in August, 1905, and a fortnight, from April 12th, in 1906, and had the satisfaction of adding two species of beetles to the British List.

I am able to add three birds to Mr. Loyd's list.

Ring-Ouzel (Turdus t. torquatus).—In 1905.

Hoopoe (*Upupa e. epops*).—In 1906 I watched one for a long time feeding at an ants' nest.

Common Snipe (Gallinago g. gallinago).—Two around one of the ponds on the top of the Island in 1906.

I also saw and heard a Cirl Bunting (Emberiza cirlus) on

several occasions in 1906.

On my way out there from Barnstaple on August 22nd, 1905, I saw an Arctic Tern (Sterna paradisæa), an Arctic Skua (Sterocorarius parasiticus) and a Storm-Petrel (Hydrobates pelagicus).

NORMAN H. JOY.

## CIRL BUNTING'S ALTERNATIVE SONG.

Ox June 21st, 1922, I heard a Cirl Bunting (Emberiza cirlus) at Malvern Wells, using an alternative to the usual song, which I have never seen noted in any book. It twice uttered the usual song (which is written down as a Yellow Bunting's without the "cheese"), but repeatedly sang this alternative, which I put down at the time as "quite like a bit of the Tree-Pipit's song, though not up to its standard of excellency; 'tistei' to begin with, the remainder, louder and more distinct, 'seear, seear, seear,' or as an alternative four seear's". It reminded one distinctly of the beautiful "seear, seear, seear," that the Tree-Pipit sings coming down the scale and coming down through the air, though not as beautiful or ringing, but distinct enough to make me think at first that it was a Tree-Pipit singing or at least uttering part of its song.

MARTIN S. CURTLER.

## WOOD-LARK BREEDING IN RADNORSHIRE.

With reference to Mr. O. R. Owen's record (Vol. XV., p. 154), of the Wood-Lark (*Lullula a. arborea*) breeding in Radnor-

shire, I knew it there as a nesting species in several districts, in one or two of which it was, locally, quite common, over twenty years ago.

JOHN WALPOLE-BOND.

#### GREY WAGTAIL BREEDING IN SURREY.

Previous to 1920 I had never seen the Grey Wagtail (Motacilla c. cinerea) in summer in my own corner of S.W. Surrey. In 1922, after an absence of two years abroad, I was surprised to find Grey Wagtails at no less than four points, close to bridges, in eight miles of the upper Wey. At two of these places complete broads were on the wing. R. E. MOREAU.

[For previous records see Vols. V., p. 24, VI., pp. 154, 218, XIII., p. 228.- Eds.]

# NUMBER OF FEATHERS IN NESTS OF LONG-TAILED TIT.

During the nesting season of 1922 I obtained two perfectly normal nests of the Long-tailed Tit (\*Egithalos caudatus roscus\*) with the object of ascertaining the number of feathers in each. A very careful count was made, with the result that 802 were found in the first nest and 1,518 in the second. It is surprising to see such a wide difference in the totals and to know that the lining of a single nest contained more than 1,500 feathers.

D. W. Musselwhite.

[Macgillivray, *Brit. Birds*, II., p. 458, gives 2,379 as the contents of one nest, and Mr. R. H. Read records, *Bull. B.O.C.*, XIX., p. 22, 952 feathers in a nest examined by him.—Eds.]

## LATE NESTING OF THE MISTLE-THRUSH.

Mr. Richardson, of East Bergholt, Suffolk, recently showed me a clutch of four eggs of the Mistle-Thrush (*Turdus viscivorus*) taken, the day after the last egg had been laid, on November 23rd, 1920, in Raydon Wood, Suffolk.

WALTER B. NICHOLS.

## THE SONG-PERIOD OF THE MISTLE-THRUSH.

I should like to record that on August 8th, 10th, and 15th, 1922, I listened to the characteristic strains of the Mistle-Thrush (*Turdus v. viscivorus*) and on two of the occasions saw the birds. I have heard the song now and again in November and December, while, of course, from January until June is well on its way it is more or less of a commonplace, given suitable conditions, despite statements to the contrary. I

have heard the song from time to time in September as well as in October and watched the performers; but not until July 3rd, 1918, did I get my solitary record for that month. Thus, I have heard the song of this delightful species every month in the year.

Henry S. Davenport.

#### EARLY FIELDFARES IN CUMBERLAND.

WITH reference to Mr. W. Shore-Baily's note (antea, p. 162), on the early arrival of the Fieldfare (Turdus pilaris), I may say that I saw the first flock in Cumberland this year (1922) on September 7th.

My earliest record is in 1909, when I saw a flock near Threlkeld, Cumberland, on September 5th.

E. U. SAVAGE.

## ERYTHRISTIC EGGS OF THE BLACKBIRD.

I was shown recently by the finder, Mr. Richardson, of East Bergholt, Suffolk, a clutch of four eggs of the Blackbird (*T.m. merula*) the ground-colour of which was a warm, pinkish cream; the markings on three bold and of a bright red; on the fourth, which was smaller and rounder than the others, the markings were sparse and very small, but of the same bright colour. They had been taken in Suffolk in 1922.

WALTER B. NICHOLS.

[This very beautiful type, though rare, is well known to many collectors and many more instances could be specified. See *Brit. Birds*, VII., p. 254.—F.C.R.J.]

# CUCKOO RETURNING TO SAME SUMMER QUARTERS FOR FOUR YEARS.

With reference to the notes on this subject by Major B. Van de Weyer and the Rev. F. C. R. Jourdain (antea, pp. 107-8), a bird has visited Formby, Lancashire, for the last three or four years, that is quite unmistakable by its call. This, a rusty "cook-clook" sounds as though the bird had a bad cold. The call too does not change as the season advances, but remains the same until the end. Thos. L. S. Dooly.

## ABUNDANCE OF LITTLE OWL IN NORFOLK.

I no not propose to discuss the merits or demerits of the Little Owl (Athene noctua mira), but I think that the following figures, which show its adaptability to our climate and conditions, should be placed on record. Within ten miles of

Norwich, on two estates which together comprise but 5,000 acres. Little Owls have been killed as follows:—

$I_{11}$	1919					 10
	1920					 28
* 1	1921					71
	1022	(mp	to 5th	Octob	er)	TO

These figures speak for themselves, and I offer no comment upon them.

HUGH S. GLADSTONE.

MIGRATION OF KESTRELS ON HAMPSHIRE COAST. I spent the three days September oth-11th, 1922, near Lymington, Hants, where the sea, leaking through the embankments, is forming brackish pools on the edge of a small area of rough common. Strong N.E. winds prevailed throughout, especially on the 10th and 11th. Passage movements, e.g., of Whinchats, Redstarts, Wheatears, Yellow Wagtails, and also evidently of Pied Wagtails, were in full swing, while continual processions of Swallows, House- and Sand-Martins were moving east parallel to the line of the coast. Kestrels (Falco t. tinnunculus) were common, one, two or three were almost always to be seen hovering over the common. On the morning of the 11th a Peregrine (F, p). peregrinus), which had previously made an unsuccessful 'stoop" at a mixed party of small Waders feeding in one of the brackish pools, made another appearance overhead. In following it with my binoculars I found one Kestrel after another come into the field of view high up and a long distance away. In all I counted fourteen moving steadily eastwards. They were clearly travelling in company, and their method of progression was exactly similar to that which I have observed among the hordes of Lesser Kestrels (F. n. naumanni) migrating northwards through Egypt in spring against the prevailing N.W. or northerly winds. That is, the birds had attained a considerable height, and, with wings thrown forward and tails expanded to their fullest extent, soared in a series of curves and with hardly a single wing-flap, steadily on their way against the wind. R. E. Moreau.

#### COMMON BUZZARĐ IN SURREY.

On October 1st, 1922, whilst in the neighbourhood of Tadworth my wife called my attention to a large bird soaring immediately overhead, and on looking up. I was surprised to see a Common Buzzard (Butco b. butco). It was fairly low down when first noticed, and we were able to make a careful examination through binoculars before it rose to a great height, and finally passed out of view.

Howard Bentham.

#### TUFTED DUCK NESTING IN SURREY.

Ox July 30th, 1922, on a pond in East Surrey, I noticed a female Tufted Duck (*Nyroca fuligula*) accompanied by a brood of ducklings, apparently about a week old.

It is only during the past two or three years that Tufted Ducks have been regular winter visitors to the district, in which they have apparently this year nested for the first time. The species has, however, been numerous and of regular appearance in many other parts of Surrey for a much longer period, and has been recorded as breeding on one occasion in the western half of the county (B.B., Vol. VI., p. 158).

HOWARD BENTHAM.

## TURTLE-DOVES IN WIGTOWNSHIRE IN SUMMER.

Ox May 29th, 1922, a Turtle-Dove (Streptopelia t. turtur) was found dead on the moor near Leswalt, Stranraer, having been killed by a Hawk. Five or six were seen in Locknaw Woods on May 31st, and two pairs flying about between Locknaw estate and the Earl of Stair's property in June. My keeper has a note that he saw old birds on June 20th, 24th, and on July 2nd. He did not find a nest, but it would not have been on my shoot, where the old rough woods are thick, but he has no doubt that they bred. One keeper has been on the shoot for twenty years and the other for ten, and neither had ever seen Turtle-Doves there before.

M. PORTAL.

## OYSTERCATCHERS IN SHROPSHIRE.

On October 22nd, 1922, a pair of Oystercatchers (Hæmatopus o. ostralegus) paid a short visit to Betton Pool, three miles S.E. of Shrewsbury. Although plentiful on the Welsh coast this species rarely wanders inland so far as Shropshire, but it has occurred at least twice before on this same sheet of water, which seems to have some special attraction for sea and shore birds, perhaps because it has open grassy banks and is not hidden by trees as most of the other pools about here are. Cormorants, Gulls and Terns of several species, as well as many of the Ducks, are frequent visitors, and often remain for days together. Of the Waders the more noteworthy are the Greenshank and Green Sandpiper. A pair of Great Crested Grebe reared a brood there this year, and have nested there several times previously.

H. E. Forrest.

# CURLEW-SANDPIPER AND BLACK-TAILED GODWIT IN SOMERSET.

DURING the first week of September, 1922, three Curlew-Sandpipers (*Erolia ferruginea*), two of which were shot, and

a Black-tailed Godwit (*Limosa limosa*) were seen on the mud-flats at Portishead, Somerset. It is probable that the vast mud-flats of the Severn Estuary are the haunt of many birds supposed to be rare in this district, owing to difficulty of approach and identification, and to lack of observers.

L. HARRISON MATHEWS,

#### GREEN SANDPIPER IN ANGLESEY.

With reference to Capt. Boyd's note of a Green Sandpiper (*Tringa ochropus*) in Anglesey (*antea*, p. 112), I should like to record that I saw one several times on August 5th, 1921, on Llyn-y-parc between Beaumaris and Llandegfan.

MARTIN S. CURTLER.

# AVOCET IN KENT AND BLACK GUILLEMOT IN ESSEX.

Mr. F. Cooper recently permitted me to inspect his collection of birds, taken by himself, mainly on the Thames Estuary. Among these birds are two, which, although taken a number

of years ago, seem worth recording.

An immature Avocet (Recurvirostra avosetta) obtained at Yantlet, Kent, in August 1901. Dr. N. F. Ticehurst says in A History of the Birds of Kent (p. 440): "Since its extinction as a summer resident the Avocet has occurred at irregular intervals in spring and autumn in all its old haunts in Kent, though very rarely in the Thames district." A Black Guillemot (Uria g. grylle) obtained off Southend Pier in February, 1912. This is a fine specimen in summer plumage. Mr. Miller Christy in The Birds of Essex states that he has only one record of this species for Essex, a female shot at Mersea in December, 1869, and he adds nothing further in the Victoria County History of Essex. I can find no later records of the Black Guillemot occurring in this county, so Mr. Cooper's bird constitutes the second occurrence for Essex and may be the only known specimen obtained in the county.

WILLIAM E. GLEGG.

# BLACK-HEADED GULLS' METHOD OF OBTAINING WORMS.

The method used by the Black-headed Gull (Larus ridibundus) for obtaining worms described by Mr. C. W. Colthrup (antea p. 170) is surely too well known to field naturalists to warrant a note in "British Birds"! The habit may be observed wherever these birds congregate to feed on wet sand uncovered by the ebb-tide.

E. U. Savage.

SOME HABITS OF THE GREAT AND ARCTIC SKUAS.

THE following observations were made while cruising off the south and west coasts of Iceland during July, 1922.

The Great Skua (Stercorarius s. skua) was very common and quite the characteristic bird of these coasts, whilst the Arctic Škua (S. parasiticus) was not so plentiful, though on several occasions I counted more than twenty individuals round the ship at one time. Both dark and light colour phases, as well as intermediate forms, of the latter were present, the dark phase being slightly more numerous.

The Great Skuas were observed to attack indiscriminately all other species of birds, except the Fulmars (Fulmarus glacialis), fiercely pursuing even the Great Black-backed Gulls (Larus marinus). The Arctic Skuas confined their attention to the Kittiwakes (Rissa tridactyla) and Arctic Terns (Sterna paradisæa), and were always careful to avoid the Great Skuas and Great Black-backed Gulls. On several occasions two or three Arctic Skuas were seen to combine in attacking another of the same species, and once a Great Skua joined in the chase. Great Skuas were twice seen deliberately to dive after fish refuse thrown overboard, so as to be completely immersed. Great Black-backed Gulls and Fulmars were also seen to dive like this.

Of the other birds, Great Black-backed Gulls, Kittiwakes, Fulmars, Gannets (Sula bassana) and Arctic Terns were common, whilst Razorbills (Alca torda) Guillemots (Uria troille) and Puffins (Fratercula arctica) were not so plentiful. One Glaucous Gull (L. hyperboreus) was seen off Storknaes L. HARRISON MATHEWS. on July 10th.

FOOD OF THE STARLING IN GREAT BRITAIN AND AMERICA. —In an article in the .4 uk (1922, pp. 189–195), Mr. E. R. Kalmbach compares the food taken by the Starling (Sturnus v. vulgaris) in the British Islands, as ascertained by Dr. W. E. Collinge, and that taken by the same species in America, where the bird was introduced and is now common in certain parts. This shows that the Starling in the United States is overwhelmingly superior economically to the same bird in Great Britain.

GREAT SPOTTED WOODPECKER BREEDING IN INVERNESS-SHIRE AND EIGIN.—In July, 1920, young Dryobates major were reported from near Avienore (B. B., Vol. XIV., p. 117). Mr. W. M'Conachie now records (Scot. Nat., 1922, p. 100) a slight extension of their range to the north-east, having seen

a pair in June, 1922, near Grantown (Elgin), and having learnt from a game-keeper of a pair nesting in 1922 in Abernethy Forest.

Trapping Ducks for Ringing Purposes.—An illustrated article by Mr. F. C. Lincoln (Auk, July, 1922, pp. 322-334), giving details of various methods employed in trapping Ducks in America, should be consulted by those British Birds "ringers" who have opportunities of doing similar work in this country.

Shoveler breeding in Buckinghamshire.—Mr. W. E. Glegg writes us that at a field meeting of the London Natural History Society, held on July 30th, 1922, a female Shoveler (Spatula clypeata) with five young was seen on the canal close to Weston Turville Reservoir in Buckinghamshire. In the Practical Handbook (Vol. II. p. 309), this county has been omitted from the list of those in which the bird breeds, but it should have been included, because the Wilstone Reservoir. although actually in Hertfordshire, reaches on one side to the boundary of Buckinghamshire, and the Shoveler has been known to Dr. Hartert since about 1005 to breed in the meadows round that Reservoir. Mr. C. Oldham informs us that the Shoveler as well as the Teal have increased there in the past few years, and that a few pairs of Shovelers have nested also at Weston Turville for two or three years, or perhaps longer.

#### LETTERS.

#### VELOCITY OF FLIGHT OF BIRDS.

To the Editors of British Birds.

SIRS,—On October 23rd, 1922, near Aberayron, Cardiganshire, a Kestrel (*Falco t. tinnunculus*) flew along in front of my car for a distance of 150 to 200 yards and according to my speedometer its flying speed was 18 to 19 miles per hour.

Thos. L. S. Dooly.

#### THE WOOD-LARK AT NIGHT.

To the Editors of British Birds.

SIRS,—With reference to Mr. H. S. Davenport's interesting article on the singing of the Wood-Lark (Lullula a. arborea) by night (antea, p. 126), bright moonlight does not always seem to be necessary to cause the bird to sing. On June 20th, 1922—a moonless night—in company with an entomological friend, I spent a night on the Somerset Peat Marsh, near Glastonbury, sugaring for moths. A Wood-Lark started singing about 11 and continued till dawn. The bird was about 300 yards off and apparently was singing from a thicket and not on the

wing. I could not prove this as the thicket was off the track, and not well accessible by night owing to the many deep, boggy peat holes.

ALLESLEY, COVENTRY.

H. W. MAPLETON-BREE.

To the Editors of British Birds.

SIRS,—One of my most delightful experiences was hearing the Wood-Lark one-night in the last week of May, 1907, at Valkenswaard, Holland. In company with Mr. W. G. Clarke at about 11 p.m. we heard, what I then described in my note book, as the bird's "very varied, loud, sweet and continuous song, superior to almost any other small bird's song. It was light and liquid rather than rich." Walking back to the village, we continued to hear the song until we had counted off nine hundred and fifty paces. With the Bittern calling "baum" at intervals of about one minute, this was a night to remember.

SCARBOROUGH. W. GYNGELL.

#### INCUBATION PERIODS OF TERNS.

To the Editors of British Birds.

Sirs,—Twenty-six days, which Mr. F. L. Blathwayt records as an observed incubation period of the Roseate Tern (Sterna d. dougallii) may not be an abnormality, as he suggests. Duration of the incubation period is, in part, a function of the continuity of brooding (Bergtold). When a bird is off its eggs for long enough spells to cool the eggs the incubation period is protracted to an extent corresponding in some degree to the duration of the interruptions, and apparent variability is a result in a series of observed incubation periods. Eggs of the Common Tern (Sterna hirundo) hatched in an incubator on the twentysecond or twenty-third day (Evans). In Scotland I have been able to watch seven nests of the Common Tern during laying and incubation. I found that from the date of laving the last egg to the date of hatching the latest nestling the periods were 22, 24, 24, 24, 25, 26, and 26 days. With one exception the periods are, it will be noticed, considerably longer than the usually accepted incubation period of 20-22 days for this species. In two instances the periods are as long as the period of the Roseate Tern observed by Mr. Blathwayt. Considering the paucity of records, we can be fairly sure a period of twenty-six days is not of rare occurrence in either species. If I may hazard a statement in regard to the Common Tern, I should say the duration of the incubation period of this species ranges from twenty-one to twenty-six days, the true length of incubation being probably twenty-two days, with an apparent variability of at least four days beyond the true period. J. M. DEWAR EDINBURGH.

# BRITSHBIRDS

With which was Incorporated in January, 1917, "The Zoologist."

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## THE GREAT AND ARCTIC SKUAS IN THE SHETLANDS.

#### FRANCES PITT.

#### PART II. THE ARCTIC SKUA.

THE Arctic or Richardson's Skua (Stercorarius parasiticus) is abundant in the Shetlands, having large breeding colonies on many islands. Though this and the Great Skua often occupy contiguous territory they keep apart and do not mix much. I have already mentioned that the smaller Skua usually occupies lower ground than the bigger.

On Noss the majority of the nests were on the heather-clad stretch of land on the south-western side of theisland. When one approached this the "Scouties" rose in numbers, and swept overhead, screaming and crying. Sometimes their cries sounded like "sku-arr" with great stress on the second syllable, and sometimes like the mewing of a cat. The general effect was a perfect babel of sound. We estimated that there were at least forty to fifty pairs of birds in this colony, and I am inclined to think we were under rather than over the mark. The nests among the short stunted heather. which was barely two inches high, were not difficult to find, for, as soon as we got near one, the pair to which it belonged would drop to the ground, grovel thereon, and roll about in the most fantastic variations of the "broken wing trick." Their anxiety, and the antics they indulged in to draw us off, were really pathetic, especially as they only served to show us where the nests were. These were mere scrapes, with one or two bents arranged round the edge; real nest-making there was none. The nests we found all contained eggs, so apparently this Skua breeds a trifle later than the Great Skua, as this same day (June 20th) we found young belonging to the latter.

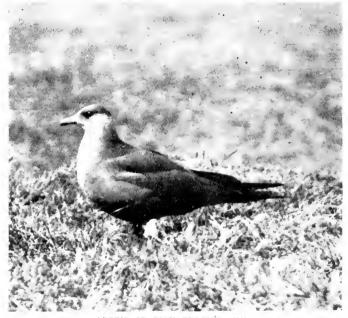
The birds continued in a frantic state while we were wandering about their territory, and swooped over so near our heads that we fully expected them to hit us, but not one actually did so, despite the character given them by the natives, who say they are much more aggressive than the Great Skuas. The shepherd's dog annoved them very much; they stooped at it regardless of the way it snapped and barked at them. The little island sheep also roused their ire, and one day I saw a "Scouty" driven frantic by a ewe and lambs that almost walked over her eggs. The Skua went at the sheep again and again, buffeted it about the head, and when the bewildered sheep went the wrong way the bird held on

and rode some vards.



ARCTIC OR RICHARDSON'S SKUA SITTING.—SOOTY TYPE. (Photographed by F. Pitt.)

The dimorphism that occurs in this species was most apparent throughout the Shetland colonies. The two types were present in apparently equal numbers, the one being a very dark sooty-brown bird, of the shade known in shops as "nigger," and the other a much lighter brown with white underparts, breast and collar. I saw a few specimens that belonged to neither extreme grade, but intermediates were scarce. The types were mated indiscriminately, dark with dark, light with light, light cock with dark hen and vice-versa.



ARCTIC OR RICHARDSON'S SKUA. (Photographed by F. Pitt.)

I only noticed one immature bird, which had horizontal breast stripes, so that it reminded one of a tabby cat.

Viewed at close quarters, as from the shelter of a photographing tent, this is a very attractive species. The birds alight with most graceful attitudes, and when they settle on their eggs have a soft, round, pigeon-like appearance that is most taking. The pair we worked at consisted of a dark and a light bird. The day I was in the tent only the dark bird covered the eggs while the other stood near, but on the second, when Miss Best kept watch, only the light one attended to the duties of incubation, so it is evident that both sexes sit.



ARCTIC SKUA CHICK AND EGG IN NEST (Photographed by F. Pitt.)

We found this species more shy than the Great Skua, though not really a troublesome bird to deal with.

In the north of Mainland, is another flourishing colony of Richardson's Skuas, and when we visited it on July 2nd we found the young were just hatching. It seems that, as in the case of the Great Skua, the young leave the nest directly, but you can generally find them near, and I suspect the parents brood them upon it at night. The chicks are pretty little things, clad in olive-dun coloured down, with blue legs, feet, and bill, the latter adorned with a conspicuous white nail, a souvenir of its exit from the shell.

We also saw great numbers of Arctic Skuas on Hermaness. The long rising moor that stretches up to the watcher's hut was alive with them, their extraordinary tameness being a striking feature. As one walked along the path they took hardly any notice. They simply sat in the heather and watched you go by, or rose, just flew quietly over, only to alight again a few yards beyond. Of their numbers it was difficult to make any accurate estimate, but there were two or three hundred pairs at least, and the watcher, Edwardson, put the number higher. He has two that are even tamer than the rest, so tame indeed that they come to his hut door for bits of bread! He says they have been there for a great many years; indeed he declares that the darker of the two birds is at least twenty-eight years old! I suggested that perhaps it was the young one of the original bird, but this he would not hear of, adhering to his statement. Despite the fact that strange voices in the hut made this bird a little suspicious, I managed to get a snap-shot of it just outside the door,

Of the two Skuas the Arctic is certainly the more beautiful and graceful, and especially so in the air, as it flies with great swiftness and hawk-like elegance, while its turns and stoops when in pursuit of a Tern or some other quarry are wonderful. At the same time I never saw one of these Skuas actually obtain anything from a Tern, and the watchers were all of the opinion that they must fish on their own account as well as rob Kittiwakes and Terns.

It was evident that there was a fairly heavy mortality among the Richardson's Skuas as we found the bodies of several, and that in widely separated localities. Unfortunately there was little to show what killed them, only wings and cleaned bones being left, but they are quarrelsome birds, continually disputing among themselves, and it may be that these were individuals that had got the worst of some brawl.

Certainly the thanks of all ornithologists are due to the Watchers Committee of the R.S.P.B., but for whom the Skua colonies of Shetland would not be in their present flourishing state.

#### SOME MIGRANTS IN BERKSHIRE.

BY

NORMAN H. JOY, M.B.O.U., F.E.S.

I have had the opportunity during the autumn of 1922 of seeing something of migration due south of the centre of England, and about 45 miles from the coast, viz., at Reading. I visited the sewage farm there from August 10th to October 18th: generally every other day, but during some weeks every day. I also explored the farm on October 31st and November 17th. This is where I saw the Black-winged Stilts in the spring (antea, p. 53). I wish I had had the opportunity of visiting it before August 10th, as some shore migrants were already there on that date. It is fortunately in the hands of a steward, who keeps it very quiet, and has been most kind in allowing me to roam about. All but two of the Waders were seen on a field that has, for the last three years, been under cultivation, but is again being flooded, and the pond thus formed is about 120 yards by 160 yards. This was the regular resting place of many Lapwings and Snipe, and the Waders got plenty to eat in it. I got within 40 yards of all the birds here recorded, except the Curlew. My most successful day was on September 2nd, when I watched, for a long time, at just 35 yards, and all within 4 square vards of one another, four Ringed Ployers, two Ruffs. two Dunlins, five Little Stints, seven Curlew-Sandpipers, and one Gray Phalarope; and there were elsewhere on the flooded field three Common Sandpipers, six Green Sandpipers and three Greenshank.

The Ruffs, as mentioned afterwards, used to visit other parts of the farm, but the others very seldom went away from the flooded field, so that, if I did not see them there, they were probably not on other parts of the farm, which I did not always have time to explore. Occasionally I possibly missed seeing one or two around the pond, or they were very occasionally away elsewhere, but I think this was rarely the case. If I saw a certain species for the first time on a given day, it had arrived since my last visit, whereas if I did not see it on my next visit, or the one after, it had left the farm, and probably district, altogether. If the same species turned up again it was a different individual having migrated in.

It has been most interesting keeping full notes on all the migrants passing through the farm, not only the Waders, but others. There are undoubtedly exceptional conditions attracting the birds, viz., the hatching out of very many

insects, flies and their larvæ, etc., from the sewage. I here give notes on the migrants which I think are of sufficient interest.

MEADOW-PIPIT (Anthus pratensis).—There were a very few in August and September, but a number came in from the beginning of October.

Yellow Wagtail (Motacilla flava rayi).—These were passing through in varying numbers until September 18th, when I saw the last two.

Grey Wagtail (M. c. cinerea).—One on October 5th; two on 10th

PIED WAGTAIL (M. alba lugubris).—At times many were migrating throughout September, but there were only a very few, possibly local ones, left by the middle of October. M. a. alba did not occur.

House-Martin (Delichon u. urbica).—There were on certain days in August and September large numbers of Swallows and Sand-Martins, but a very few House-Martins with them, but on August 27th there were from 80 to 100 flying over one of the sewage beds, with no Swallows or Sand-Martins with them. When watching them at about 3.30 p.m. they wheeled around one another, getting higher and higher, until they were at a great height, then they went off in a south-easterly direction.

RINGED PLOVER (Charadrius hiaticula).—There was one on August 19th; none on the 20th or 21st; one on 22nd; two on 25th; one on 27th to 30th; five on September 1st; four on 2nd and 3rd; none on 4th, 5th or 6th; two on 8th; none on 9th and 10th, when I thoroughly explored the farm; two on 13th; one on November 17th.

TURNSTONE (Arenaria i. interpres).—One on August 30th. It flew, calling, close by, and settled among some Lapwings by the side of the pond.

Ruff (*Philomachus pugnax*).—I first saw two on August 22nd, and three on 26th; the two remained about until September 2nd, but I did not see any more until the 10th, although I visited the farm nearly every day. I learnt that they sometimes flew with the Lapwings and settled in a stubble-field with them, so perhaps these were the same birds still about. There were four on the 14th, and so a new bird had evidently come in; two up to 25th, and one stayed about until October 5th. Judging by their size they were a Ruff and three Reeves.

Dunlin (Calidris alpina).—Two were seen on August 19th, but none again until 26th, when there were two. These remained until September 4th, when one with a black breast

joined them. This was gone by the 8th. The other two had gone by 10th, and two others turned up on 13th, and they had gone on 19th. No more were seen until 25th, when two were seen, and five on October 1st. There were three immature ones on 3rd and 5th, and one adult on 10th; one on November 17th.

Curlew-Sandpiper (C. ferruginea).—Four were seen on August 25th, and they were joined by three more on September 2nd. These were reduced to four by 9th, and two only on 13th. Apparently these same two birds remained until 28th, when they were joined by two others. The last I saw of them was October 1st, when there were two. They generally allowed me to walk to within about twelve yards of them.

LITTLE STINT (*C. minuta*).—Two were seen on September 1st, five on 2nd, four on 3rd, six on 5th; all but one had gone on 6th. Another one turned up on 10th and four on 13th; there remained three until 18th, and the last one was seen on 20th. They always let me get within about twelve yards of them.

I had a suspicion that one or two of them were Temminck's Stints (C. temminckii). In the Practical Handbook one of the chief differences given between the two species is the whiteness of the two outer tail-feathers, and the lengthening of the two middle ones in Temminck's. I did my best to get a look at their tails. Once I watched one for about twenty minutes at close range. It preened itself several times, including the tail, but unfortunately the wind was blowing from me to it. and it was therefore facing me, so that I could not see its tail. On another occasion I watched it for as long and as close. having a side view the whole time. But this bird did nothing but sleep, and I could not induce it to preen its feathers! I could not see the tail of either of these birds with the glasses when they flew, the flight is so rapid and twisting. I have examined skins at the Oxford Museum and have come to the conclusion that they were adult Little Stints in summer plumage.

COMMON SANDPIPER (*Tringa hypoleuca*).—One was seen on August 20th, two on 23rd, one until 27th, two on 30th, three on September 1st, five on 5th; but none were seen again until two on 13th to 18th. The next one was on 28th, and the last I saw was on October 1st. They were always wild.

WOOD-SANDPIPER (*T. glarcola*).—I watched one for a long time at about twenty yards range on August 22nd. It was easy to distinguish from the next, and I quite agree with the *Practical Handbook's* description of its quite different note "giff, giff." I saw one fly by on August 27th, which I

recognized from the Green Sandpipers about, by the distinctly

less white on the rump.

Green Sandpiper (*T. ochropus*).—These were always to be found in a specially quiet part of the farm, which other birds, except Common Sandpipers and Snipe, seldom visited. I saw as many as thirteen on August 19th, and there were generally nine or ten about when looked for. There were five there on September 22nd, but I saw no more until October 31st, when there were six. The latter birds were much less wild than usual, having presumably come from further north. There were none on November 17th.

On August 26th, one let me watch it for a long time at about 25 yards. The others always got up as soon as they saw one

within 100 yards.

On November 4th, I had the pleasure of watching three at the border of the lake in Englefield Park, near Reading. They were feeding at about thirty yards from the road, where I watched them from over a wall. There were two there on November 7th.

REDSHANK (*T. totanus*).—Only one occurred, on September 15th. Mr. Wallis tells me there were plenty during the summer, as indeed I knew, up to the end of May. I know now of at least four districts in the county where they breed.

Spotted Redshank (*T. crythropus*).—Two were seen on September 13th, and they remained until 17th, and one until 18th. They were rather tame; one let me watch it for a long time at about twelve yards once. They preferred wading in deep water, the water generally covering the whole of the legs, and twice, I think, I saw one swimming. I saw them on several occasions with the Ruffs. Although very distinct when walking about, when flying away they were almost exactly alike, being of the same colour, and having the same arrangement of white on each side of the rump. The Spotted Redshanks were smaller in wing-expanse than the Ruffs. The one on 18th kept calling when the Lapwings were flying over it. The note was a distinct "Ter-weet," sometimes single, and sometimes repeated. It occasionally had another note, "Tr-r-r-r-r-r-r."

GREENSHANK (*T. nebularia*).—One was seen on August 20th to 23rd; five on 25th, and three on 26th. These remained together until September 2nd, after which there was only one until 6th.

GREY PHALAROPE (*Phalaropus fulicarius*).—I watched one for a long time on September 2nd, with other birds as already stated. It was swimming about close to them.

Curlew (Numenius arguata).—I saw one fly high over, and calling, on September 8th. It had just got up off the farm.

Common Snipe (Gallinago g. gallinago).—There were nearly always a large number of these about, but as one knows so well with Snipe, the numbers varied. Some were evidently migrants, as I twice saw them flying about in flocks. On September 1st I saw a flock of about twenty wheeling around together as Dunlins, Knot, etc. do, quite unlike the usual behaviour of Snipe. I did not recognize what they were until they settled down, quite near me, in some water where the resident Snipe never settled.

BLACK-HEADED GULL (Larus ridibundus).—Three were at the farm for single days only, about a week apart, on five occasions, but two of these stopped on for the second day once. On two occasions (September 25th and October 8th) seven were seen. There were sixteen on October 16th, and twenty on 18th. I understand that they remain throughout the winter, and there were about fifty on October 31st, and

about seventy on November 17th.

Common Gull (Larus c. canus).—Three immature ones on October 10th.

Is it not clear from this evidence that, at any rate throughout this autumn, there has been a continual migration of Waders. and Black-headed Gulls, down the middle of England? This applies to the Ringed Ployer, Dunlin, Curley-Sandpiper. Little Stint, Common Sandpiper, Green Sandpiper, and Greenshank. Curlews are known to do so, as their call is fairly often heard at night, and the Common Sandpiper always visits our Berkshire streams on its way south.

The Rev. F. C. R. Jourdain informs me that the following are definitely new records for the county: Turnstone, Wood-Sandpiper, and Spotted Redshank. The Curlew-Sandpiper and Little Stint have been shot "near Oxford," and so may

have been in Oxfordshire or Berkshire.

I may as well add that some of my friends, including Mr. H. M. Wallis, have visited the farm with me on several occasions, and have seen nearly all the birds here recorded.

May I suggest that a sharp eye be kept on the large sewagefarms there must be near the centre of England, during the coming spring and autumn.

#### CONCERNING THE GREENSHANK.

BY

#### JOHN WALPOLE-BOND.

Mr. Gilroy's comments on the nesting habits of the Greenshank (*Tringa ncbularia*) prompt me to add some further remarks on the subject.

The subjoined observations, confined to two nests in the same district of Sutherland, may be of sufficient interest to publish. The year was 1914; the date, May 16th, in the first instance. Indeed, I had not de-trained six hours before finding nest number one. But I had unusual luck. For, when about 70-100 yards from a smallish loch—as Scotch lochs go—where the previous mid-April I had watched a male Greenshank in amorous pursuit of his mate, the loud, resonant, penetrating and persistent nest-call of one of these birds rang out with startling suddenness and much vehemence. I knew at once that this nest could be discovered almost for the asking.

Another forty paces covered and the bird rose from the edge of the loch. As a fact, it was very close to its nest, only I did not then realize the fact. Its first manœuvre was to fly to and fro above the water at a low elevation with normal rapid beat-and-glide wing-motion. Occasionally, however, a slight "dip" was noticeable. But this must not be confounded with the very switchback-like order of its going at a much higher altitude, often indulged in when an intruder is in the vicinity of its nest. Taking it all round this species' flight is always inclined towards the erratic. None the less it is equally always a fine, strong, free exhibition and to me, at any rate, somewhat reminiscent of that of an imaginary hawk. Now and then the wings are beaten so fast that for a few strokes a veritable swishing of feathers is heard. You must be fairly close to notice it, though.

To continue, however, my friend's protracted plaint fell on deaf ears as far as its partner was concerned; and presently it began to "sing." This showed that the individual in question was a male; and I know for a fact that at any rate with some pairs of Greenshanks incubation is shared by both sexes. I have watched the two exchange duties. In this particular instance, however, I did not see a second bird leave even the neighbourhood of the spot. But I do not think that the one present had run off eggs on my approach. On the contrary, I had the good fortune to "catch" it just about to take its turn on the nest or resume incubation after

a spell of feeding and exercise at some distance from its belongings.

From the bird's excited behaviour it was obvious that I was very "warm." Yet, at first, I was unsuccessful in my quest over some rough ground bordering the loch, though at one point the bird challenged me closely. This "chancy" method was soon abandoned for the altogether better one of watching. With which intent I followed the Greenshank to the far side of the loch, on the pebbly shore of which it had alighted. There I lay down. Events now followed in rapid succession. The bird rose almost at once and made straight for its original coign of vantage. It settled about 25 yards from the nest and ran on to the latter immediately, calling to the very last. Giving it a few minutes' grace I strolled round and flushed it from the usual four eggs at a few yards' range. It literally floundered off them and pitched in the shallows of the loch quite close to me, standing there up to its girths for a few moments. Then it flew a little further afield and stood silhouetted on a bank, now fully erect, with legs -looking strangely like stilts and showing rather bulging "knee"-joints—rather wide apart, now half squatting. called incessantly. Eventually, however, it rose and proceeded to "sing"—with rage, it must be presumed. Once it came within a very few yards of me.

There are those who maintain—evidently Mr. Gilroy is one of them—that the Greenshauk never breeds close to a loch, really close, I mean; on its very shore, in fact. But, as with most things, the exception does occur; and this nest was a case in point. It was in a site so often affected by the Common Sandpiper, and was just nine feet from the water and almost on the same level. It was placed amongst cotton-grass and a few tufts of scrubby heather, two of which were growing just in front of one side of it, whilst a baby bog-myrtle partially projected over it. All the same it was very exposed.

The nest itself measured 6 in. by 5 in. across by 1½ in. in depth; the scrape prepared for its reception was, however, 2¾ in. in depth, so that the nest-fabric in its deepest part was 1½ in. The materials used were wisps of cotton-grass, a few withered bog-myrtle leaves and a few heather-sprigs, together with a little desiccated moss and rock-lichen. But the cotton-grass predominated. A few whitish feathers rubbed (accidentally, of course) off the birds' underparts clung not only to the nest-fabric, but also to the heather contiguous. The eggs were of the pale-grounded, speckly-spotted type and were "set" about a fortnight.

The second nest was discovered on May 22nd. About 9.30 a.m. (old time) I was sauntering along a rough track by a huge loch when suddenly from quite half a mile away on the right there was borne to my ears the frantic outcries of a Greenshank. Following up this clue I reached the spot the bird had never ceased calling for more than the briefest intervals—and soon had the crier a-wing, still screaming displeasure. It now flew in wide circles at a fair elevation. Some of the circles were very wide; once, in fact, the bird was quite a mile away. Fifteen minutes, approximately, passed ere it bethought it once more of its original post—a rock some 70 yards from me. There it stood, a picture of elegant poise, bending slightly forward and, of course, still calling lustily. Its mate now arrived on the scene, also calling, and settled on another boulder about 70 yards behind me. But it only stayed for some ten minutes.

Whereupon the original bird rose and flew to another rock which was about 80 yards from me as well as its first perch. This second stand proved to be just in front of the nest. For after a minute or two's rest the Greenshank jumped down and walked behind it with stately deliberation; and it had slopped complaining. The nest was there, of course; and the sitter let me approach to within five or six paces ere jumping off and then careering wildly about overhead.

This nest lay just above a brand-new peat-cutting and only about 60 yards below another at which two men were working. It was evident that, at one period of incubation, they must have been busy within a very few paces of the nest and, it is to be presumed, the sitting-bird. For if not—I am assuming a long, enforced absence on the part of the sitter—the eggs would surely have "addled," which was not so. For in front of me lay a successful hatch. I am well aware that the Greenshank often sits very closely indeed. Yet I should hardly have imagined that one would have put up with people working (some doubtless talking) all day—even if that only stretched to one day—at such remarkably close quarters. But this bird did.

The nest lay in the centre of what may be described as a rough square, the sides of which were made up of a big stone; a mound about 8 in. in height overgrown with wiry grass, in addition to a dwarf 6 inch-high bog-myrtle growing to one side of it; another lower, heather-clad tump; and a tuft of heather. Grey lichen, too, formed part of the picture. The nest itself, measuring 6 in. across by 2 in. in depth, was constructed of cotton-grass, a few sprigs of heather and a

scattering of lichen, well lined with small leaves—those of the bog-myrtle. This shrub is nearly always present in the breeding-haunt of the Greenshank.

There were three chipping eggs in it (of the Redshank type, i.e., pale buffish, with rich reddish-umber markings) and a nestling just hatched. He was, in fact, still very wet. The little fellow was making plaintive chirp-like whispers of chec to himself. At this stage he was, in general appearance above, when not too shrewdly inspected, of a longitudinal streaky-pattern mixture of blackish and very pale buff. A closer inspection, however, revealed reddish-buff tips to the pale buff portions. The underparts were very pale buffish, fading to dirty white on the throat and belly; the irides, dark hazel; the bill, leaden-tinted and quite short, not the least up-curved either (the adult's bill, be it remembered, is slightly uptilted); the legs, brown in the main, with pinkish-flesh "shin" and "calf"; soles of feet, dirty orange; claws, rather long for the size of their owner and of a pale leaden tint.

The same evening, circa 7.15, the remaining eggs were hatched, and their once-inmates all lay huddled in the nest. The shells had all been ejected, but all the halves were not visible. These nestlings appeared to be cold—and indeed these May evenings in Sutherland are none too warm; at any rate they were shivering. Bad-tempered they seemed, too, since now and again one tiny creature dug at its fellow with puny bill. When looked at casually they now resembled furry patches of bright tortoiseshell. Actually they are a "stripy" pattern of warm buffish and black, which—according as to how the light plays on them—looks chestnut-buff and black or yellowish-buff and black.

On this occasion one of their parents had left the rock above the nest when I was about 100 yards distant. It careered madly around, being at once joined by its mate. Both vociferated loudly.

Next morning—May 23rd—on visiting this pleasing family one of the parents left the vicinity of the nest some 50 yards ahead. It screamed as usual, but was not joined by its mate. The young were all outside, but close to, their birthplace, and excessively hard to see, so beautifully did their colours match the environment. In the evening Mr. J. T. Proud, who collected and photographed them—this forming, so far as I am aware, the first photograph of nestling Greenshanks ever obtained in Britain\*—reported them as

<sup>\*[</sup>Mr. O. A. J. Lee photographed young Greenshauks in the nest as far back as 1896, and subsequently published a reproduction in his work on British Birds in their Nesting Haunts.—F.C.R.J.]

still being outside the nest and more scattered than in the morning. This is exactly what you would have expected. On the 25th inst., however, their parents had shepherded them almost to the loch-shore half a mile away.

A propos these two nests (and two broods of young seen on May 31st) it should be noticed that they were all very distinctly on the early side, whilst one was unusually early. Normally, of course, this species has fresh eggs between May 13th—18th, so that 1914 must have been an unusually early

year.

A few remarks on the Greenshank's notes, and I must finish. The usual cry is a musical (as are all its cries, even if a few are harshly musical) tchu or tew generally thrice repeated, a decent interval ensuing before its repetition. It bears some sort of comparison to one cry of the Redshank; but, all the same, to the man with "ear" it is quite distinct. Coming to the cries in use at the nest, these are varied; though I am not quite sure whether they are all mere modifications of the stock note of tchookh or really distinct utterances. But if I was pinned down to a definite opinion I should say that they represent at least two different notes with, in addition, variations. On a still day this tchookh can be heard. I was going to say, quite a mile away. But perhaps I exaggerate. Very occasionally indeed it strikes one as bearing a superficial resemblance to the "rattle" of the Blackbird as it retires to roost in the evergreens. But it is, of course, ever so much louder. That it is like the Peregrine's scream, as certainly one writer has asserted, I utterly disagree.

Sometimes this tchookh sounds more like kewkh. In an ordinary way it is rather a fast utterance. But now and then it borders on the slow side. Occasionally it becomes a somewhat whining cheuke; again, che-cheuke; yet again, chookh-cheuke. On other occasions, however, a different cry is given altogether, especially when young are present. This sounds like tyee-tyee-tyee; and at another time a dear-dear-dew is heard, the dew being clipped and pitched in a lower key than the preceeding dears. Yet another cry may be syllabled as chik or tchik, oft repeated. What a number of birds slur a "t" into the beginning of their notes!

Coming now to the song of the Greenshank, that is a musical and moderately fast-repeated dissyllabic *tew-hoo*. It is a really rich note and pitched in much the same key as one utterance of the Golden Plover. To this there is sometimes added—generally after each quick *tew-hoo*, if indeed not simultaneously with it—a twanging and very metallic sounding

chuk, cork, clock or tluk, just as the ear dictates at different times. It is a curious sound and one, too, sometimes used by itself. I am, however, in doubt as to whether it is a vocal accomplishment or effected by means of the wings or tail, or both. I am inclined to one of the latter beliefs, seeing that on some occasions—as already mentioned—it appears to be synonymous with the song proper, which I have never heard (nor yet its clanging accompaniment) from a Greenshank except when flying. But all the other cries are emitted indifferently from a bird on the wing or at rest, though a

flying Greenshank is ever the noisier.

When "singing" the Greenshank rises fairly high—sometimes very high—above the moor and starts by soaring, head to wind, of course. It may then remain soaring, looking very hawk-like indeed, while it sings. Or else—and this generally happens—it varies the performance by proceeding in a succession of downward, inverted arcs of good size, though soaring is resumed for a few moments as the summit of each curve is reached. In this case "singing" only takes place on the downward portion of the curve. On the down curve, too, the wings are sometimes vibrated very rapidly. Sometimes, also, when the "song" itself is in progress, the wings are flicked up and down with measured rhythm. In this last detail the flight resembles, and is characteristic of, that of nearly all the *Limicolae* when "singing."

# SOME FURTHER OBSERVATIONS ON THE BIRDS OF LUNDY, JUNE 1914.

BY

#### E. W. HENDY.

My only visit to Lundy Island lasted from the 10th to the 18th (inclusive) of June 1914, but as my notes during that period supplement, in some instances, those of Mr. Loyd (antea, p. 148), they may be of interest.

RAVEN (Corvus c. corax).—I saw three on June 10th, and one on the 16th. I was informed that there were two pairs on the island that year. Owing to the Ravens' alleged depredations upon sheep, the young of one pair had been shot in the nest, where their remains were still visible.

CARRION-CROW (C. c. corone).—In 1914 they were plentiful.

My note is "many all over the Island."

Jackdaw (Colœus m. spermologus).—I have no note of any. Chough (Pyrrhocorax pyrrhocorax).—I searched carefully, but saw none. Mr. Heaven (nephew of the then owner), who was living on the island in 1914, told me he had seen none for fifteen years, but that before that time they were "common as crows." This, roughly, agrees with Mr. Loyd's note.

LINNET (Carduelis c. cannabina).—Numerous.

HOUSE-SPARROW (Passer d. domesticus).—Mr. Heaven told me that when the first pair came to Lundy his uncle wanted to have them shot, but the then tenant of the farm refused to allow it. They were fairly plentiful in 1914.

MEADOW-PIPIT (Anthus pratensis).—Numerous.

TREE-PIPIT (A.t. trivialis).—Several, June 11th, many 12th. SPOTTED FLYCATCHER (Muscicapa s. striata).—One seen June 13th in the grounds of the Manor House.

MISTLE-THRUSH (Turdus v. viscivorus).—One in song

June 11th.

RING-OUZEL (Turdus t. torquatus).—One female June 10th.

Wheatear ( $Enanthe\ \alpha$ .  $\alpha$ nanthe).—Numerous.

WHINCHAT (Saxicola r. rubetra).—Several, June 14th.

STONECHAT (S. torquata hibernans).—Numerous; breeding. Wren (Troglodytes t. troglodytes).—One, June 11th.

Swallow (Hirundo r. rustica).—Two, June 10th. I saw two fly in over the sea from the west, 6.30 a.m., on the 15th.

MARTIN (Delichon u. urbica).—One, June 10th, two, 18th.

Swift (Apus a. apus).—One, June 11th.

Woodpeckers.—I saw none.

Cuckoo (Cuculus c. canorus).—One, June 11th, one, 15th. Short-eared Owl (Asio f. flammeus).—A shepherd told me he had shot two long-eared Owls. Date not given. As

he added that they came with the Woodcock, they were

probably Short-eared.

Peregrine (Falco p, peregrinus).—There was one eyrie in 1914; the Eyasses were taken for hawking purposes while I was on the island. I was told that at one time there was a second eyrie in another part of the island, but I saw no signs of more than one pair.

KESTREL (F. t. tinnunculus).—Seen on June 15th and 16th.

No evidence of nesting.

COMMON BUZZARD (Butco b. butco).—One pair had partly fledged young in the nest. I saw another pair in a different part of the island, but did not discover if they were nesting.

Gannet (Sula bassana).—I searched carefully the vicinity of the former breeding-place, but saw none. Crossing from

Lundy to Ilfracombe on June 18th, I saw one.

MANX SHEARWATER (Puffinus p. puffinus).—Heard often at night. I was told of one nesting place, but found no nests. The lighthouse keepers told me they often came to the lighthouses.

Turtle-Dove (Streptopelia t. turtur).—Three, June 10th. Oyster-Catcher (Hæmatopus o. ostralegus).—Two, June 13th.

Lapwing (Vanellus vanellus).—One, June 10th, one, 15th. Common Curlew (Numenius a. arquata).—One heard June 15th. Saw no signs of their nesting.

BLACK-HEADED GULL (Larus ridibundus).—Three, June

15th.

Herring-Gull (L. a. argentatus).—In great numbers. Like Mr. Loyd, I saw them eating Guillemots' eggs. Nesting. British Lesser Black-backed Gull (L. fuscus affinis).

—In great numbers. Nesting.

GREAT BLACK-BACKED GULL (L. marinus).—Two pairs. I was informed these were the only ones on the island that year.

KITTIWAKE (Rissa t. tridactyla).—Nesting in large numbers. RAZORBILL and COMMON GUILLEMOT (Alca torda and

Uria t. troille).—Nesting in immense numbers.

British Puffin (Fratercula arctica grabæ).—Nesting in countless thousands, particularly at the N.W. end. A light-house-keeper said he did not think they were decreasing, but were shifting more to the west of the island since the battery on that side ceased to exist.

Canada Goose (Branta canadensis).—Mr. Heaven showed me a lady's hat made out of the skin of a Canada Goose shot on the island recently.



#### LARGE SET OF ROOKS' EGGS IN IRELAND.

With reference to the notes (antea, p. 19) on the finding of clutches of seven eggs in nests of the Rook (Corvus f. frugilegus) in England, it may be of interest to know that on April 3rd, 1922, I found a set of a similar number in a large rookery in Co. Donegal. I have no previous record of seven for Ireland.

#### COAL-TIT HIDING BEECH-NUTS.

Ox November 12th, 1922, while working in my small garden at Hampstead, I noticed a Coal-Tit (Parus a. britannicus) fly on to the garden fence with something in its beak, which I first thought was a berry, but subsequently discovered to be a beech-nut. I took little notice of the incident at the time. but a little later my attention was again more than once attracted by the same bird flying with a nut in its beak across the garden. I then determined to watch events more closely, and retired to a window overlooking my garden and that of my neighbour, in which stands a copper-beech tree. The tree this year bore a large amount of mast, and the ground beneath has for many weeks been visited by Great, Blue and Coal-Tits, busily engaged taking the nuts to neighbouring fences, breaking and eating them. But the Coal-Tit under observation on the 12th behaved differently; for a space of two hours, the hour that I was in the garden and an hour that I spent watching the bird deliberately, it occupied itself exclusively in gathering nuts and hiding them in various places. No attempt was made to open a nut; I saw it make fifty journeys in a little less than an hour with a fresh nut each time in its beak. With each of these it flew out of my neighbour's garden to return in about a minute—the journeys being made with extraordinary regularity. What the bird did with all these nuts I could not say definitely as it often flew out of sight behind trees or round the corner of a building, but the bird always went with a nut and returned after a short interval without it. A number of the journeys, however, were wholly in view and on these occasions I always saw the bird hide the nut in some crevice in a fence or in the stems of ivy clinging to the fences, etc. Many of them were carried in succession to the creeper on the walls of my own house, to

be hidden behind the stems against the wall. One was hidden in a little closed space on the ground behind the stem of a tree growing close to a wall: I saw the bird cover this nut with fragments of fallen leaves, and found the nut, intact and full of kernel, there subsequently.

Returning to the garden an hour after my period of observation ended. I saw the Coal-Tit was still at work. The bird must have hidden hundreds of nuts during the morning

within a radius of about 100 yards.

The point which naturally arises is as to whether the nuts were purposely stored against the time when the supply on the ground should fail. That many of the hidden nuts will be found and eaten by the Coal-Tit during the coming months I do not doubt, for they are hidden in just those places in which Titmice love to pry. That this bird has laid up a store which she will use is. I think, beyond question.

The Blue and Great Titmice will also reap the advantage of this store, for they are certain to find some of the nuts in their wanderings. It is impossible to believe that the Coal-Tit will remember where each nut is hidden; it may be that the bird will not remember where one is hidden or indeed that she has hidden nuts at all. In this case she will share equally with the Great Tits and the Blue.

I publish this note chiefly to draw attention to this bird's actions and to the possibility that such storage is more widespread than has been supposed. Such storing is only likely to be discovered if the bird is seen in the act, for the nuts are scattered and not gathered into one place.

T. Lewis.

### NUMBERS OF FEATHERS IN NESTS OF LONG-TAILED TIT.

WITH reference to the note on this subject (antea, p. 189), the following record may be of interest. A nest of the Longtailed Tit was found at Aldworth, Berkshire, on June 17th, 1922, and appeared to be of normal size. On counting the feathers, it was found that the total was 2,457.

A. Steven Corbet.

WITH reference to Mr. D. W. Musselwhite's note (antea p. 189) on the difference in the numbers of feathers in two nests of the Long-tailed Tit (Egithalos caudatus roseus) examined by him, the following particulars of six nests examined by me seem to show that the number of feathers in the nest is largely a question of the distance of the nest from a farmyard or poultry run where feathers can be obtained.

Number of feathers.				Distance from nearest farmyard.				
No. 1		2024				120 y	rards	
No. 2		1060						
Xo. 3		1573				400	,,	
No. 4		1203				450		
No. 5						<b>5</b> 60	* 1	
Xo. 6		835				650	, -	

The distances were carefully measured on a six-inch ordinance survey.

E. U. SAVAGE.

#### GREAT GREY SHRIKE IN SHROPSHIRE.

An adult Great Grey Shrike (*Lanius excubitor*) was shot on the Wallop estate near the western border of Shropshire on December 2nd, 1922. Two others were obtained in the same district November 5th, 1895, and in 1896. I have just a score of records for the county, but the most recent was an immature bird shot on Haughmond Hill, Shrewsbury, October 25th, 1902—just twenty years ago. H. E. FORREST.

#### SIZE OF CLUTCHES OF MISTLE-THRUSH, SONG-THRUSH AND BLACKBIRD.

During twenty years' observation I have never found a larger clutch than five eggs of either Mistle-Thrush (Turdus v. viscivorus), Song-Thrush (T. philomelus clarkei) or Blackbird (T. m. merula). In fifty clutches of eggs of the Mistle-Thrush thirty-nine contained four eggs and eleven only five eggs. In one hundred clutches each of eggs of the Song-Thrush and Blackbird seventy-two of the former and sixty-three of the latter contained four eggs only, the remainder being five egg clutches. No account is taken here of clutches of three eggs or less, such possibly being incomplete.

Nearly all these observations were made in Yorkshire from 1890 to 1910. W. GYNGELL.

#### SONG-PERIOD OF THE MISTLE-THRUSH.

With reference to Mr. Davenport's note on this subject (antea, p. 189), it may be of interest to record that I watched a Mistle-Thrush which was singing on August 26th, 1922. I heard the song again on October 3rd and 15th. The weather on all three occasions was warm and sunny.

HOWARD BENTHAM.

#### THE WRYNECK EXCEPTIONALLY DOUBLE-BROODED.

A PAIR of Wrynecks (*Jynx t. torquilla*), which I have annually under observation, got their first brood off by June 21st, 1921. They then bred a second time in the same hole, and had well-grown young the last week in July. This is quite unique in my experience, and was evidently connected with the exceptional warmth of the season.

J. H. Salter.

#### CUCKOO'S EGG IN WILLOW-WARBLER'S NEST.

There was an instance in 1922, near Riding Mill-on-Tyne, of a Cuckoo (Cuculus c. canorus) depositing its egg in the nest of a Willow-Warbler (Phylloscopus t. trochilus). Four of the Warbler's eggs had been laid when the Cuckoo added hers, and the nest was thereupon deserted. The nest and eggs were presented to the Hancock Museum, Newcastle.

E. LEONARD GILL.

#### KESTREL CAPTURING SWIFT.

At the end of June, 1922, I and three other scoutmasters were camped in Longford Park, outside Salisbury. On the Sunday morning as we were talking over our camp fire we noticed a Kestrel (Falco t. tinnunculus) hovering in the open near our camp, and that a large number of Swifts (Abus a. abus) appeared to be derisively circling round it. Suddenly the Kestrel swooped to earth, bearing a Swift with it. We ran up and the Kestrel flew off leaving the Swift lying quite still with eyes closed in the long grass. At first we thought it was dead, but its eyes opened and shut, so realising the difficulty a Swift has in rising, and as we could see no wounds upon it, I picked it up by its wing tips and threw it into the air, when it immediately flew away. I understand that a Kestrel rarely attacks a Swift, the latter being far too quick a flyer to be caught. P. I. Southon.

[For a previous record of a Kestrel capturing a Swift see Vol. XIV., p. 136.—Eps.]

# KESTREL CAPTURING ADULT SKY-LARK.

Although it is certainly not unusual for the Kestrel (Falco t. tinnunculus) to take the fledged young of small birds during the nesting season, adults are apparently but rarely attacked.

I recently observed one of these Hawks, evidently about to seize a newly fledged young Sky-Lark, when one of the parent birds pursued the Kestrel, and was captured and carried off.

The Hawk appeared in the first instance to have no designs upon the adult birds, but as one passed directly beneath it, an easy capture was immediately taken advantage of.

HOWARD BENTHAM.

[Although records of Kestrels attacking and killing adult birds are not very numerous, there are several known cases of Sky-Larks being taken. *Cf.* Macgillivray *Hist. Br. Birds*, III., p. 330; H. L. Saxby, *Zool.*, 1861, p. 7,809, etc.—F. C. R. J.]

#### COMMON BUZZARD IN SURREY.

On June 4th, 1922, I was surprised to see a Common Buzzard (*Butco butco*) wheeling about in characteristic fashion over Epsom Downs and Tadworth. I thought it was probably a semi-captive bird, but Messrs. Colthrup's and Bentham's notes (*antea*, pp. 166, 191) make it seem worth recording.

E. LEONARD GILL.

#### SPOONBILL IN IRELAND.

While staying at Achill Island, Co. Mayo, I was fortunate in seeing a solitary Spoonbill (*Platalea leucorodia*) on three successive days, viz., April 26th, 27th and 28th, 1922.

My attention was first drawn to this tall white bird, feeding close to a Heron in shallow water, by a peasant of the island who wished to capture it. He was successful in enticing his pair of sheep dogs to run into the water after the bird, which seeing them, leisurely flapped a few hundred yards further along the beach and recommenced feeding.

On the second day I had a much better view of this bird and saw clearly the broad tip of the bill through binoculars. Seeing it first fly down from the mountain-side I watched it until it alighted on the shore near a Heron and commenced to feed. Its flight was buoyant, the wing-strokes being quicker than a Heron's, the neck was outstretched and the legs trailed in line with the body. Its feeding method was quite different to that of the Heron, for whereas the latter remained motionless waiting for its prey to draw near, the Spoonbill walked about in the shallow water, swinging its head from side to side in a circular fashion. L. J. Turtle.

# BEWICK'S SWAN IN GLAMORGAN.

Ox November 12th, 1922, whilst observing birds on a pool not far from the coast in East Glamorgan, I noticed in the

distance five Swans. As I was much interested in the diving of some other birds, I did not at the time pay much attention to them, until I was suddenly struck with the upright carriage of the head and neck, when I at once made great efforts to identify them. It was not until I had got considerably closer that I was able to identify them as Bewick's Swans (Cygnus bewickii), two adults and three juveniles.

The amount of black on the bill appeared to exceed the yellow, and there was not the distinctive prolongation of yellow towards the tip of the bill, as in the Whooper (*C. cygnus*).

The birds then rose and flew at no great height from the water, and passed fairly near to me, when the details of the colouring of the bill were more easily seen. They alighted on the water again at the far side of the pool, but the light being poor, I was unable to make any further observations. On November 19th I was again at the pool, where I was glad to see they were still remaining, and, the light being better, I was able with the aid of a telescope to make further certain of the correct identification. They were also seen on this occasion by Mr. H. Morrey Salmon and Mr. G. C. Ingram. There are, I believe, only two previous records for these Swans in Glamorgan.

# VELVET-SCOTER INLAND IN CHESHIRE.

On December 9th, 1922, my wife and I saw a duck or immature male Velvet-Scoter (Oidemia fusca) in the middle of Oakmere, Cheshire. It spent the greater part of the time resting with its bill among the scapulars, and evidently was not feeding at all, though from time to time it became more alert and swam up and down—looking a large bird in comparison with the Tufted Ducks and Pochards it associated with. The white wing-bar could usually be seen clearly, though it was occasionally covered when the bird was swimming; the upper of the two white face-patches could be seen even when it rested with its bill under its feathers.

Prior to last winter this species had not been recorded from Cheshire (Vol. XV., p. 158) and this occurrence is the first from an inland water.

A. W. BOYD.

#### HERRING-GULL EATING ITS OWN CHICK.

On June 16th, 1922, I was lying on the cliff-face watching the birds on the Lye Rock, near Tintagel, which is separated from the mainland by a narrow cleft as clean and sheer as a sword-cut. A Herring-Gull (Larus a. argentatus) was

standing by its pair of chicks in down not more than fifty yards in front of me. One strayed two or three feet away amongst the Puffins' holes and I saw the old bird pick it up by the "scruff," apparently gripping the down in its bill. The chick's wing-stumps waved. No sooner had the parent put the little thing down alongside the other than it began to peck its head viciously. The chick must have died at once, but the old gull continued to batter and worry it for many minutes. Sometimes the body was shaken with an extraordinary ferocity till its black feet flapped limply and the dust was disturbed in the hollow among the sea-pinks. In the end the old bird gulped the carcase down whole. obviously made it very uncomfortable, and after stretching its neck from side to side as far as it would go, it brought up its mouthful. The remaining chick, which had been standing quietly by all this time, now came forward for a share and pecked at the tit-bit. Two Jackdaws sidled up and, dodging the parent bird's rushes, nearly got it but after a further furious worrying it finally swallowed its offspring. I have wondered whether this curious scene was prompted by a sudden access of blind fury—perhaps the chick was a troublesome straver—or whether it is as far from uncommon for Gulls to devour their offspring as it is for some domestic R E. MORFAU. animals

Reported Nutcracker in Suffolk.—Mr. C. E. Alford has informed us that Dr. H. M. Hart-Smith observed a bird which he identified as a Nutcracker (Nucifraga caryocatactes) on October 19th, 1922, at Southwold, and Dr. Hart-Smith has himself recorded the occurrence in The Field (November 4th, 1922, p. 684). During the night, which was very rough with a strong easterly gale, Dr. Hart-Smith heard a violent scratching at his window and on drawing aside the blind saw a bird which had a large straight greyish-black bill, rufous or brownish body with white spots and dark wings and tail. On the window being opened the bird flew in and perched on a cupboard where it remained until the early morning, when it flew out of the window which had been left open. Dr. Hart-Smith identified the bird as a Nutcracker on looking at Coward's Birds of the British Isles.

Song-Periods as observed in Ireland.—A further interesting article by Mr. J. P. Burkitt is published in *The Irish Naturalist* for November, 1922. Mr. Burkitt here gives the results of careful study of the song of Robins, Blackbirds,

Chaffinches, Mistle-Thrushes, Hedge-Sparrows and Yellow-hammers during 1922 and preceding years, in relationship to breeding operations.

All these observations, with the exception of those concerning the Blackbirds, support his contention that song is much more vigorous before breeding begins than afterwards; he also comes to the conclusion that the species that continue singing late into the summer also have late broods; this may seem to conflict with the first hypothesis, but Mr. Burkitt finds evidence that between broods there is a considerable increase of song, and that unmated birds of any species will go on singing every day until the breeding-season of the species comes to an end—that is, presumably, in most cases, until the moult begins.

Ornithologists should certainly be indebted to Mr. Burkitt for his extremely careful observations on this subject, which can only be thoroughly cleared up by continual study of individual birds. It is especially to be hoped that some observers in other districts will make similar observations, for in at least one respect—namely, the total song period—there are remarkable differences between north Ireland and the southern and midland counties of England. H. G. A.

Goosanders, not Red-Breasted Mergansers in Warwickshire.—Correction.—Miss B. A. Carter informs us that through recent experience she finds that she wrongly identified the birds seen by her in Sutton Park on October 21st, 1918 (Vol. XII, p. 189) and that they were really Goosanders (Mergus merganser).

Supposed Unrecorded Great Auk's Egg.—In the Naturalist (1922, p. 254) is a note and figure of an egg of the Great Auk under the heading "Unrecorded Egg of the Great Auk." To avoid confusion it is as well to point out that this egg, which was purchased at a sale by Mr. F. R. Rowley, was exhibited by Mr. E. Bidwell at a meeting of the British Ornithologists' Club in January, 1918 (Bull. B.O.C., XXXVIII., p. 40). In referring to this in British Birds (Vol. XI., p. 264) we were mistaken in considering it as the seventy-fourth known egg, since Mr. Bidwell had exhibited to the same Club in January, 1914, photographs of another previously unrecorded egg discovered in France by the Comte de Tristan (Bull. B.O.C., XXXIII., p. 90; see also Revue Francaise d'Orn., 1913, p. 118, and Ibis, 1914, p. 358). There are thus now seventy-five known eggs of the Great Auk.

#### OBITUARY.

#### JOHN LEWIS JAMES BONHOTE.

By the death of J. L. Bonhote on October 10th, 1922, the world of ornithology loses an eminent devotee. He was the only son of the late Col. John Bonhote and was educated at Elstree, Harrow and Trinity College, Cambridge (M.A. 1901). Bonhote from his earliest school days was interested in natural history, and his early taste for entomology soon became supplanted by a keener interest in birds, and for many years he was a very enthusiastic aviculturist; his name will always



JOHN LEWIS JAMES BONHOTE.

be associated with his experiments in hybridization of ducks, and his subsequent works on Vigour and Heredity, Colour Patterns, Inheritance, etc. He thoroughly understood the treatment of birds in captivity and was successful in getting a number to breed, notably the Corncrake, Eagle-Owl, Bearded-Tit and Herring-Gull. But besides aviculture, Bonhote had a wide knowledge of birds in general, for he collected in various parts of Great Britain, Norway, Egypt and Bahamas, and had a fairly extensive museum and library for reference. With over twenty-five years' close friendship, and as his companion on many trips, the writer can say that

Bonhote with his scientifically trained mind was one of the most original thinkers in the realms of British ornithology. and the most interesting man to carry on a discussion with on any subject, whether it was a question of Migration or Moults, Inheritance of Acquired Characters or Evolution. Geographical Variations or Climatic Effects, and so on—there was hardly a branch of our science he could not dicourse on and discourse ably, indeed he would often take a view he knew to be erroneous for sheer love of arguing from the opposite side: for the trivialities of ornithology he cared but little, always taking the broader and more general view. In his early days he was one of the first to take up bird photography, and although the interest in this was but shortlived. I believe he was the first to try to film birds and I have a lively recollection of the colossal camera we hauled about the cliffs of N. Wales filming Kittiwakes, etc., as long ago as 1903; the films, as may be imagined, were not very good!

A man of great energy, Bonhote was a most excellent organiser, as the many posts he filled testify; he was joint secretary to the Fourth Ornithological Congress (1905); secretary to the B.O.C. Migration Committee; secretary to the British Ornithologists' Union (1907-13); secretary and treasurer to the British Ornithologists Club (1920-22); on the Council of the Royal Society for Protection of Birds, and held various offices in the Avicultural Society from its inauguration. He was a Fellow of both the Linnean and Zoological Societies and contributed several papers to their Journals, as well as to the pages of the Ibis, Zoologist, British Birds (Magazine). Nature, etc., while he was the author of a popular book on the Birds of Britain. A more genial, kind-hearted man never lived; he was ever ready to help and encourage any beginners who appealed to him, and with such a lovable nature one can safely say he never had a real enemy in the world. Such men are all too few. C.B.T.

#### WILLIAM EVANS.

By the passing away of Mr. William Evans on October 23rd, 1922, Scotland lost one of her foremost naturalists. For many years he had devoted himself to the study of Scottish natural history, more especially that of the Forth area, and, as his published writings testify, his interest was wide and his knowledge was great. Mr. Evans contributed well over a hundred papers or long notes to the Scottish Naturalist, Annals of Scottish Natural History, Proceedings of the Royal

Physical Society of Edinburgh, The Ibis, British Birds, Transactions of the Botanical Society of Edinburgh. The History of the Berwickshire Naturalists' Club, The Transactions of the Perthshire Society of Natural Science, Entomologists' Monthly Magazine and The British Association Handbook, while his short notes in various natural history magazines numbered about four hundred. In these he covered a vast field: Botany. Invertebrates, Reptiles and Batrachians, Fish, Birds and Mammals in turn claimed his attention, and as a result we have many valuable papers from his ready pen. Special mention may be made of "The Mammalian Fauna of the Edinburgh District," of his presidential address to the Royal Physical Society in 1906-07, "Our present knowledge of the Fauna of the Forth Area " (in which each group from Protozoa to Mammalia is considered separately), and of his painstaking lists of Invertebrata collected in various parts of Scotland. His ornithological work included the discovery of the nesting of the Pintail in Forth, many records of uncommon visitors to the country, and of the visits of Continental subspecies to our shores, the mapping out of the breeding stations of various species in the area and the collecting and tabulating of old records. We hope to see shortly a List of the Birds of Forth at which he was working to within a few days of his death. Mr. Evans was a Fellow of the Royal Society of Edinburgh, a Member of the British Ornithologists' Union, and had held the office of President of the Royal Physical Society of Edinburgh.

We have known Mr. Evans for many years and always found him most kind in his help, most able in his criticism. most generous in his praise. Handicapped as he was by ill health, his industry was immense, and the fruits of it and of his extensive and unusual knowledge were always at the service of those who sought them. Many times we foregathered on our natural history expeditions, and the sight of his spare form and intellectual face was always a welcome one. Every pocket was crammed with boxes and bottles for specimens: out they used to come, one after another, and as each specimen was duly secured, some comment was made on it which showed one how immensely he had studied and how much he knew. A rare and lovable personality has gone from our midst and one whom Scottish naturalists could ill spare and will greatly miss. But he has left a memorial of good work behind him which will endure and will prove invaluable to future workers in the science which he loved so well.

E.V.B.

#### LETTERS.

#### VELOCITY OF FLIGHT OF BIRDS.

To the Editors of British Birds.

SIRS,-On November 20th, 1922, a friend was driving along a straight road about 8 p.m. at 24 miles per hour per speedometer and saw a Little Owl (Athene noctua mira) on the road; it rose as the radiator hid it from view, so presumably 4 or 5 feet off the car, and flew straight in front in the glare of head lamps and easily out-distanced the car—this from a sitting start, so probably the bird was doing 40 M. PORTAL. miles per hour.

#### SWANMORE, HANTS.

#### THE WOODLARK AT NIGHT.

To the Editors of British Birds.

Sirs —With reference to Mr. Mapleton-Bree's letter (antea, p. 195). may I suggest the possibility of the bird he and his friend heard singing on the moonless night of June 20th, 1922, in a Somerset peat marsh, having been a Nightingale (Luscinia m. megarhyncha). I have worked this ground as an ornithologist for more than twenty-five years, but I have never found the Woodlark (Lullula a. arborea) there in the breeding season. The "ground" is quite unsuited to the tastes of this species and it is rather unlikely that a "stray" from the uplands would come to these bogs and sing a dark night through. A few scattered pairs of Nightingales breed regularly.

I was very often present there during April, May, June and July last and spent the whole of June 21st, the day following the night on which Mr. Mapleton-Bree was present, but I did not meet with any STANLEY LEWIS. Woodlarks.

CHEDDAR, SOMERSET.

#### ABERRANT SONG OF A CHIFF-CHAFF.

To the Editors of British Birds.

Sirs.—With reference to my note (antea, p. 134), Dr. F. G. Penrose of Bournemouth writes me as follows:-

"It may interest you to hear that the Chiff-Chaff you wrote about in British Birds occupied the upper part of the same Chine during the spring of 1920, and I frequently went to listen to the bird. In that year he almost always began with 'chiff-chaff' and ended up with the Willow Warbler's 'warble.'

"Some years ago there was a Chiff-Chaff close to the Tennis Pavilion at Durlston, Swanage, which used to add a Sedge Warbler song to its own, but I only heard it for one season.'

EAST DULWICH, LONDON, S.E. Dec. 5th, 1922. C. W. COLTHRUP.

#### INCUBATION PERIOD OF THE MERLIN AND AN APPEAL FOR THE RINGING OF THE YOUNG.

To the Editors of British Birds.

Sirs.—Mr. Stephen Birch, Head Keeper on the Bolton Abbey Estates, who has given me so much assistance in my work on the Merlin (Falco columbarius asalon), has this year, with the kind permission of His Grace the Duke of Devonshire, ringed some nestlings under the British Birds marking scheme. Only one family was handled, and of these Birch has sent me the following particulars. The first egg was laid on May 13th. The clutch of four was completed and incubation begun on the 21st. One egg eventually proved to be

infertile; the other three hatched together on the 29th day of incubation. Some of the old favoured nesting sites have again continued their runs. The spot on which many of the photographs illustrating my articles were taken (Fig. 1 and others), although both the birds that posed for me were subsequently shot, has again been used, the nest being less than four yards from last year's.

As the result of information collected from other sources since my return to Canada, I am more than ever interested in the Merlins of the West Riding. I shall be grateful if I may avail myself of this opportunity of appealing to those of your readers who take an active share in your marking scheme, to miss no opportunity of ringing the Merlin, particularly in Wales and Lancashire. As suggested elsewhere, I believe that an appreciable percentage of the Yorkshire breeding birds have been reared in other districts, and there is at least some reason for thinking that Wales is one source of supply. As this whole question could be elucidated by extensive ringing of the species, I should be most thankful to those who can lend a hand. The subject is of particular interest because of the invaluable light it would throw on a most neglected phase of bird migration, in the study of which I am now engaged. Whilst conditions on this side are favourable for the work, liberal ringing of the Merlin in England would prove of greater value than anything specific I have in sight over here at the present time. WILLIAM ROWAN.

UNIVERSITY OF ALBERTA, CANADA, October 30th, 1922.

#### SHORE-BIRDS' METHOD OF OBTAINING WORMS.

To the Editors of British Birds.

SIRS,—Referring to the notes by Mr. C. W. Colthrup and Rev. E. U. Savage (antea, pp. 170 and 193), on the method used by the Blackheaded Gull (Larus ridibundus) for obtaining worms. It is perhaps not so well known that the Ringed Plover (. Egialitis hiaticula) has a similar habit. In this case the action is not so much "stamping" as a very rapid vibration of one foot on the wet sand. The process is described in part in the article by Major W. R. Thompson on p. 185. At very close range, or with powerful glasses it would no doubt have been seen that the "sudden stop" there described was accompanied by this rapid vibratory movement of one foot. A. ASTLEY. Freshfield, Ambleside.

# BLACK-HEADED GULLS' METHOD OF OBTAINING WORMS.

To the Editors of British Birds.

Sirs,—With regard to Mr. E. U. Savage's reply (antea, p. 193), to my note on the above (antea, p. 170), my reason for sending it was that I could not find it recorded before, and found that quite a number of ornithological friends did not know of the habit, and one correspondent has written me doubting it, suggesting that the worms would seek safety under the soil rather than come to the surface to fall an easy prev to the Gulls.

The habit may be well known to Mr. Savage, but there are many ornithologists, who may never have the chance of observing it, or of

knowing that it occurs.

There are no doubt many such small occurrences, which if recorded, would add to the interest of the life history of a species. EAST DULWICH. C. W. COLTHRUP.

[Mr. E. Leonard Gill also writes that he notices this habit regularly in the Meadows, Edinburgh, though in the grass the action is inconspicuous and easily overlooked.—Eds.]

# BRITSHBIRDS

WITH WHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST." EDITED BY H. F. WITHERBY, M.B.E., F.Z.S., M.B.O.U.

ASSISTED BY

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### ORNITHOLOGICAL NOTES FROM NORFOLK FOR 1922.

#### 29TH ANNUAL REPORT.\*

 $\mathbf{B}\mathbf{Y}$ 

J. H. GURNEY, F.Z.S.

In once more offering to *British Birds* the annual Norfolk Report on birds, I must not omit to acknowledge the cooperation of a number of correspondents, and especially of Mr. Caton Haigh, Dr. Long, Dr. Riviere and Mr. Pashley, to all of whom grateful thanks are returned. Mr. Haigh's notes referring to Lincolnshire are enclosed by brackets.

The winter of 1921-22, which was closing at the time of my last Report, resembled as far as regards a plethora of wildfowl, that of 1911-12. It did not begin in earnest until January 4th, when sleet and snow quickly had the effect of depriving Ducks and Geese in the far north of food, and

driving them helter-skelter southwards.

In addition there came a contingent of Glaucous Gulls, and almost simultaneously with these northern visitors, an influx of Grebes. Fresh relays arrived from the far north in February, with more Goosanders and some beautiful Smews. "The whole place was alive with wild-fowl," wrote my Cley correspondent, but this did not last very long; on February 15th a change set in, the wind veered to the west, and their numbers quickly diminished.

A High Tide.—On January 1st and the day preceding there was a very unusual tide, the sea reaching to an alarming level at Cley and breaking through Salthouse sea-wall, with the result that land which had been reclaimed more than a hundred years ago, again became a very extensive broadwater which later on was resorted to by Ducks and other wild-

towl.

There was a thick mist on the night of August 29th, and as often happens in this month, bewildered *Limicolæ* attracted by the street lights of Norwich flew round and round the city for hours. Dr. Riviere first heard them at 10.30 p.m., and

<sup>\*</sup> This report which was evidently written up almost to the date of Mr. Gurney's death, was found among his papers and sent to us for publication by his son, Mr. Gerard Gurney. A few items, which were not confirmed, have been omitted from the report, but otherwise it is here published as written by the author. No attempt has been made to complete the year as it was thought better to leave this task to a successor, who we hope will continue this long and useful series of annual reports on the birds of Norfolk.—Eds.

again at I a.m. and 3 a.m., and recognized the voices of Grey Plover, Redshank, Whimbrel, Godwit, Dunlin and Ringed Plover. On the same night their noisy cries were heard at Cromer and also, Mr. Patterson tells me, at Yarmouth and Lowestoft.

#### Classified Notes.

HOODED CROW (Corvus cornix).

On May 21st, Dr. Long and Mr. Clarke saw five at Horsey, seated in a row on some faggots, namely two old birds and three young ones which could fly only a short distance, so they concluded that these had been reared on some of the matted Scotch firs near by, but no nest was found.

SERIN FINCH (Serinus canarius serinus).

A female was netted at Yarmouth on May 1st (Riviere, Brit. B., XVI., p. 47).

CROSSBILL (Loxia c. curvirostra).

April 16th. Dr. Long was shown a nest at North Wootton and watched the old birds feeding their young, but neither Crossbills nor their nests have been reported in east Norfolk.

Skylark (Alauda arvensis).

Towards the end of January—about the 20th—Jack Dale, the skipper of the "Agnes Mutten," being some fifty miles to sea off Lowestoft, saw large numbers of Skylarks flying east, evidently crossing from England to the continent. The reverse passage is witnessed every autumn, when tens of thousands come over, but the spring departure is rarely seen.

TITMICE (Parus).

At the beginning of October, Titmice of all five species showed up in considerable numbers, migrants from somewhere, which may or may not have crossed the sea. The Long-tailed Tit, however, is still far from common in this part of England, never having fully recovered.

LESSER GREY SHRIKE (Lanius minor).

A young bird shot on the sand-dunes at Palling on September 19th, still had the crown, back and scapulars barred and mottled, and no black frontal band on the forehead. Mr. Gunn was told by the boy who shot it that there were no others with it. (F. E. Gunn, *Brit. B.*, XVI, p. 161.)

EVERSMANN'S WARBLER (Phylloscopus b. borealis).

An example of this northern Warbler, the first recorded for England, was shot on September 4th in the marrams near Blakeney, the wind being N.W.2, with drizzling rain, by Mr. E. C. Arnold (*Brit. B.*, XVI., p. 162).

WOOD-WARBLER (Phylloscopus s. sibilatrix).

Early in June, Dr. Long was shown two nests at South Wootton, both containing young, and saw and heard three pairs of old birds.

[Yellow-browed Warbler (Phylloscopus h. præmium).

On August 28th, the wind being S.W. in Lincolnshire, and W.2 at Cromer, I went down to the shore but saw nothing except a Death's Head Moth which had been caught on a boat. Mr. Caton Haigh was more fortunate in Lincolnshire since he secured a Yellow-browed Warbler near Grimsby.]

GRASSHOPPER-WARBLER (Locustella n. nævia).

Early in May, some rush-cutters at Potter Heigham mowed out a Grasshopper-Warbler's nest containing two eggs.\* They were considerate enough to replace the nest carefully and cover it with a swathe of reeds, with the result that the bird returned and laid four more eggs, making a clutch of six, which were not hatched on May 16th.

ICTERINE WARBLER (Hippolais icterina).

[Mr. Caton Haigh informs me that one shot in north Lincolnshire on September 4th is a new bird to the Lincolnshire list, whereas Norfolk has produced nine]. On May 28th, Mr. Pashley saw what he believed to be an Icterine Warbler in a garden at Cley, but made no attempt to kill it.

HOOPOE ( $Upupa\ e.\ epops$ ).

One seen at Gorleston on August 14th (E. C. Saunders). [Another at Skegness on September 7th (Field).]

ROLLER (Coracias g. garrulus).

One at Southery, near Downham, on September 30th (R. Smith); the last certain occurrences were in September, 1901, September, 1902, and October, 1903.

Snowy Owl (Nyctea nyctea).

Somewhere about the 1st of May a Snowy Owl made its appearance on the coast, being first seen at Wayham, and then for a time frequenting the sand-hills at Horsey and

<sup>\*</sup> It should be noted that eggs are seldom laid until late in May.—Eps.

Winterton. On the 13th it had got as far as Sutton where it was seen by Dr. Long, after which it must have migrated as nothing more was heard of it.

A correspondent picked up some of its pellets, one of which measured  $2\frac{1}{4}$  inches with a circumference of nearly 4 inches, and contained the bones of a young rabbit, while another which was much smaller seemed to be made up of stems of the sea marram (Ammophila arundinacea).

The last Snowy Owl for this county was trapped in April, 1905, at Cockley Cley, which is some sixteen miles from the sea.

#### BARN-OWL (Tyto alba).

Re-appearance of the luminous Owl.—Early in January a luminous Barn-Owl (see Brit. B., i, p. 289, ii, p. 35, iii, p. 32) turned up at Rushall, near Harleston, but was not seen after February 3rd. Mr. George Saunders, who seems to have had the best view of it, describes the light as falling with some brilliancy on a straw stack when the Owl flew round it. Another witness, Mr. Dunnett, said anyone might have mistaken it for a distant lamp, while a third compared the bird of night to a pale star!

On February 15th, 1921, a luminous Barn-Owl was seen over the marshes at Haddiscoe, but its luminosity does not seem to have been great, it frequently lit on the marsh, and once or twice came quite close to Mr. Farman who was out duck flighting. It would appear, therefore, that these birds are not so rare as has been supposed.

With regard to the cause of this singular luminosity in Owls, no better theory has been suggested than that originally advanced, which ascribed it to contact with the luminous touchwood supposed to be produced by certain *Mycelium* forming fungi. Phosphorescent bacteria are liable to exist in any seat of decay and putrefaction; and a bird living in a hollow tree might be expected to rub against fungus growth.

#### ICELAND FALCON (Falco r. islandus).

Picked up on September 20th in Glenham Park, Suffolk (Field, October 7th).

#### RED-FOOTED FALCON (Falco vespertinus).

About the beginning of June an adult male Red-footed Falcon frequented Hickling Broad, where it was seen and identified by Mr. Montagu, whilst hawking for dragon-flies the remains of which were found scattered round a post on which it had been observed to perch.

#### COMMON BUZZARD (Buteo buteo).

On August 9th, Mr. W. G. Clarke watched five Buzzards circling for nearly an hour over the old Roman road, known as the Peddar's Way, probably a family party which possibly had been bred in the Thetford and Brandon district, where some of the fir-woods are extensive.

On July 1st, a very large bird of prey which Mr. Hy. Cole is confident was an Eagle was seen following an aeroplane over Cromer. On any less authority I should have hesitated to include it at such a date, but Mr. Cole is satisfied about its identity.

# Montagu's Harrier (Circus pygargus).

On May 16th my son found a nest, and at the same time the keeper found another, but although they seemed ready for eggs there was nothing in them, which agrees with previous experience of this species being by no means an early breeder. It is believed to be many years since *C. cyaneus* bred in the Broad district, although migrants are occasionally seen.

# Sparrow-Hawk (Accipiter nisus).

Several of these small Hawks came in from the sea in the early part of September, indeed I was told of three which at different times settled on the deck of a "trawler."

I find that at two days' old the eye in the nestling Sparrow-Hawk is slate-coloured, and for the first fourteen days frequent inspection revealed little change. In the fourth week a distinct hue of yellow is perceptible which goes on increasing to a beautiful lemon tint.

#### Spoonbill (Platalea 1. leucorodia).

One which came to Breydon tidal Broad, their timehonoured resort, on July 6th (Jary), and another seen at Hickling a short time before are all there are to record.

#### BITTERN (Botaurus stellaris).

On February 1st, Mr. Davy flushed a Bittern out of a wet ditch at Northrepps, an extraordinary place in which to find such a bird; orders were given for its protection.

#### GREY GEESE (Anser).

[On October 15th, Mr. Caton Haigh witnessed a great passage of Wild Geese, presumably Pink-footed (A. brachyrhynchus) maintained from 11 a.m. to 2 p.m., in north Lincolnshire. At first it was impossible to see them, although they could be

heard, as the sky was clouded with light clouds about a thousand feet high, and the Geese were well above the clouds, but at II.30 the clouds had partly broken, and the flocks of Geese could be distinguished. They were going E.S.E. against a gentle wind (S.E.I at Spurn, S.E.2 at Keswick)].

# Snow-Goose (Anser hyperboreus).

A Snow-Goose appeared, I am informed, about the beginning of October on Lord Leicester's marshes, where it associated with the herd of Pink-footed Geese. Some years ago four or five were seen on these Holkham meadows (*Zoologist*, 1910, p. 133, and 1913, pp. 168, 177), which were thought at the time to have escaped from Woburn.

# Brent Goose (Branta bernicla).

Brent Geese no longer come to our coast in the numbers which, according to old gunners, they once did, but the sharp weather in January brought a pretty good contingent of these birds. Mr. Gunn had six, all dark breasted, and several more were seen by Mr. Pashley and by Mr. Patterson at Yarmouth.

# GARGANEY (Anas querquedula).

On April 6th, a pair were seen on Scoulton Mere by Dr. Long. The Garganey is believed to be slightly on the increase. In May, a friend in another locality had two nests under supervision, and protected both of them successfully.

These nests, which were less than one hundred yards apart, were comfortable domiciles, but small when compared with a Shoveler's nest which was hard by. In spite of being on almost open ground, so snugly were they hidden that Mr. Gladstone and I would never have found them unaided. They contained five eggs apiece on May 16th and a fair supply of soft white-tipped down, the old birds were absent and evidently the clutches were not yet complete.

Afterwards we saw a pair of Garganeys which may have been the owners, and as there was a Teal on the wing at the same time, we were able to appreciate the difference.

# Scaup-Duck (Nyroca marila).

Scaups were among the wild-fowl which appeared during the hard weather on February 4th. Mr. Patterson and Mr. Cook watched about seventeen which had found their way into the herring-dock at Lowestoft, and the next day there were thirteen more weather-bound near the old extension pier. Several were also shot at Blakeney and Salthouse, and at the latter place a pair remained until July (Long).

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MERGANSER, GOOSANDER AND SMEW.

During the hard weather several Red-breasted Mergansers (Mergus serrator), were reported by Mr. Pashley, and, I understand, a liberal toll was taken of them on the coast by gunners. It often happens that when Mergansers turn up there are very few Goosanders (M. merganser), but this year January brought Norfolk a supply of both, as well as several fine Smews (M. albellus), good examples of all three coming to Norwich for preservation. At the same time many Smews appeared in Danish waters according to a published report, so probably they were spread over the continent.

#### Shag (Phalacrocorax graculus).

It was naturally concluded that the two Shags, whose presence in the heart of Norwich was chronicled last year (Brit. B., XV., p. 281), would in due course take their departure, but there they were, still living on our very dirty river, and occasionally bringing small fish to the surface up to May 26th when they left (H. J. Thouless). How they ever discovered that there were fish to be had in such a place, is a mystery.

FULMAR (Fulmarus glacialis).

On September 21st, an immature Fulmar was seen by Mr. Cole flying along the face of the cliffs at Cromer, and afterwards going out to sea.

GREAT CRESTED GREBE (Podiceps c. cristatus).

Habits.—These handsome Grebes are now to be met with on every Broad, and even on our rivers, and so long as there is an abundance of small roach for them (and their appetites are not small), each pair is content, and will appropriate a separate bend or corner.

There are few prettier sights that the stately "Loon" as she rises from the water, perhaps with young ones on her back; not only will they cling on to their parent when she dives, but even retain a firm hold if she chooses to fly from one part of a Broad to another. I have had two instances given me on good authority of a young one being seen to fall from the old Grebe when on the wing, she being frightened by the discharge of a gun.

SLAVONIAN, RED-NECKED AND BLACK-NECKED GREBES.

On the night of February 3rd and early morning of the 4th there was a storm from the west with sleet and snow which brought more Grebes to Hickling Broad and Barton Broad

than had been seen in that neighbourhood for many years, there being about twenty Slavonian (*P. auritus*) and five Red-necked Grebes (*P. griseigena*) on Hickling alone, but what there were on the other Broads I did not hear.

About a week before this migration Grebes had been rather abundant on the coast, where Mr. Pashley also reported a second and later arrival coinciding with their appearance on our inland waters. Altogether he handled twenty or more Red-necked Grebes, besides seeing several Slavonian, a few Great Crested and one Black-necked Grebe (*P. nigricollis*). A few more may have perished at sea as I heard of three being washed up (Doughty).

# DUNLIN (Calidris alpina).

On January 24th there was a bitter wind and frost, and the *Times* announced that it was colder in England than at Spitsbergen. That this would have its effect on birds was a safe prophecy, and accordingly the next day one of my correspondents reported a steady stream of Dunlins and Sanderlings passing east over one of the Broads situated about three miles from the sea, in flocks varying from six individuals to forty. A bitter east wind was blowing (force 6 at 7 a.m.), against which these birds were travelling.

From the direction of their flight, it would seem as if all these Dunlins came overland from the Wash to the Broads, and as they were still on the wing when last seen it is probable that they continued their course to Holland and Belgium.

# SPOTTED REDSHANK (Tringa erythropus).

An adult was seen at Salthouse on August 1st (G. Davey), two more were seen by Mr. Pinchen, but these may have been young birds.

#### GREAT SNIPE (Gallinago media).

Mr. Gunn received one from Knapton, near North Walsham, on September 30th.

# BLACK TERN (Hydrochelidon nigra).

Black Tern were to be seen on the flooded Cley marshes as late as July; Dr. Long saw a pair on July 6th, and it was even thought they might have eggs, but in such a place it was impossible to find them.

# Arctic Tern (Sterna paradisæa).

The breeding of the Arctic Tern at Blakeney which has been often suspected, is believed to have been established by

Dr. Riviere and two other observers on June 8th, but further confirmation is needed. A photograph of the eggs is given by Dr. Long in the Norwich Naturalist's *Transactions*. Roseate Terns also are thought to have had at least one nest at the Point.

#### SANDWICH TERN (Sterna s. sandvicensis).

This fine Tern seems to have established itself in Norfolk, eight nests each containing one egg were inspected by Dr. Riviere, while later Dr. Long ascertained that there were no less than ninety nests at Salthouse, of which Mr. Borrer has already given some account (*Brit. B.*, XVI., p. 138).

#### Sabine's Gull (Xema sabini).

About the 12th January a Sabine's Gull, as I learn from Mr. Pashley, was shot at Blakeney, but unfortunately lost in the sea, and during the same month some Little Gulls were seen.

# GLAUCOUS GULL (Larus hyperboreus).

As already suggested, it was probably the change to hard weather which brought the Glaucous Gulls to our coast in January. Mr. Pashley believes there were a hundred off Cley and Blakeney at one time, and several were shot. It was probably a part of the same contingent which found their way to the Broads, where at least a dozen were seen, but all young birds.

Among those shot were some in the white transition stage which has received the name of *Larus hutchinsi*.

# ICELAND GULL (Larus leucopterus).

During the migration of Glaucous Gulls, four or five from their smaller size were attributed to this species, and on one being shot at Blakeney and another at Yarmouth (*Brit. B.*, XV., p. 296), this surmise proved to be correct.

#### GREAT SKUA (Stercorarius s. skua).

On September 16th a Great Skua, which had been seen about for a week, was picked up dead, on or near the shore, and taken to Mr. Pashley, who considers it a very old bird, showing no signs of having been wounded.

#### COMMON CRANE (Megalornis grus).

A Crane, as I am informed by Mr. Pashley, frequented the Cley and Salthouse marshes in the first week of September, but no ornithologist was able to get a view of it.

It is rather curious that we do not have more Cranes in England, as they are not very rare on passage on the north coast of France (cf. Rev. Française d'Orn., ii, p. 71), while in eastern Belgium they are occasionally seen in large numbers (Le Gerfaut, 1913, p. 176).

#### Соот (Fulica a. atra).

Coots are very expeditious in surmounting the difficulty of a sudden rise in the water caused by copious rain, but afterwards when the waters shrink to their normal level, the nest is often much too high, being sometimes a foot and a half or more above the surface. This year a nest was found with as many as twelve eggs, a very unusual clutch, and eleven of them, I am informed, hatched out.

For the most part the nests are securely anchored, but occasionally one gets afloat.

# QUAIL (Coturnix c. coturnix).

Quails were heard near Docking about June 12th, but no nest was found. On September 1st one was shot near Norwich, and on September 14th three were seen by Major Gurney at Bawdeswell.

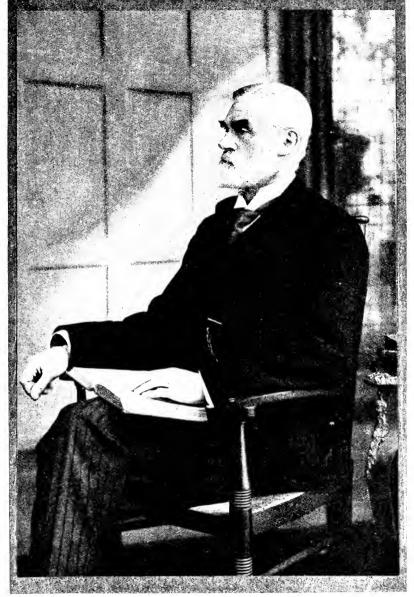
#### OBITUARY.

#### JOHN HENRY GURNEY.

"The old order changeth, yielding place to new," and slowly but surely those who may be styled as belonging to the old school of ornithologists are dying out. Having been privileged to know not a few of these older naturalists, I may perhaps be allowed to say that I have always been struck by their never failing courtesy and helpfulness as compared with the somewhat combative criticism of the younger generation. Possibly this opinion may be due to the veneration of youth for age but, be this as it may, it will be agreed on all hands that the outstanding characteristics of the late John Henry Gurney were his humility and his kindness.

John Henry Gurney came of a family which has been prominent for many generations in the public life of Norfolk where the Gurneys have long been noted for their philanthropy and integrity. His father [John Henry, b. 1819, d. 1890] represented Lynn in Parliament in 1857 and 1859, and although recognized as a man of affairs was best known as an ornithologist: in his day he stood pre-eminent in his knowledge of the Accipitres and Striges and his collection of the Birds of Prev. now in the Norwich Castle Museum, was for a long time the finest out of London. John Henry the younger may be said to have been born an ornithologist; his father, as may well be supposed, having made him familiar with birds, both living and dead, from his infancy. He was born at Easton Lodge, near Norwich, on 31st July, 1848, and was educated at Harrow School. For a short time he was in Messrs. Backhouse's bank at Darlington, but the greater part of his life was spent in Norfolk where he ably fulfilled his duties as a large landowner and country gentleman and, as such, took a prominent part in local, religious and philanthropic work. At the time of his death he was a Justice of the Peace and a Deputy Lieutenant for Norfolk, of which county he was High Sheriff in 1894. He is survived by his wife, three daughters and a son who, it is most interesting to note, carries on the scientific traditions of his forefathers, since he is well known as an aviculturist and lepidopterist.

As an ornithologist J. H. Gurney has been said to have had an international reputation. He was elected a Fellow of the Zoological Society in 1868, a Member of the British Ornithologists' Union in 1870 and a Fellow of the Linnean Society in 1885. His first contribution to ornithology,



Maull  $\times \Gamma \circ \mathbf{x}$ , Phot.]

Herry

Born July 31st, 1848.

Died November 8th, 1922.

"Variety of the Swallow," appeared in The Ibis of 1866,\* and since that date not a year passed without some important contribution from his pen to the science which he loved and served so well. In 1018 he had printed a list of his articles dealing with ornithology† and this gives a total of 127 separate items; this total, however, seems inadequate when compared with the list of his publications given in Messrs. Mullens and Kirke Swann's Bibliography of British Ornithology ± and it must also be remembered that in any case this total has to be augmented not only by his publications since 1918, but also by his contributions to many periodicals which can hardly be regarded as having a scientific status. publications the most important is undoubtedly *The Gannet*. a bird with a history, \ and he admitted a partiality for the Gannet ever since his first visit to Ailsa Craig in 1871; his keenness on all that related to this bird was remarkable and. though it can hardly be said to have amounted to a fetish. it led him to incorporate a Gannet in his book-plate of which a reproduction is given on page 243. His Rambles of a Naturalist in Egypt and other countries, published in 1876, provides a record of some of his earlier travels and in 1884 he contributed "A Catalogue of the Birds of Norfolk" to Mason's History of Norfolk. In 1885, with Col. C. Russell and Dr. Elliott Coues, he published *The House Sparrow*\*\* and two years later he issued a pamphlet "The Misdeeds of the Sparrow" †† dealing with the same subject. His Catalogue of a collection of British Birds<sup>‡‡</sup> published in 1892, gives the localities, sex

<sup>\*</sup> The Ibis, Vol. II. (1866), p. 423.

 $<sup>\</sup>dagger$  Articles on Ornithology and Ornithological Reports for the County of Norfolk by J.H.G. Pamphlet 8vo, 1918, pp. 8. Printed by Messrs. Taylor and Francis.

<sup>‡ 1917,</sup> pp. 260-264.

<sup>§</sup> The Gannet, a bird with a history, 1 vol., 8vo, pp. li+567. Published by Witherby & Co., 1913.

<sup>||</sup> Rambles of a Naturalist in Egypt and other countries 1 vol., 8vo, pp. vi+307. Published by Jarrold & Sons, 1876.

<sup>¶</sup> This catalogue was reprinted separately, 1 vol., 8vo, p. 47. Printed by Messrs. Wertheimer, Lea & Co., 1884. 5 pp. "additions and corrections" thereto were issued in December, 1885.

<sup>\*\*</sup> The House Sparrow, I vol., post 8vo, pp. vi+7o. Published by Messrs. William Wesley & Son. [1885.]

<sup>††</sup> The Misdeeds of the Sparrow, pamphlet, post 8vo, pp. 9. Published by Messrs. Gurney & Jackson, 1887.

<sup>‡‡</sup> Catalogue of a collection of British Birds, 1 vol. 8vo, pp. ii+ 33. Published by Mr. R. H. Porter, 1892.

and state of plumage of the 1,126 specimens of 308 species then in the collection formed by himself and his father, and since that date the collection has continuously grown in size and in importance. His Catalogue of the Birds of Prey,\* published two years later, demonstrates his intimate knowledge of this class of Birds. If his "Gannet Book" (as he used to call it) is his best known work, his Early Annals of Ornithology,† published in 1921, was the book which he most



enjoyed writing for he had a real love of antiquarian research and of old time literature, and in this connection it may be mentioned that he possessed a large library containing many ornithological books and pamphlets of which some were of great rarity.

The publications mentioned above may be regarded as J. H. Gurney's more important books, but his contributions

<sup>\*</sup> Catalogue of the Birds of Prey (Accipitres and Striges), 1 vol. 8vo, pp. 56. Published by Mr. R. H. Porter, 1894.

<sup>†</sup> Early Anna's of Ornithology, 1 vol. 8vo, pp. iv+240. Published by Messrs. H. F. & G. Witherby, 1921.

to the scientific magazines of his day give the most direct evidence as to his unremitting zeal in the study of birds. Such notes as he contributed were always careful and concise and his "Ornithological Notes from Norfolk" (published in either *The Zoologist, British Birds* (Magazine), or *The Transactions of the Norwich and Nofolk Naturalists' Society*) were continued without intermission from 1879 up till the time of his death, and this series of notes is in itself an exemplary record of continuity and energy.

It was only to be expected that J. H. Gurney should have taken a keen interest in local ornithology and he was one of the original members of the Norfolk and Norwich Naturalists' Society which was founded in March, 1869, and of which he was President in 1881-2, 1888-9, 1898-9 and 1919-20. He was always a generous supporter of the local Wild Birds' Protection Societies and when these became merged under the supervision of the local Naturalists' Society in 1921, he was elected President of the Norfolk Wild Birds' Protection Committee. For many years he was associated with the work of the Norwich Museum and he was co-opted on the Museum Committee in 1804, when the collections were transferred to the Castle. His father had made the collection of raptorial birds one of the first in the world and the son dutifully carried on his work in obtaining new specimens as they became available and in materially assisting the Museum authorities with his wide knowledge of birds.

J. H. Gurney has been described as "a man of striking appearance, a noticeable personality in any gathering and a careful speaker whose words always carried weight. Although at times showing a certain brusqueness, due to concentration of thought, he was ordinarily a delightful, well-informed companion, always ready to give of his store of knowledge to those who sought his assistance."\* I remember his delighted amusement at being described by a Scots game-keeper as "yon man who is terrible fond of birds," and his death, at Keswick Hall near Norwich on 8th November, 1922, has brought sorrow to a far wider circle of friends than that composed of ornithologists, for he was regarded by all who had the privilege of knowing him as one whose sole aim in life was to do as much good as he could to his fellow-men.

H.S.G.

<sup>\*</sup> Eastern Daily Press, 10th November, 1922.

# HENRY JOHN ELWES.

British Birds is not the magazine to record in detail the various and memorable achievements both in travel and in science performed by the late Henry John Elwes; for this reason the following article has been considerably curtailed and has taken the form of a personal reminiscence rather than that of an obituary notice.

Elwes once described himself to me as a "jack of all trades and master of none," but it has been said of him that "he was perhaps the greatest living traveller of the day, an authority second to no one in Europe on trees, a lepidopterist whose collections enrich our national museum at South Kensington, the author of what is still the authoritative work on Lilies and a big-game hunter and ornithologist of great repute."

Henry John Elwes was the eldest son of John Henry Elwes and Mary, daughter of the late Sir R, Bromley, 3rd Baronet of Stoke, Newark, and he was born at Elm Green. near Cirencester, on 16th May, 1846. In due course he was sent to a private school near Tunbridge Wells at which were twelve other boys (including the Hon. Thomas de Grey, afterwards Lord Walsingham and famous as an entomologist, ornithologist and game-shot) all of whom were keen on natural history. In 1857 he went to Eton where, so Elwes told me, he spent most of his time—and all his pocket money—on birds; only six years ago he vividly recalled his chagrin when a Great Northern Diver's egg (bought for ten shillings from Joseph Dunn the collector in the Orkneys and Shetlands) arrived at Eton smashed in the post. He left Eton at the early age of sixteen as it was thought that he was not studious enough, but two years later he passed sixth out of one hundred and twenty-six candidates for the Army. He was gazetted to the 1st Battalion Scots Guards in 1865 and thereafter any leave that he could obtain was spent in travel. He made more than one expedition to the Hebrides and the Orkneys in pursuit of Wild Fowl and these trips gained him the sobriquet of "The Wild Goose" or "Wild Goose Chaser." On one visit to Islay he killed five different species of Geese and when in the Orkneys he used to shoot with Joseph Dunn, employing the same boat's crew as that with which Dunn was eventually drowned on 28th November, 1872. Elwes himself nearly lost his life off the Hebrides and it was curious how many ships in which he had sailed were afterwards wrecked.

After five years' service in the Guards Elwes retired with the rank of Captain and began that life of scientific travel and adventure from which a rich harvest was to result. His father, so he told me, never taught him anything except how to ride, and he attributed the sound basis of all his scientific work to the instruction of such men as Alfred Newton, Osbert Salvin and Frederick Du Cane Godman (his brother-in-law and greatest friend) who persuaded him in 1866 to join the British Ornithologists' Union. Men such as these inculcated him with the precept that real solid work can only be achieved by thorough mastery of the subject in hand and he had the greatest dislike for "wishy washy spectacular articles" which he contemned as of no use for the advancement of science. He regarded Henry Seebohm (with whom he collected in Holland) as one of our outstanding modern ornithologists, but he readily ceded the place d'honneur to Alfred Newton.

Elwes's first publication appeared in *The Ibis* of 1867\* the subject being Birds of Prev in Scotland, and this was followed two years later by "Bird Stations of the Outer Hebrides."† To the same journal he contributed a joint paper with T. E. Buckley, in 1870, on the Birds of Turkeyt and in 1880 "Field-notes on the Birds of Denmark"; he also wrote a revision of the genus Henicurus and described a new Crossoptilon from Tibet.\*\* His paper "On the Geographical Distribution of Asiatic Birds," published in 1873,†† is his most important contribution to Ornithology and to it he attributed his election as Fellow of the Royal Society in 1897. He was not, however, a regular contributor to the ornithological literature of his day, though in the course of his travels he often came across little known species and in 1912 he succeeded in bringing home alive several specimens of the Mikado Pheasant from Formosa. In 1921 he was elected President of the British Ornithologists' Union and he held this position at the time of his death, when he was its oldest Member.

A very brief summary of his achievements other than ornithological is perhaps permissible:—As a traveller he made extensive journeys in Turkey, Asia Minor, Tibet, and India four times, in North America, Mexico, Chile, Russia and

<sup>\*</sup> The Ibis, 1867, pp. 143-4.

<sup>†</sup> Loc. cit., 1869, pp. 20-37.

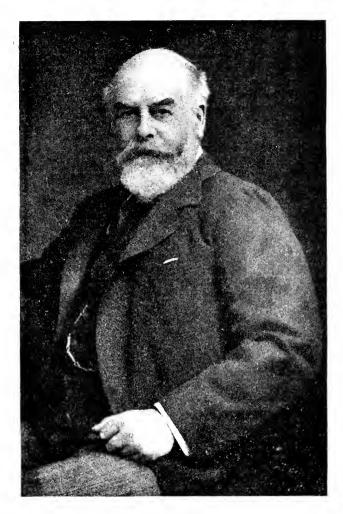
<sup>‡</sup> Loc. cit., 1870, pp. 59-77, 188-201, 327-31.

<sup>§</sup> Loc. cit., 1880, pp. 385-389.

Loc. cit., 1872, pp. 250-262.

<sup>\*\*</sup> Loc. cit., 1881, pp. 399-401.

<sup>††</sup> Proceedings of the Zoological Society of London, 1873, pp. 645-682.



Elliott & Fry, Phot.]

M Slives

Born May 16th, 1846.

Died November 26th, 1922.

Siberia three times; in Formosa, China and Japan twice, and in Nepal and Sikkim. In short Elwes's career in life may almost be said to have been peripatetic for he would set off for Tampico or Ta-Kao as unconcernedly as any ordinary man would leave London for Brighton. This love of travel was probably in part hereditary, for his uncle Robert Elwes had, in his time, been a great traveller.\* As a botanist it may be claimed for Henry John Elwes that he introduced many species to this country and the Botanical Magazine figured no less than eighty-seven plants of his growing or finding, many of which are now familiar in our gardens. His great monograph on the genus Lilium appeared in 1880 and is still regarded as the standard work on the subject. arboriculturist he devoted much attention to practical forestry and he will ever be famous for his monumental work The Trees of Great Britain and Ireland (begun in 1006 and finished in 1913), written in conjunction with his friend Professor Augustine Henry, and in this connection it may be noted that Elwes expressed himself as much in favour of the advantages to be gained by two men collaborating in the writing of a book. As a lepidopterist he published twentyseven papers, between the years 1880 and 1896, describing numerous new species of his own finding, and his paper on the "Lepidoptera of Sikkim," printed in the Transactions of the Entomological Society, is perhaps the most noteworthy; in 1902 he presented his collection of Palæarctic Butterflies to the Natural History Museum at South Kensington. He was the official representative of Great Britain at the Botanical and Horticultural Congresses at Amsterdam in 1877 and at St. Petersburg in 1884, and was the Scientific Member of the Indian Embassy to Tibet in 1886. He was a past President of the Royal Arboricultural Society and of the Entomological Society of London; past vice-president of the Royal Horticultural Society, of which he was Victoria medallist, and he was, besides, a member of numerous other learned societies.

As a large landowner he took far more than the usual interest in agriculture than is displayed by the ordinary country squire and he strove to advance the prosperity of the industry by testing, and when possible adopting, approved methods and appliances. The various phases of sheep raising received his close and constant attention and he was

<sup>\*</sup> Robert Elwes wrote and illustrated "A Sketcher's Tour round the World": 1854, and "W.S.W., a voyage in that direction to the West Indies": 1866.

the owner of one of the few English flocks of pure-bred Shetland sheep. As a sportsman he was born and bred. He has been described as a lucky rather than a patient fisherman and, though very keen on ordinary shooting, it was the quest of big-game which of all sports appealed to him most. He was devoted to fox-hunting in his own country where he may be said to have been the Father of the Cotswold Hunt; a noted fox-preserver his coverts were never drawn blank. In politics he was a staunch Conservative. He was a Justice of the Peace, a Deputy Lieutenant for Gloucestershire, and at one time he interested himself in local government, both on the Board of Guardians and on the Bench.

The above is but a brief summary of the achievements of a crowded and useful life. Henry John Elwes died at his home at Colesborne on 26th November, 1922, being survived by his widow and only son, Lt.-Col. Cecil Elwes, D.S.O., A few words must suffice here to describe his wonderful home in the Cotswolds which he inherited from his father in 1891, and of which he was passionately fond. Those who had the pleasure of staying at Colesborne were amazed at the collections and trophies which Elwes had acquired in all parts of the world and which were to be found throughout the house; whilst his gardens with their rows of hothouses filled with the rarest of plants and his forestry experiments and rare trees, vied in interest with the strange sheep and deer which were kept in paddocks near the house. But inside or outside Colesborne the man himself was the commanding feature: six feet in height, nobly proportioned. erect of carriage and strikingly handsome, Elwes was above everything else a fluent talker. That he was versatile to a degree has been shown and though his critics might regard him as impracticable, arbitrary and even self-opinionated, no one could but envy him his wonderful power of assimilating knowledge, his prodigious memory and his kindness of heart which was as thoughtful as that of a woman. Many amusing stories have been told against him. For example, it is said that on one occasion he was asked to meet an official of the British Museum who was a recognized authority on sheep. Having been introduced, before the controversial subject had even been mentioned, the British Museum man was about to speak when Elwes clapped him on the back and said, "Now I know what you're going to say, but you're wrong, you're wrong, you're wrong." Elwes used to be invited annually to shoot by the late Lord Sherborne, but the year he went to Formosa he was unable to turn up at Sherborne. One of the usual guests, remarking his absence, asked at dinner, "Where is Elwes?" "Gone to Formosa," replied someone. "But there are cannibals there, aren't there?" "Yes," said Lord Sherborne, "but I do not advise them to eat Elwes. he is sure to disagree with them." But if there are stories against Elwes they are only the penalty of greatness, for that he was a great man nobody can deny; whilst of his generosity and thoughtfulness only those who experienced them are qualified to judge. It seemed an inexorable fate that Elwes, brilliant conversationalist as he was, should have been struck down in the last few months of his life by a malady which deprived him of his power of speech. This was a premonition that his end was not far off and the calm way in which he busied himself with the preparation of his biography and set about the disposal of his treasures and possessions was a matter of wonderment to all. Orders which could no longer be given by word of mouth had each to be laboriously written down, but there were no complaints and no lamentations; throughout his life Henry John Elwes had commanded admiration not only for his energy but also for his determination; up to the last he showed, what had probably been his life-long charac-H.S.G. teristic, pluck.



# LINNET NESTING IN A CORNFIELD.

In May, 1922, a pair of Linnets (Carduelis c. cannabina) nested in the middle of a cornfield in the Huntingdonshire fens. The nest was situated on the ground under a dock leaf, no bush or tree being anywhere near.

E. Peake.

#### SINGING OF CHAFFINCH.

The fact that the Chaffinch (Fringilla c. cælebs) renders its song imperfectly in the early months of the year is well known, but has it been noted that it becomes imperfect again at the end of the singing season, in the last days of June, or first week of July? In 1922, a Chaffinch had its station just outside my bedroom window at Bluntisham, Hunts., and almost without exception it sang some portion of its song in the early morning till the beginning of October. Sometimes it was only the first few notes, sometimes repeated many times, sometimes only once or twice. On September 1st, for instance, a bright morning, it kept on for more than an hour, only once completing the whole song. The Chaffinches, in this part, one and all end the song weakly, without the emphatic "wee-do" which I have always noted elsewhere.

E. Peake.

# TREE-SPARROW BREEDING IN SOMERSETSHIRE.

In cutting down an old apple tree in my orchard at Martock, Somerset, on November 25th, 1922, I came across the nest of a Tree-Sparrow (*Passer montanus*) with eggs, three of which, though dried up were unbroken. I knew the nest was there in May, 1922, but thought it to be a House-Sparrow's and did not investigate it. I had not seen a Tree-Sparrow's nest here since May, 1912.

JOSEPH H. SYMES.

# SONG-PERIOD OF CORN-BUNTING.

The Practical Handbook gives the song-period of the Corn-Bunting (Emberiza c. calandra) as from February to October. On January 5th, 1923, whilst on the Sussex Downs near East Dean, I heard at least three individuals singing persistently, the day being fine and fairly warm. I believe that the song is occasionally heard during mild weather, even in the depth

of winter, and I shall be interested to know if it has also been recorded in November and December. W. H. Thorpe.

[Where resident it apparently sings during all the winter months, fide C. J. and H. G. Alexander (Vol. IV., p. 278). Mr. C. J. Pring also reports a male singing in Somerset on January 2nd, 1923.—EDS.]

# WOOD-LARK IN SUSSEX.

DURING April and May, 1922, I came across several pairs of Wood-Larks (*Lullula a. arborea*) in north-west Sussex, close to the Hampshire border. I know the species well and the cocks were all singing, so that although I did not find any nests, they were probably breeding there.

J. Beddall Smith.

# BLUE-HEADED WAGTAIL BREEDING IN SUSSEX.

In mid-May, 1922, I found a pair of Blue-headed Wagtails (Motacilla flava) near Seaford. The cock was always in the same place for a week and very noisy and the hen was evidently sitting in a field of young wheat, but I did not find the nest.

J. Beddall Smith.

# COAL-TIT HIDING FOOD.

With reference to the note by Sir T. Lewis (antea, p. 216), describing a Coal-Tit (Parus a. britannicus) hiding beech-nuts. This habit must surely be well known, as it is very constant. Coal-Tits almost invariably hide food in the manner described, as may readily be noticed by anyone who puts out scraps of food for the birds in hard weather. While the Great and Blue Tits will eat the food on the spot, the Coal-Tits will carry crumbs of bread, or any other food available, and will hide them in many places all over the immediate neighbourhood. Whether this hidden food is ever found again except by accident I do not know.

A. ASTLEY.

[We can find only the briefest mention of the habit in Yarrell (B.B., I., p. 490) and none elsewhere.—Eds.]

# NUMBER OF FEATHERS IN NESTS OF LONG-TAILED TIT.

WITH reference to the note by the Rev. E. U. Savage (antea, p. 217), on the number of feathers in six nests of the Long-tailed Tit (Ægithalos caudatus roscus) and the distance of each nest from the nearest source of supply. A further

analysis of the figures given leads to a most interesting result. On the assumption that only one feather was brought on each trip the total mileage travelled by these six pairs of birds in obtaining feathers works out as follows:-

Nest	No.	I	 	 276	miles.
,,	No.	2	 	 612	,,
, ,	No.	3	 	 716	,,
,,	No.	4	 	 616	,,
,,	No.	5	 ; •	 618	,,
	No.	6	 	 618	

The remarkable similarity in most of these distances is, to say the least, surprising, and it would almost seem to suggest that the birds have only a certain amount of energy to expend on each process of nest-building, and that when that amount of energy has been used the process will cease, regardless of the number of feathers obtained. In the case of Nest No. 1 it is possible that an ample supply of feathers was obtainable before the energy allowance had been exhausted, but the similarity in distance in the other five cases would certainly seem to call for some explanation. investigation into the question would be of interest.

A. ASTLEY.

# SONG-THRUSH LAYING IN BLACKBIRD'S NEST.

On April 21st, 1910, I discovered the nest of a Blackbird (T. merula). It was situated close to the ground on the bole of a large tree and was undoubtedly deserted, being wet and soiled. It contained two eggs. Close by, on the ground, was the newly laid egg of a Song-Thrush (T. philomelus). After photographing the Blackbird's nest, I removed one egg on account of its peculiar markings and placed that of the Thrush in its place. On visiting the nest again on April 26th a Thrush was disturbed from the nest, which was found to contain three more Thrush's eggs and was dry and showed signs of being occupied. I was unable to visit the nest again.

GUTHRIE HALL.

# ROBIN FEEDING ON HAWS.

On December 31st, 1922, a warm wet day, when animal food must have been easy to come by, a Robin (Erithacus rubecula) in a whitethorn bush at Berkhamsted was eating haws, which it plucked from the twigs and swallowed whole. How many it ate I do not know, but it took three at

intervals of a few seconds, and then flew away, as my friend, Mr. F. Brownsword, and I stood and watched it from a distance of five or six yards. The Robin is, perhaps, more frugivorous than is usually supposed—it is said to eat rowanberries upon occasion—but surely haws are seldom included in its diet. The large hard nuts and the skin are probably ejected in castings, as the seeds and skin of ripe currants certainly are.

Chas. Oldham.

# HEN-HARRIER AND ROUGH-LEGGED BUZZARD IN DENBIGHSHIRE.

I RECENTLY examined at the local taxidermist's an adult female Hen-Harrier (Circus cyaneus) which had been trapped on Sir Watkin Wynn's Denbighshire Moors on November 20th, 1922. The keeper who trapped it reports that he recently obtained two Rough-legged Buzzards (Butco l. lagopus) on the same moors. It will be seen on reference to my V. Fauna N. Wales that the last-named species has visited these moors more frequently than any other part of the district.

H. E. FORREST.

# SHOVELER BREEDING IN HUNTINGDONSHIRE.

A PAIR of Shovelers (Spatula clypcata) frequented Berry Fen in the parish of Bluntisham in May, 1922, and on August 1st, a young drake, one of a brood, was shot there by Mr. C. G. Tebbutt.

E. Peake.

# GREY PHALAROPE IN WIGTOWNSHIRE.

On November 11th, 1922, a Grey Phalarope (*Phalaropus fulicarius*) was killed against the lantern of the Corsewall Lighthouse, Stranraer. The skin is now in the Royal Scottish Museum.

M. Bedford.

#### ROSEATE TERN IN CUMBERLAND.

In his Vertebrate Fauna of Lakeland, Macpherson says of the Roseate Tern (Sterna dougallii): "No specimen of the Roseate Tern has been obtained in Cumberland since 1834." In view of this, it may be of interest to state that, a short time ago, my friend, the Rev. E. U. Savage, and I were looking over the collection of Mr. Moore Kitchen at Allonby on the Cumberland coast, and in one of the cases was an immature Tern which looked to us like a Roseate. Mr. Kitchen has since sent us the specimen for examination, and it has proved without doubt to be of this species. He tells us that he picked it up

on the village green in September, 1902, the day after a great storm. Another one like it was entangled in the telegraph wires close by, and, as he was unable to disentangle it, it hung there until it rotted away.

H. W. Robinson.

#### GREAT SKUA AND SNOW-GOOSE IN NORFOLK.

Two Great Skuas (*Stercorarius skua*) were seen at Stiffkey on December 20th, 1922, and on the same date a Snow-Goose (*Anser hyperborcus*) was seen at Holkham. The latter had frequented the marshes there for some weeks.

J. BEDDALL SMITH.

ORTOLAN BUNTING IN ROSS-SHIRE.—Col. and Mrs. R. Meinertzhagen record (*Scot. Nat.*, 1922, p. 165) that a young female *Emberiza hortulana* was obtained near Portmahomack on September 15th, 1922. The species has very rarely been recorded from the Scottish mainland.

GREY WAGTAIL BREEDING IN SUSSEX.—Mr. J. Beddall Smith informs us that in 1922 he found two pairs of Grey Wagtails (*Motacilla c. cincrea*) nesting in north-west Sussex. The nests could not be seen into as they were both built beside mill-wheels.

Great Grey Shrikes in Staffordshire and Somersetshire.—Mr. B. Bryan writes us that a Great Grey Shrike (Lanius e. excubitor) was taken alive on limed twigs at Longton, Staffs., on October 22nd, 1922. The bird struck at a Goldfinch, which it nearly decapitated, and immediately afterwards at a Lesser Redpoll, which together with the Goldfinch was being used by a bird-catcher as a call bird. The Great Grey Shrike has been recorded for Staffordshire on more than twelve occasions.

Mr. C. J. Pring informs us that a Great Grey Shrike was shot on January 3rd, 1923, at North Curry, about 8 miles from Taunton, Somerset, by a local farmer, and was brought to him for identification. The bird was probably a female, as the brown wavy bars on the breast were very noticeable. The last recorded specimen in the county was obtained in November, 1920. [See Vol. XIV., p. 237.]

Hoopoe in Cardiganshire and Denbighshire.—Mr. J. C. Harford records (*Field*, 3/V1/1922, p. 766), that a *Upupa epops* was picked up under telegraph wires near Aberayron in the second week in May, 1922. In the same Journal

(20/V/1922, p. 692) Mr. R. N. Bevan-Prichard states that he saw a Hoopoe near Wrexham on April 20th, 1922.

Garganey in Dumbartonshire.—Mr. J. Robertson states (Scot. Nat., 1922, p. 174) that he saw three Anas querquedula on April 2nd, 1922, near Summerston Station, where a pair had been observed in May, 1920 (see Brit. B., Vol. XIV., p. 237).

LITTLE BITTERN IN CORNWALL AND BUCKINGHAMSHIRE.—Mr. F. W. Frohawk records (*Field*, 28/x/1922, p. 655), that a female *Ixobrychus m. mimutus* was captured alive on May 9th or 10th, 1922, near Mousehole, near Penzance, and was kept in captivity for a few days, when it died. Mr. E. Tyrwhitt-Drake states (*t.c.*, p. 714) that a bird of this species was shot in the winter of 1921-2 on his lake at Amersham.

Green Sandpiper in Winter in Dorsetshire.—The Duchess of Bedford informs us that she saw a Green Sandpiper (*Tringa ochropus*) on January 15th, 1923, a few miles from Dorchester. The bird, although in good condition, appeared very tame compared with others met with in migration seasons. Two other birds of the same species were seen on the 21st and they are reported to be regular winter residents in this district. For other recent winter records see Vol. XV., pp. 214, 274.

Great Snipe in Scotland.—Great Snipe (Gallinago media) are reported to have been shot at Mid-Clyth, Caithness, on September 9th, 1922, by Mr. C. G. Talbot-Ponsonby (Field, 7/X/1922, p. 539); near Crossmichael, Kirkcudbrightshire, on October 11th, 1922, by Mr. W. M. Russell (Scot. Nat., 1922, p. 174); and at Drum, Aberdeenshire, on November 3rd, 1922, by Col. L. E. S. Parry (Field, 11/XI/1922, p. 714).

Baillon's Crake in Nottinghamshire.—Mr. J. Whitaker states (*Field*, 13/V/1922, p. 658) that he saw a *Porzana p. intermedia* at Rainworth in December, 1921, and again on March 5th, 1922, when he had a clear view of the bird.

#### REVIEWS.

De Vôgels van Nederland. Door Prof. Dr. E. D. Van Oort. Vol. I. Large 4to., 87 coloured plates. 'S Gravenhage, M. Nijhoff.

The first volume of this work, which is being issued in parts, is now complete and when bound makes a fine book. Dr. van Oort adopts an ascending systematic order to which

ornithologists in this country have never been accustomed. though it is perhaps the more scientifically correct. But apart from this, the author's order is unusual, as will be seen by the following: Grebes, Divers, Petrels, Gannet, Cormorants, Herons, Bitterns, Storks, Ibis, Spoonbill, Flamingo, Swans, Geese and Ducks. All the birds in this volume are on the British List with three exceptions (Anas formosa, Erismatura leucocebhala and Phalacrocorax c. subcormoranus), and of these the last-named, which is figured with a nest in a tree, may occur in this country, while it seems doubtful if Anas formosa should be included in the Dutch List as a truly wild visitor. The chief interest in the work to British ornithologists will lie, we think, in the numerous coloured plates which have been well reproduced from the paintings of Heer M. A. Koekkoek. These are on the whole excellent. The drawings are rather stiff and formal, but as figures of the birds they are good, and the surroundings are for the most part pleasing. They should prove of considerable value, because in most cases several figures are given of the same bird portraying it at different ages and seasons. For the sake of general appearance it is a pity that the plates were not printed on larger paper, as they are smaller than the text and in many the drawings are too large and the margin is consequently insignificant. The Dutch language may not be known to many English ornithologists, but we can heartily commend the work for the sake of its useful and excellent plates.

The Fauna of British India, including Ceylon and Burma. (Published under the authority of the Secretary of State for India in Council.) Birds. Vol. I. (second edition). By E. C. Stuart Baker, O.B.E., F.Z.S., etc. London, Taylor & Francis.

Ornithologists in India as a whole have been decidedly slow in adopting modern ideas in ornithology, and this was probably owing to there being no up-to-date standard work on the subject. This, however, is now being provided, and Mr. Stuart Baker's first volume will, we feel sure, be warmly welcomed. Oates's first volume of the first edition of this work was published as long ago as 1889, and since then a vast amount has been done in Indian ornithology. There is ample evidence of this in the work before us, which contains accounts of 476 forms, while in Oates's volume the same families were represented by only 357. Although the total number of different forms known is thus increased, the number of species as here considered is actually lessened, owing to the fact that Mr. Baker has treated geographical forms trinomially. But this is by no means the only point of difference, for Mr. Baker gives full accounts of breeding and other habits which were dealt with in very meagre fashion in the first edition.

As only two of the birds in this volume are on the British list it would be out of place here to do more than thus draw attention to Mr. Baker's work; which we trust will receive the wide recognition it deserves.

#### LETTERS.

#### BIRD MIGRATION IN THE ALPS.

To the Editors of BRITISH BIRDS.

SIRS,—In several papers (Revue française d'Ornithologie, Falco, Chasseur, etc.) I have proved that the belief that birds on migration avoid the Alpine region is erroneous, though the latest publications (Dr. Bretscher, Der l'ogelzug in Mitteleuropa, 1921, and von Lucanus, Rätsel des l'ogelzuges, 1922) affirm that there is no migration in the Alps.

The Commission Ornithologique Suisse possesses some 60,000 records from the Swiss Alps. The *Inchiesta Italiana Ornitologica* (an official publication, like the Swiss one) gives thousands of records and the numerous papers written on the birds of Austria, Styria, Salzburg, Carinthia, Tyrol, Vorarlberg (300 publications in Tyrol), Switzerland, Italy, Savoy, Maritime Alps contain many thousands, though, some thirty years ago, ornithologists noted and published records for rare birds only. Another proof, the "Roccoli," the well-known buildings or towers for bird-catching, are numerous within the Italian region of the Alps, up to 120 kilometres from its southern limit (Valteline, Aosta Valley, Tessin, up to 1,000 metres alt.). Bird-catching is practised for from three to six months of the year, with other engines in all the valleys of the Italian Alps, and I know of a little town in the upper regions where they get, during October, from one to twelve quintals of Larks every day! The number of birds passing through that narrow valley of Valteline, twice a year, is estimated by the well-known ornithologist, Dr. Galli-Valerio, at millions.

The results of my researches on migration in the Alpine regions are

as follows :---

Birds do not avoid the Alps, though a great many (? the majority)

of the migrants prefer to travel along the course of the ranges.

They enter the Alpine regions through nearly all the valleys, from Vienna to Geneva—in autumn, from Nice to Geneva, Turin to Udine in spring. It is an often observed fact that in Switzerland, sepcially between Constance and Aarau, birds of the same kind take the way to the Alps (N.—S.), while others continue their way to S.W. or W.

The birds pass over the mountains N.—S. (S. to N. in spring), or they remain within the Alpine regions for several days and thus traverse a great part of the length of the Alps, from Austria to France. They fly along the valley in search of food and do not mind a change of direction for some miles. But often one flock keeps to its route, while another takes to some lateral valley or mounts up to the crest in order to pass over to another valley. As the birds are dependent on the few places offering sufficient food, it is impossible for them to travel in large flocks, so that in the Alpine regions these are seldom met with, but the birds migrate in small flocks or family parties.

The birds cross over to other valleys, not only at the passes, but very often over the crests, summits and glaciers, probably because of the violent winds that rage in the passes.

A great many pass over the Alps high over all the crests and peaks.

Those that pass in small flocks reunite with others of the same kind before leaving the Alps on suitable feeding ground in the lower reaches of the valleys.

When leaving the Alps they frequently scatter again, one party to the S., another of the same kind to the W., another to the S.E., etc., though they once more reunite before crossing the sea, to split up again on arriving at the opposite coast. Birds generally cross the mountains, passes, crests, glaciers, summits, during the night, when the winds are calm. But in this as in other things there are no unalterable rules for their behaviour.

OLTEN, SWITZERLAND.

G. von Burg.

#### WOOD-LARK AT NIGHT IN SOMERSET.

To the Editors of BRITISH BIRDS.

SIRS,—In reply to Mr. Stanley Lewis's note in your January issue (antea, p. 227), in which he suggests that I mistook the song of the Nightingale for that of the Wood-Lark, I should like to state that I am perfectly well acquainted with the songs of both these birds, and that I made no such mistake. On the night in question my attention was particularly drawn to the song of this bird because it was not that of the Nightingale. I have known that district of Somerset for many years, and have never before come across the Wood-Lark (Lullula a. arborea) there in the breeding season. I agree with Mr. Lewis that this peat-marsh is not well suited to this species, though a few pairs breed, or used to do so till lately, on the Blackdown Hills on the borders of Devon and Somerset,

ALLESLEY, COVENTRY, January 3rd, 1923.

## THE "SCAMEL"—A SUGGESTION.

To the Editors of BRITISH BIRDS.

"Cal. I pr'ythee, let me bring thee where crabs grow;
And I, with my long nails, will dig thee pig-nuts;
Show thee a jay's nest, and instruct thee how
To snare the nimble marmozet; I'll bring thee
To clust'ring filberds, and sometimes I'll get thee
Young scamels from the rock. Wilt thou go with me?"

Tempest, Act II., Sc. ii.

The word "scamels" occurring here has so far baffled the commentators of Shakespear. In Newton's Dictionary of Birds (pp. 814, 815) there is the following note:—"Scamel, a word, used once by Shakespear (Tempest, Act II., Sc.ii, line 176) that has given rise to many conjectures (cf., Wright, Cambr. Shakesp. i., p. 51); but is commonly accepted as a bird's name, a signification rendered more likely by the fact that at Blakeney, on the coast of Norfolk, it was applied to a Godwit (Stevenson, B. Norf. ii., p. 260), though it is not to be supposed that Shakespear used it in that sense. It seems to be otherwise unknown, and the most plausible suggestions are that the word was a misprint for 'Seamel' (i.e., Sea-Mew) or for 'Stannel' (a Kestrel)."

Now, on the shores of Strangford Lough (Co. Down, Ireland), the word "scameler" is an uncommon local name for the Red-breasted Merganser (Mergus serrator), and I wish to suggest that here we have the clue to what the writer of the Tempest meant by "scamels." I believe, however, that if Shakespear had any actual bird in mind it

was the Sheld-Duck and not the Merganser.

On Strangford Lough the common local name for the Merganser is the "scaler" or, less usually, the "scale-duck." But the latter is also a local name for the Sheld-Duck (cf. Newton's *Dict.*, p. 814), and, as readers will know, the superficial observer is very apt to mistake the one bird for the other.

There is a very considerable Scottish element on the shores of Strangford, due to the settlement of people from North Britain during the Plantations, and many of the folk-names in use have a Scottish origin,

e.g., "whaup" is the usual name for the Curlew. It is practically certain that the word "scameler" came across the water in the same way. I presume, therefore, that at one time it was a current name in Scotland for the Merganser. It would seem that the word "scameler" or "scamel" came to be known in England and it is probable that it migrated thence from Scotland. But the Merganser does not breed in England whereas the Sheld-Duck does, and is a much better known bird. My belief is that by the confusion which is so easy in the popular mind, the Sheld-Duck came to be called "scameler," and the fact that Shakespear mentions "young scamels" adds weight to this view.

It is, of course, possible that like our word "Sea-gull," as used popularly, "scamel" was a general name for various sea-fowl—perhaps ducks—but, as I have said above, if an actual species was referred to it was most probably the Sheld-Duck.

Edward A. Armstrong.

[A slip for "Stannel" (=Stand-Gale, i.e., Kestrel) seems more probable as they are rock-breeders, and taking of young hawks in Shakespear's days seems much more probable than the young of Sheld-Duck which are usually met with on sandy or muddy shores, rather than on rocks.—Eds.]

# BLACK-HEADED GULLS' METHOD OF OBTAINING WORMS. To the Editors of British Birds.

SIRS,—In his letter, in reply to my note, Mr. C. W. Colthrup states (antea, p. 228) that he has not been able to find any record of the Blackheaded Gulls' method of obtaining worms.

May I refer him to Our Common Sea Birds by Dr. P. R. Lowe, p. 162, where he will find the habit mentioned. E. U. SAVAGE. RAUGHTON HEAD, CUMBERLAND, January 15th, 1923.

## GULLS' METHOD OF OBTAINING WORMS.

To the Editors of British Birds.

SIRS,—Most fishermen and dwellers on the coast know of this method of bringing worms to the surface. The larger Gulls, particularly the Herring-Gull (*Larus argentatus*) also use this treading and stamping to bring cockles to the surface, and shell-fishermen use an illegal instrument known as the "Jumbo" for the same purpose, for which they have Herring-Gulls to thank as their teachers.

H. W. ROBINSON. CATON.

#### ICELAND GULLS IN DORSET.

To the Editors of British Birds.

Sirs,—With reference to my notes (antea, p. 183) on some Dorsetshire Birds; Mr. H. W. Mapleton-Bree of Gable End, Allesley, Coventry, writing me, on December 2nd, 1922, amongst other interesting notes, on the birds of Poole and neighbourhood, makes the following observations with regard to Iceland Gulls which I think are worth recording: "I was residing in Parkstone, Dorset, from about 1890. The specimen of Larus leucopterus—Iceland Gull—you mention as shot by Mr. G. R. Peck (who is a personal friend of mine) was a female. It had been haunting the locality for some little time accompanied by a male, which latter came a little later on into my possession. I have the specimen stuffed now. Both these birds were in immature plumage."

W. R. Thompson.

RAVELLO, CARLTON ROAD, WEYMOUTH, Dec. 21st, 1922.

# BRITISHBIRDS

WITH WHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST." EDITED BY H. F. WITHERBY, M.B.E., F.Z.S., M.B.O.U.

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# THE MIGRATIONS OF SOME BRITISH DUCKS: RESULTS OF THE MARKING METHOD.

BY

A. LANDSBOROUGH THOMSON, O.B.E., D.Sc.

The writer is again greatly indebted to Mr. H. F. Witherby for an invitation to work up a section of the data collected under the *British Birds* Marking Scheme, and for the suggestion that these records should for this purpose be combined with those obtained by the writer himself during the course of the Aberdeen University Bird-Migration Inquiry. He wishes, also, to make grateful acknowledgment of the help and advice which Mr. Witherby has given him during the

preparation of this report.

The material now dealt with is that relating to the Ducks of various species. The records included are those which have so far been obtained under the British Birds scheme and those which were obtained during the now concluded Aberdeen University inquiry; the data of the two inquiries, being so similar in nature and referring to the same geographical area, are obviously enhanced in value by being analysed in combined form. Many of the British Birds records have already appeared in scattered form in these pages, and a summary of those relating to the Mallard has also been published by Mr. Witherby.\* The Aberdeen University records were with one exception included in the writer's final report on that inquiry, some of them in more detail than need be repeated here. Ducks have also been marked in this country independently of the two large scale inquiries, notably by Sir Richard Graham in Cumberland, but there has been no means of including such records as have been obtained in this way. Records of birds marked abroad and recovered in this country have, however, been added—so far as ascertainable from published sources—in the form of supplementary notes, and reference is also made to the principal foreign records relating to the European area as a whole.

Many birds, particularly Mallard, have been marked as hand-reared ducklings, and in some of these cases the eggs have been brought from a distance. These records are kept apart from those of truly wild ducklings, although a comparison of results does not actually suggest any difference in migrational behaviour. When birds have been marked as adults,

<sup>\*</sup> Witherby, H. F., British Birds, 1919-20, XIII., p. 295.

<sup>†</sup> Thomson, A. L., Ibis, 1921, Eleventh Series, III., pp. 500 and 517.

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however, it has obviously been impossible to distinguish between those of hand-reared and those of wild origin. Adults recorded by the markers as being used as half tame "call ducks" have been excluded altogether, as have all doubtful and incomplete records of any kind.

Where figures are given for the numbers of birds marked under the *British Birds* scheme, they are taken up to the end of 1921 only, while all recovery records are included up to the time of going to press; the corresponding figures for the Aberdeen University inquiry may be regarded as complete and final in both respects.

# SHELD-DUCK (Tadorna tadorna).

Out of 72 and 31 birds marked during the *British Birds* and Aberdeen University inquiries respectively, 3 have been recovered in each case.

Marked as Young Birds.—The British Birds records are all of Sheld-Duck recovered near the places of marking after an interval of only one or two months. The Aberdeen University birds were all marked at the same time, and each of them, it so happens, was recovered under circumstances of considerable interest, the particulars being as follows:—

Ring Number.		nd Place of larking.	Date and Place of Recovery.			
A.U.26519 (case 447)	16.7.12	Hampshire	10.2.13	Cornwall		
A.U.26760 (case 448)	,,	,,	ea.12.8.13	Busum, Schleswig Holstein, N.W. Germany		
A.U.25886 (case 906)	,,	23	18.8.17	Mouth of the Weser N.W. Germany		

Summary.—There is one record showing movement within Great Britain, and there are two instances of native British birds being found in subsequent summers on the north-western coasts of Germany.

# MALLARD (Anas platyrhyncha).

Out of 686 birds marked under the *British Birds* scheme and 425 during the Aberdeen University inquiry, 153 and 96 respectively have been recovered. The recovery rate is therefore 22.4 per cent. over all, but in certain batches the proportion was very high; out of 67 hand-reared ducklings marked in 1912 at Dunecht House, Aberdeenshire, no

less than 39 were recovered; and of 38 hand-reared ducklings marked in the same year at Leadenham House, Lincolnshire, 19 were recovered. The high percentage of recoveries for the species may be attributed to the large size of the bird and to the fact that it is both shot for sport and trapped for the market. The fact that the recovery data refer to so large a proportion of the birds marked adds to the value of the method. At the same time it should be noted that there are greater chances of the birds being reported from the places of marking than from elsewhere, owing to the fact that so much ringing has been done on sporting estates and that the markers will never fail to notify recoveries there; shooting at the places of marking may begin, moreover, before much migration could be expected.

Marked as Young Birds.—The records may be summarized as follows:—

#### TABLE A.

Analysis of Reappearance Records of Mallard Marked as Young Birds in Great Britain.

(The marking locality in 42 cases was Lancashire, the remainder being scattered throughout Great Britain. One bird marked in Ireland and recovered at the same place is excluded from the table.)

Year of bird's life (dating			Recovered at or near place of marking.		Recovered at a Distance.	
from 1st April of summer of marking).		April- Sept.	October- March.		October- March.	
First year			14	35		
Second year			I	2		
Third year			2	I		I
Fourth year			_	I		
Fifth year						1
Total			17	30	0	2

Grand Total: 58 records and individuals.

The two birds recovered at a distance were (B.B.31245) marked on July 20th, 1911, in Lancashire and recovered on January 31st, 1914, in Norfolk, and (B.B.37713) marked on May 22nd, 1918, in Lancashire, and recovered on November 2nd, 1922, in Co. Down, Ireland.

Marked as Young Birds, Hand-Reared.—The records may

be summarized as follows:-

TABLE B.

Analysis of Reappearance Records of Mallard Marked as Hand-Reared Young Birds in Great Britain.

(With one exception the marking localities fall into two groups, namely, 69 birds marked in Aberdeenshire and 50 marked in Essex, Norfolk and Lincolnshire.)

			near I	red at or blace of king.	Recovered at a Distance.	
Year of bird's life (dating from 1st April of summer of marking).			April– Sept.	October- March.	April– Sept.	October- March.
First year			.4 I	56		_
Second year			7	10	3	
Third vear			ì	_		-
Fourth year					I	No. of Contrast
Eleventli year				-	_	I
Total			49	66	1	I

Grand Total: 120 records and individuals.

The bird reported in its eleventh winter, just in time for inclusion here, was described as a drake. The ring had worn very well and was still perfectly strong and legible despite the long period which had elapsed.

TABLE BB.
(Details of Cases in Table B, columns 4 and 5.)
PARTICULARS OF MALLARD MARKED AS HAND-REARED YOUNG BIRDS
IN GREAT BRITAIN AND RECOVERED AT A DISTANCE.

Ring	Date and		Date and Place of Recovery.			
Number.	Mark	ring.				
A.U.16020 (Case 367)	summer, 10	Aberdeen- shire	18.7.11	Gottrup, Aalborg, N. Denmark (female with brood).		
B.B.32431	14.6.12	Norfolk	4.8.13	Near Bouchain, Nord, France.		
B.B.9147	26.5.10	Essex	16.8.11	Near Danzig, Prussia.		
A.U.16066 (Case 738)	summer, 10	Aberdeen- shire	10.8.13	Osterley, Upland Sweden.		
A.U.19475 (Case 923)	3.8.12	Aberdeen- shire	ca.12.22	Co. Antrim, Ireland.		

Marked as Adults in Summer.—Of adult Mallard caught and marked in Great Britain in summer, I was recovered in its first summer, I in its second summer and again in its second winter, 4 in their first winter, I in its third winter, and I in its seventh winter, all at or near the

respective places of marking; a total of 9 records and 8 individuals. (The record of the bird which survived until the seventh year is for Northumberland, the others are for Berkshire, Warwickshire and Staffordshire.)

Marked as Adults in Winter.—The records may be summarized as follows:—

#### TABLE C.

Analysis of Reappearance Records of Mallard Caught and Marked in Great Britain in Winter.

(All except two—birds recovered at place of marking in second winter—were marked in Wigtownshire.)

Year of bird's			Recovered near pla mark	ace of	Recovered at a Distance.	
(dating from 1st October of winter of marking).			October– March.		October– March.	
First year			8	2		7
Second year			3.2		4	1
Third year			5	I	-	_
Fourth year			_	_		-
Fifth year			I		I	-
Total			46	3	5	8

Grand Total: 62 records and individuals.

#### TABLE CC.

(Details of cases in Table C, columns 4 and 5.)

Particulars of Mallard Marked as Adults in Winter in Great Britain and Recovered at a Distance.

Ring Number.		nd Place of Marking	Date and Place of Recovery.		
B.B. <sub>37384</sub>	28.2,21	Wigtownshire	12.5.21	Færoes	
B.B.36682	27.2.15	.,	1.8.15	Near Amäl, S. Sweden	
B.B.37391	28.2.21	*	1.8.22	Lake Vänern, S. Sweden	
B.B.20534	3.3.22	17	-,8,22	Kvevlaks Wasa, Finland.	
B.B.37363	28.2.21	2.1	4.8.21	Near Gefle, S. Sweden	
B.B.34819	28.2,14	2.9	12.8.14	Norrbotten, N. Sweden	
B.B.34820	28.2.14	,,	17.8.14	Kaskö, Finland	
B.B.37389	28.2.21	, ,	23.9.21	Norrköping, S. Sweden	
B.B.32636	28.2.13	,,	11.13	Räneä, N. Sweden	
B.B.34853	28.2.14	,,	14.11.14	Scania, S. Sweden	
B.B.34805	28.2.14	,,	26.11.14	Friesland, Holland	
B.B.34872	28.3.16	,,	31.1.17	Co. Antrim, Ireland	
B.B.34842	28.2.14	,,	10.17	Hasslö, S. Sweden	

Marked Abroad and Recovered in the British Isles.—A Mallard (Helsingfors 22) marked as a young bird on June 17th, 1913, at Osterbotten, Finland, was recovered on December 10th, 1913, in Caithness (Palmen, Medd. Soc. Fauna et Flora Fennica, 1914, XL., 206).

Other Foreign Records.—Young birds marked in the Baltic States have been recovered in winter in Northern Germany, Belgium and North-eastern France, and others marked in East Prussia have been recovered in winter in Saxony and Moravia (Thienemann, J.f.O., 1915, 470; 1916, 534; and 1918, 366). Adults marked in summer in Holland have been recovered in North-eastern France in winter and in Southern Germany in a subsequent summer: adults marked in spring in Holland have been recovered in summer in Schleswig-Holstein, Sweden and Finland, and in autumn in Sweden (Van Oort, Notes from the Leyden Museum, 1912, XXXIV., 247; and 1913, XXXV., 211).

Summary.—Mallard marked in Great Britain in summer. whether as wild young birds, as hand-reared young birds, or as adults, have been recovered mainly at or near the respective places of marking, and the high proportion of recoveries to the total of birds marked gives special validity to the conclusion that most of our native Mallard are strictly sedentary. Only three birds, marked as ducklings, were recorded elsewhere in the British Isles. Four, marked as hand-reared ducklings, were recovered abroad, namely in North-eastern France, Northern Denmark, North-eastern Germany, and Sweden, but it is noteworthy that all these were reported in summer, i.e. at the same season as that in which they were marked in Great Britain in a previous year; in one case a native British Mallard was definitely reported as breeding in the foreign locality. In view of the fact that there is no evidence supporting—and much evidence against—the supposition that there is any ordinary migration on the part of our native Mallard, these exceptional cases seem best explained by the theory that the birds emigrated in spring in company with foreign birds with which they had chanced to become associated in this country during the winter.

The records of Mallard marked in winter are chiefly of interest in so far as they indicate the summer quarters of the birds which are winter visitors to the British Isles. There are 8 records of this kind from Sweden, 2 from Finland, and I from the Færoes. These are supplemented by a record of a bird marked in Finland in summer and recovered in Scotland in winter. Two Mallard marked in Great Britain in winter

were recovered in subsequent winters in Ireland and Holland respectively.

GADWALL (Anas strepera).

From a small number of birds marked during the *British Birds* inquiry, 2 have been recovered.

Marked as Young Birds.—Both these (B.B. 34121, 34123) were marked in Northumberland as young birds in August and were recovered in the same district in winter—February of the second winter and November of the fourth.

Summary.—The only two records indicate absence of movement on the part of native British birds.

TEAL (Anas c. crecea).

Out of 149 birds marked during the *British Birds* inquiry and 28 during the Aberdeen University inquiry, 17 and 2

respectively have been recovered.

Marked as Young Birds.—A.U. 23973 (Case 446) was marked as a duckling on May 29th, 1912, in Inverness-shire and recovered on February 5th, 1914, in Co. Waterford, Ireland. One marked in Perthshire was recovered near the place of marking later in the same summer.

Marked as a Young Bird, Hand-Reared.—B.B. 67116 was marked on August 23rd, 1919, in Cumberland and recovered on September 27th, 1921, near Christiansand, Southern Norway.

Marked as Adults in Summer.—B.B. 18396 was marked on July 24th, 1912, in Cumberland and recovered on February 28th, 1913, in Co. Limerick, Ireland. Two marked in Northumberland were recovered in the same district, one in the following autumn and the other after an interval of exactly two years.

Marked as Adults in Winter.—The records may be analysed as follows:—

TABLE D.

Analysis of Reappearance Records of Teal Marked as Adults in Winter in Great Britain.

Year of the bi	from	ıst	Recovered at or near place of marking.		Recovered at a Distance.	
October of winter of marking).					October– March.	
First year			2	_	-	5
Second year			3		2	
Third year				1		_
Total			5	I	2	.5

Grand total: 13 records and individuals.

The particulars of the cases of recovery at a distance are as follows:—

#### TABLE DD

Particulars of Tenl Marked as Adults in Winter in Great Britain and Recovered at a Distance.

(Details of Table D., columns 4 and 5.)

Ring Number.		nd Place of arking.	Date and Place of Recovery.		
B.B.8651	'' autumn,'	'10 Stafford- shire	29.7.11	Dalarne, S.Sweden	
B.B.25811	16.1.15	Wigtown- shire	1.8.15	Nr. Stockholm, S Sweden	
B.B.67051	3.17	Wigtown- shire	4.8.17	Morayshire	
B.B.3949	14.2.10	Essex	21.8,10	Hamburg, N.W. Germany	
B.B.25813	17.2.15	Wigtown- shire	24.9.15	Montgomeryshire	
B.B.3939	14.2.10	Essex	11.10	Cumberland	
B.B.8635	30.12,12	Stafford- shire	—. <b>1</b> 2.13	Scheveningen, Holland.	

Marked Abroad and Recovered in the British Isles.—There are the following records of birds marked on autumn passage on the North Sea island of Fanö on the western coast of Denmark, and of a bird marked in Holland (Mortensen, Vidensk. Meddel, fra den naturh. Foren. i Kbhvn., 1908, 127; and Van Oort, Notes from the Leyden Museum, 1912, XXXIV., 248):—

TABLE E. Particulars of Teal Marked Abroad and Recovered in the British Isles.

Ring Number.	Date and Mark		Date and Place of Recovery.		
Viborg 61	14-15.10.07	Fanö, Denmark	10.12.07	Co. Limerick, Ireland	
Viborg 60	,,	,,	31.12.07	Co. Kerry, Ireland	
Viborg 85	,,	,,	5.1.08	Herefordshire	
Viborg 71	.,,	11	17.1.08	Cornwall	
Viborg 68	,	1,	30.1.08	Dorsetshire	
Viborg 24	,,	,,	24.2.08	Co. Fermanagh, Ireland	
Viborg 83	,,	,,	28.2.08	Queens's Co., Ireland	
Viborg 51	11	, ,,	21.8.08	Co. Galway, Ireland	
Leyden1982	28.7.11	Leyden, Holland	7-13. 1.12	Dorsetshire	

Other Foreign Records.—Of birds marked on autumn passage on the Danish island of Fano, 8 were recovered in the British Isles as shown above in Table E., I was recovered in Schleswig-Holstein, 2 in Holland, 7 in Western France, I in Southern Spain, 1 in North-eastern Italy and 1 (in summer) in Sweden (Mortensen, loc. cit.). Among the Helsingfors records for this species is one of a bird marked in Russian Lapland in summer and recovered in Northern Italy in its first winter (Palmen. Medd. Soc. Fauna et Flora Fennica, 1914, XL., 207). There German records showing iournevs Schleswig-Holstein to Northern France, from Petrograd to Southern Hungary, and from near Petrograd to South-eastern Italy, although the second of these birds was not clearly identified as between Teal and Garganey (Thienemann, *I.f.O.*, 1915, 473; and 1916, 539), and there is a Swedish record of a journey from Lapland to Deux Sevres, Western France (fide Schaanning, Norsk Ornith, Tids., 1920).

Summary.—Two records indicate winter emigration to Ireland on the part of at least some of the birds native to Scotland and the north of England, and there are no records indicating a more sedentary habit on the part of others. One bird native (hand-reared) to the north of England was recovered the following autumn in Norway. Two records from Sweden, one from Northern Germany and one from Holland indicate part of the summer area of birds which are winter visitors to the British Isles, while there are also eight cases of birds marked on autumn passage in Denmark and recovered in winter in the south of England and in Ireland (others reaching Holland, France, Southern Spain and Northeastern Italy): a bird marked in Holland in summer was also recovered in the south of England in winter. A bird marked one winter in England was recovered in the next in Holland.

# WIGEON (Anas penelope).

Out of 103 birds marked during the *British Birds* inquiry and 8 during the Aberdeen University inquiry, 8 and 2 respectively have been recovered.

Marked as Young Birds.—Two members of the same brood (A.U. 2052, Case 4, and A.U. 2050, Case 118) marked on June 19th, 1909, in Sutherlandshire, Scotland, were recovered respectively on September 3rd, 1909, at Groningen, Holland, and about January 2nd, 1911, in Nottinghamshire.

Marked as Young Birds, Hand-Reared.—Two marked in Cumberland were recovered near the same place in the autumn of the following year.

Marked as an Adult in Summer.—B.B. 65001 was marked on August 18th, 1915, in Northumberland and recovered in the autumn of 1917 in Jutland, Denmark. (The dates are such that more than one interpretation of this record is

possible.)

Marked as Adults in Winter.—B.B. 36917 was marked on October 6th, 1915, in Warwickshire and recovered on April 21st, 1918, near Uralsk, about a hundred miles north of the Caspian Sea and just within the boundaries of Asia: the two points are more than 2,000 miles apart and in practically the same latitude as each other. Four other birds marked in winter, one in Wigtownshire and three in Warwickshire, were all recovered in the following winter at or near the places of marking.

Marked Abroad and Recovered in the British Isles.—A Wigeon numbered "Rossitten 26768p" was obtained on January 14th, 1916, in Co. Mayo, Ireland; although exact details of marking are lacking, the ring is known to have been issued to a marker in East Prussia in 1913 (Thienemann,

J.f.O., 1921, 27).

Other Foreign Records.—One marked in summer in Holland was recovered in winter in Northern France, and another marked in summer in Holland, but as a call-duck, was recovered in the autumn of the following year in Arctic Finland (Thienemann, J.f.O., 1912, Sonderheft, 48, and 1914, 463).

Summary.—As far as the few records go, it appears that there may be southward movement and emigration on the part of at least some of our native birds, and that some of those which are winter visitors to the British Isles may come from Eastern Europe and even from Western Asia.

# PINTAIL (Anas a. acuta).

From a small number of birds marked during the British

Birds inquiry, 2 have been recovered.

Marked as a Young Bird.—B.B. 8457 was marked as a young bird on June 6th, 1910, in the Orkney Isles and was recovered on October 5th, 1910, near the same place.

Marked as an Adult in Summer.—B.B. 33462 was marked on August 11th, 1915, in Northumberland and recovered on

August 4th, 1919, in the same district.

Marked Abroad and Recovered in the British Isles.—There are the three following records of birds marked on migration on the North Sea island of Fanö at the south-western corner

of Denmark (Mortensen, Dansk. Ornith. Foren. Tids., 1914, 113–159):—

Ring Number.		and Place of larking.	Date and Place of Recovery.		
Viborg 366	20.10.08	Fanö, Denmark	20.11.08	Ross-shire,	
Viborg 361	20.10.08	Fanö, Denmark Fanö Denmark	early	Co. Tyrone,	
Viborg 261	1.10.08	Fanö, Denmark	10,12,09	Co. Kerry, Ireland	

Other Foreign Records.—320 Pintail caught in a duck-decoy on the Danish island of Fanö were marked by Mortensen (loc. cit.) in the autumns of 1908, 1909 and 1910. Of these no fewer than 67, or twenty per cent., were recovered, mainly at a distance. At various times 16 were recovered in the region of marking. In winter 3 were recovered in the British Isles, as already mentioned: 8 in Holland: 12 in France. mainly in the north-east and on the west coast, but in one case in the extreme south; 6 in Spain, one on the south coast and the rest on the east; 8 in Italy, mainly on the Adriatic coast: and 2 in Austria-Hungary, as it then was. also on the Adriatic seaboard. In summer 2 were recovered in Southern Sweden; 3 in Finland, one of them as far north as latitude 68° 27′ N.; and 9 in Russia, ranging from Kief in the south-west and Novgorod in the west to the eastern side of the Urals (59° 51′ E.) and to the region east of the White Sea (six records, the furthest being from 67° 36′ N. and 52° 30′ E.). The series, indeed, represents one of the most successful pieces of intensive study by the marking method that has yet been done. There are also 3 records of birds marked in autumn on Sylt, North Frisian Islands, and recovered in winter in Holland (Weigold, I.f.O., 1913, Sonderheft I, 52; and Krüss, J.f.O., 1918, Sonderheft, 30).

Summary.—The only two records of birds marked in Great Britain are of no special interest, but birds marked in autumn in Denmark have been recovered in winter in the north of Scotland and in Ireland. Apart from the British area, migration from Northern Europe to Western and Southern Europe has been very clearly demonstrated.

# SHOVELER (Spatula clypeata).

From a small number of birds marked during the *British Birds* inquiry, 3 have been recovered.

Marked as a Young Bird.—B.B. 37070 was marked as a young bird on May 31st, 1917, in Lancashire and was recovered on January 15th, 1920, in Overijsel, Holland.

Marked as Adults in Winter.—B.B. 36718 was marked on January 16th, 1915, in Warwickshire and recovered on August 7th, 1920, in Jutland, Denmark. B.B. 36704 was marked in January, 1915, in Warwickshire and was recovered in January, 1917, in Merionethshire.

Foreign Records.—A Shoveler marked in summer in Sweden was recovered in its first autumn in North-eastern France, and one marked as an adult duck on its nest in Northern Germany was recovered the following summer in Holland (Thienemann,

J f.O., 1914, 462, and 1919, 278).

Summary.—There is a single record indicating emigration (to Holland) on the part of a native bird and a single record from Denmark which probably indicates a portion of the summer area of winter visitors to Great Britain.

# COMMON POCHARD (Nyroca f. ferina).

From a small number of birds marked during the British

Birds inquiry, 3 have been recovered.

Marked as Adults in Winter.—B.B. 33029 was marked on February 19th, 1913, in Warwickshire and recovered on August 7th, 1913, at Bütgow, Mecklenburg, Northern Germany. The other two birds were both marked in November in Warwickshire; one was recovered at the same place twice during the following three weeks, and the other was recovered in Staffordshire in January two years later.

Summary.—A single record from Northern Germany probably indicates part of the summer area of birds which

are winter visitors to the British Isles.

# TUFTED DUCK (Nyroca f. fuligula).

Out of 65 birds marked during the *British Birds* inquiry, 8 have been recovered.

Marked as Young Birds.—Of young birds marked in Northumberland in August, 6 were recovered in the same county, or in the neighbouring county of Cumberland:—2 in their first autumn, I in its first winter, I in its second winter, I in its third winter, and I in its fifth summer. Another bird (B.B. 67535) was marked on August 27th, 1915, in Northumberland and recovered early in July, 1917, at Kunsamo, Northern Finland.

Marked as an Adult in Summer.—One marked in Northumberland was recovered in the third subsequent winter in the same district.

Marked Abroad and Recovered in the British Isles.—A Tufted Duck (Helsingfors 358) marked on July 13th, 1913, on the Aland Islands, off the Finnish coast, was recovered on

December 31st, 1913, on Lough Neagh, Northern Ireland (Palmen, Medd. Soc. Fauna et Flora Fennica, 1914, XL., 207).

Summary.—Six records indicate a sedentary habit on the part of native British birds. One bird bred in Great Britain was recovered in its third summer in Northern Finland, a further instance of a duck finding a new summer area. One bred on the Aland Islands reached Ireland in its first winter.

COMMON EIDER (Somateria m. mollissima).

There is only one record.

Marked as a Young Bird.—A young bird (B.B. 495) marked in June, 1909, in the Orkney Isles was recovered in February, 1910, near the same place.

RED-BREASTED MERGANSER (Mergus serrator).

There is only one record.

Marked as an Adult in Summer.—An adult female (B.B.521) which was marked on its nest in Co. Fermanagh, Ireland, was recovered near the same place almost exactly three years later.

Foreign Record.—A bird of this species marked when young in Northern Germany was recovered in the autumn of the following year at Graz. Austria (Thienemann, J.f.O., 1916, 534).

#### GENERAL SUMMARY.

The Ducks appear to be well suited for study by the marking method, yielding as they do a relatively high percentage of recoveries, and the possibilities of intensive marking have been well shown by the results of Mortensen's study of the Pintail. Only the Mallard has been marked on a large scale in this country, and in this case the records are sufficiently numerous to be reliable as a basis for general conclusions, all the more so because they represent an unusually high proportion of the birds of this species which were marked. Smaller groups of records, sufficient for provisional conclusions on certain points, have been collected in the case of the Teal, the Wigeon and the Tufted Duck. Individual records of some interest have also been obtained in the case of the Gadwall, the Shoveler, the Pochard and the Sheld-Duck, while the foreign records are of special interest in the case of the Pintail; the conclusions to be drawn from such small numbers, however, cannot be described by a stronger word than "indications." Two other species, the Eider-Duck and the Red-breasted Merganser, have each yielded a single record of no particular significance. Separate summaries have already been given for each species, and it remains only to draw attention to such general points as appear to emerge from a consideration of the whole of the results.

All the species of Ducks now in question are found in Great Britain, to a greater or less extent, throughout the year, but the immigration of winter visitors from abroad—usually in numbers far exceeding those of the native birds—is well known. The question arises as to how far our native birds may be migratory, and as to how far the observable movements are rather to be attributed to the winter immigrants. The results of the marking method show that the native Mallard, are, as a rule, not only resident within Great Britain but also sedentary in their particular districts. Such records as there are for the Tufted Duck and the Gadwall indicate that these should be placed in the same category. Distinct evidence of movement on the part of at least some of our native birds, on the other hand, has been obtained in the case of the Teal, the Shoveler and the Wigeon; the records are but few, and too much importance must therefore not be attached to the fact that there are no records indicating a sedentary habit on the part of other native birds of these same species. The records, such as they are, indicate winter movements of native Teal from the northern parts of Great Britain to Ireland, winter movement of native Shoveler from England to Holland, and winter movement of native Wigeon from the north of Scotland to the south of England and to Holland

There are 4 records for the Mallard, I for the Teal, I for the Tufted Duck, and 2 for the Sheld-Duck, which show that a bird may be born in Great Britain and vet be found—and even found breeding—in a subsequent summer in a totally different area. This is contrary to the generally accepted belief as to the behaviour of migratory birds, and contrary also to the results gained by the marking method in the case of other species than the Ducks, yet it cannot fairly be described, in the face of so many records, as altogether abnormal; rather it would seem to be an irregularity which is to some extent characteristic of the Ducks. At first sight the phenomenon appears to be capable of explanation in either of two ways. Perhaps the more obvious explanation would be that these birds had emigrated from Great Britain in autumn and had failed to find the same route and the same summer-quarters in the subsequent spring. But in the case of the Mallard, at any rate, this theory does not seem to be tenable, for there is an entire absence of records indicating an autumn emigration on the part of native British birds and. indeed, a strong positive case for supposing these to be strictly sedentary apart from the extraordinary movements

in question. The second explanation accordingly seems to be the more likely, namely that these birds which find new summer-quarters do so by accompanying winter-visitant birds which are returning thither in spring in their ordinary course; the gregarious habits of the Ducks lend further plausibility to this theory. If this exceptional type of movement be so frequent among the Ducks as the records now considered seem to indicate, it may be convenient to introduce a new name to denote its special nature. Some such term as "abmigration" might perhaps be used to describe the northward departure in spring, for a new summer area, on the part of birds which had made no corresponding southward journey in the previous autumn. It may be added that the existence of this phenomenon, and the possibility of its occurrence in other cases than those which can be clearly proved, introduces an element of uncertainty into the interpretation of marking records for these species. For example, a Duck marked as a young bird in Great Britain might be recovered in its second autumn in Holland and thus apparently suggest an emigration from Great Britain to Holland; but it might really indicate emigration from Sweden on the part of a bird which had "abmigrated" from Great Britain in the intervening spring.

As regards the summer area of Ducks which are winter visitors to the British Isles, the records indicate principally Sweden. Finland and Northern Germany, with Denmark and Holland to a lesser extent and perhaps mainly as intermediate points, while the Mallard has also yielded one record from the Færoes; the absence of more than a single record from Norway—and that a record of a bird (Teal) which was not marked as a winter visitor to the British Isles but as a native British bird—seems noteworthy. In the case of the Pintail, Mortensen's records of birds marked on passage in Denmark indicate a summer area which extends to the extreme north-eastern corner of Europe, while probably the most remarkable record of all is that of the British Birds Wigeon which was marked in winter in England and recovered in summer beyond the Asian frontier to the north of the Caspian Sea.

The British marking records for the Ducks are not as yet very numerous, except in the case of the Mallard, but already they have afforded various indications of much interest. It seems certain that the different species are well worthy of further study by the marking mathed

further study by the marking method.

# THE "BRITISH BIRDS" MARKING SCHEME.\*

PROGRESS FOR 1922.

#### вv

#### H. F. WITHERBY.

ONCE again I have the pleasure to report an increase in the number of birds ringed. Although the increase is not great the total number is a large one, and our "ringers" are to be much congratulated on the result. The following are the totals :---

## Number of Birds Ringed.

In 1909		2,171	In	1916		7,107
,, 1910		7,910	,,	1917		6,926
,, 1911		10,416	1)	1918		5,937
,, 1912		11,483	,	1919		3 <b>,5</b> 78
,, 1913		14,843	,,	1920		5,276
,, 1914		13,024	,,	1921		8,997
,, 1915		7,767	11	1922		9,289
	Grand	Total		. 11	14,724	

Since my last report appeared, a valuable paper on the results of ringing Starlings, by Dr. A. Landsborough Thomson. has been published (Vol. XVI., pp. 62-76). Dr. Thomson has also most kindly undertaken to work out the results of ringing Ducks, and his paper on this subject appearing in the present number will, I feel sure, be read with very great interest. Both these papers show how much may be learnt from the marking method when records have accumulated and, after years, enough have been gathered to give real value to systematic analyses such as those so well prepared by Dr. Thomson.

In my last report I gave some suggestions with a view to showing that there is still much that may be accomplished by ringing, and to these I may refer those readers who may desire to assist in the scheme. Perhaps it is not too much to expect that Dr. Thomson's article may induce someone to restart a duck-decoy for ringing purposes!

Last year a good many requests were made that some idea should be given in this report of the number and kind of

<sup>\*</sup> For previous Reports see Vol. III., pp. 179-182, for 1909; Vol. IV., pp. 204-207, for 1910; Vol. V., pp. 158-162, for 1911; Vol. VI., pp. 177-183, for 1912; Vol. VII., pp. 190-195, for 1913; Vol. VIII., pp. 161-168, for 1914; Vol. IX., pp. 222-229, for 1915; Vol. XII., pp. 150-156, for 1916; Vol. XI., pp. 272-276, for 1917; Vol. XIII., pp. 96-100, for 1918; Vol. XIII., pp. 237-240 for 1919; Vol. XIV., pp. 203-207, for 1920; Vol. XV., pp. 232-238, for 1921.

birds ringed by any one "ringer." This I am now able to do, thanks to many ringers having acted on the suggestion of sending in a list of the birds they ringed during the year, and I would remind those who neglected to do this last year that it is a great assistance in arriving at the totals.

This year Mr. Mayall is a long way ahead of anyone else in numbers. His total for the year is sixteen hundred and fortyseven, but in the list below sixty-six ringed at the end of 1021 and not included in last year's totals have been added. The total is remarkable because no colonies of birds have been ringed. There are thirty-eight species comprised in the list. mostly Passeres, and the greatest numbers ringed are Chaffinch (223), Blackbird (216), Swallow (181), Linnet (168), Song-Thrush (157), and Martin (120). We may note also one Cuckoo and twenty-five Swifts. Dr. Moon, who has also done a remarkable total, though this year it falls a good way behind Mr. Mayall's, has ringed thirty-four species, all except two of which are Passeres. His largest numbers are. Song-Thrush (164), and Blackbird (115), and in this list we may mention twenty-six Wood-Warblers and thirteen Pied Flycatchers. Mr. Robinson's large total is composed chiefly of Lesser Black-backed Gulls (445). Swallows (85) and Sandwich Terns (77). Mr. Bartholomew has ringed seventeen species of Passeres, amongst which Song-Thrush, Blackbird and Swallow figure largely and ten species of other orders amongst which we may note Lapwing (104), Curlew (20), Wood-Pigeon (15). Mr. Holder's list contains twenty-three, chiefly Passeres.

Of the rest the most diversified list is that of Dr. Joy who has ringed thirty-five species, while Mr. Taylor has ringed twenty-nine, and the least diversified, but very useful, is Mr. Portal's fifty-five Mallard. As will be seen in the general list of species ringed for the year, with the exception of Lapwings and Lesser Black-backed Gulls, all the large numbers ringed have been Passeres and it would be useful to have more lists like Mr. Portal's and such as Mr. Macdonald's which contains amongst other birds, Guillemot (104), Razorbill, Puffin, Kittiwake (43) and Gannet (26).

A number of interesting recoveries have been reported during the year and a list of those still unpublished will shortly appear, while attention may be drawn to the seventh record from South Africa of a Swallow with a *British Birds* ring

(see p. 284).

# vol. xvi.] 'BRITISH BIRDS' MARKING SCHEME, 279

# NUMBERS OF EACH SPECIES "RINGED."

	'og-' <b>1</b> 5	,16	'ı 7	<b>'1</b> 8	,19	'20	'21	22	Total
Crow, Carrion	22		No	record	kept		16	ΙI	49
Rook	173	6	38	23	3	8	17	_	274
Jackdaw	111	23	29	- 9	4	7	29		232
Jay	., 30			ú	_	5	2		50
Starling	5720	368	560	219	151	169	411	454	8052
Greenfinch	1690	382	254	200	200	187	380	386	3745
Goldfinch	10	50-		record			20	-	42
Twite	42					3	I		46
Redpoll, Lesser	95	37		4		3	5	17	161
Linnet	725	195	162	173	46	122	272	377	2072
Bullfinch	113	23	18	21	20	40	52	23	310
Chaffinch	1720	319	338	262	220	367	521	618	4365
Sparrow, House		3	330			2	I	1	468
Sparrow, Tree	171	4	9	-1	17	20	48	40	313
Bunting, Yellow		32	47	62	20	41	100	101	707
Bunting, Reed	170	18	98		20	39	59	54	512
Lark, Sky	1169	195	213	54 150	51	4 I	63	54 64	1946
Pipit, Tree	170	16	8		15	31		42	321
Pipit, Meadow	924	131	113	5 85	12	22	34 134	62	1483
Wagtail, Yellow	04	12	16	9			26	19	156
Wagtail, Grey	93	12	-	8	5 1	5	11	25	150
Wagtail, Died	500	93	91	17	20	46	124	112	1003
Creeper, Tree	12	93		record		40	24		
Tit, Great	723	10	16	16	8 8	26		13 18	49
Tit, Blue		12	11		0	6	31 12		848
Tit, Coal	635		11	5				32	713 106
Tit, Marsh			_	_		I 5 —	3		
Tit, Marsh Tit, Long-tailed	52		_			_	_	4	56
Wren, Gcrested	-	3		_		I			41
Shrike, Rbacket		7		16	-	22	29	11	43
	, ,		13	100	17		-		212
Flycatcher, S. Flycatcher, Pied	452	63		record	65	114	157	72	1138
Chiffchaff		_	8	6	кері		43	13	62 182
Warbler, Willow	51	5			108	19	68	25	
Warbler, Wood	- 1	123	146	154 18		206	284	274	2636
Warbler, Reed	· 75				3	34	71	59	262
Warbler, Reed Warbler, Sedge	85	15	19	54	38	31	39 80	21	343
Warbler, Garden		32 16	53	72 I	32	30		50	434
Blackcap	_	12	9		I 4	55	55	42	278
Whitethroat		61	17	9	<u> </u>	21	32	37	204
Whitethroat, L.	· · 237		34	40	85	130 28	179	133	899
Fieldfare		23	3	ΙΙ	<b>I</b> 3		23	19	211
Thrush, Mistle	438	91	4.5		-	~~		100	85
		1500	45 68o	33	21	33	77	103	841
<b>-</b> .		2	000	789	475	621	1042	1052	
Redwing Ouzel, Ring	•	8	_		_	_	3		45
Blackbird	72			3	386	469	3 918	5	92
Wheatear	· · 3557	751 17	453 8	446	300	409 11		920	7900
X X 7 X 1 1 1 1		26		17 65	1.7		75	1 55	433
0. 1.	• -	12	54		17	55	17	30	513 166
The second secon	124	6	_			12	5	25	
Nightingale	-		_	13	15		135	76 20	447
rigitingale	34	7		5	5	19	19	20	109

	-		_~						
	'09•'15	16	17	'18	'19	'20	'2 I	,22	Total
Redbreast	1957	263	244	204	162	299	494	507	4130
Sparrow, Hedge	1344	193	140	98	IIO	185	246	22 I	2537
Wren	561	106	26	34	ΙI	76	265	133	1212
Dipper	113	10	5	11	5	' š	18	8	178
Swallow	3874		1470	714	512	307	382	821	8800
Martin ·	951	208	401	137	87	87	144	245	2260
Martin, Sand	436	133	116	29	32	52	37	18	853
Swift		133		record		32	27	72	105
Nightjar		6	7	2	2	6	7	5	67
Wryneck	107	34	25	29		17	8	8	228
0 1	78			14	~	-	20	16	160
Owl, Long-eared		_5	13		7	7 2	10	12	
Owl, Barn			6	30				2	54
Owl, Tawny		3	11	* 4	18	5 8	14		97
M 12	·· 74			I4		0	15	14 6	154
		_		record			I		23
Kestrel	34	5	- 6 No	7	3	4	I 2	3	74
Buzzard	2	_	140	record	Kept	_	ΙI	3	16
Hawk, Sparrow	55	5	_	2		5	4	9	80
Heron, Common		4		1				6	117
Sheld-Duck	49		_	_	I	2 I	I		72
Mallard	540	30	7º	4	_	I	4 I	58	744
Teal	83	I	12		33	20	_	1	150
Wigeon	55	15	- 6	I	2	23	1	15	118
Duck, Tufted	62	3	_			_		4	69
Cormorant	470	_	_	2 I	72	_			563
Shag	156	_	_	_	10	_		_	166
Gannet	198	-	_	_		_		26	224
Shearwater, Mar	-		_	_	_	3			72
Wood-Pigeon	139	14	ΙI	20	9	19	33	26	271
Dove, Stock	38	3	4	I	5	6 -	26	7	90
Dove, Turtle	48	10	3	8	7	5	9	12	102
Oystercatcher	84	_	7	3	6	4	5	7	116
Plover, Ringed	122	4	2		1	19	39	19	220
Plover, Golden	39	4	_	6	_		4	I	54
Lapwing	3346	242	<b>1</b> 68	154	123	125	220	34.5	4723
Sandpiper, C.	140	20	7	25	16	13	10	24	255
Redshank	220	15	35	25	3	13	25	26	362
Curlew, Commo	n 176	10	7	17	4	14	36	67	331
Snipe, Common	151	13	28	19	3	6	19	18	257
Woodcock	345			3 -	. —	17	8	31	404
Tern, Sandwich	655	_	23		<b>5</b> 3	3 <b>i</b>	30	77	869
Tern, Common	2918	1	174	761		144	706	2	4706
Tern, Arctic	77		. s		20	25	24	2	156
Tern, Little	173	I		· I		9		9	193
Gull, Bheaded		13		4	ΙI	_	5	_	11966
Gull, Common	487	20	7					26	540
Gull, Herring	491	19			1		6	9	527
Gull, L. Blkbk		219		- 84	77	471	197	455	3821
Gull, G. Blkbk			_				/	2	80
Kittiwake	33	_	_	- 50	r			43	127
Razorbill	60	_	_	- 4	_	5		18	87
Guillemot	23		No	record	l keni			106	
Puffin	899	2		- 2	2			8	
Moor-Hen	219	21	2		7	20	12	33	2 0
	219	- 1	~ .	-4	/	20		33	203

# VOL. XVI.] BRITISH BIRDS 'MARKING SCHEME.' 281

#### NUMBER OF BIRDS "RINGED."

MR. A. MAYALL (1713), Dr. H. J. Moon (913), Messrs. H. W. Robinson (617), J. Bartholomew (573), F. W. Holder (543), N. H. Joy (442), W. P. G. Taylor (407), J. F. Thomas (354), J. R. B. Masefield (295), Mr. and Mrs. R. O. Blyth (267), Capt. A. W. Boyd (260), Messrs. J. N. D. and T. L. Smith (237), D. Macdonald (222), R. C. C. Clay (210), W. A. Elliston (215), B. Clarke (212), Mrs. L. Marshall (132), Mrs. Patteson (118), Messrs. A. C. Fraser (114), C. F. Archibald (105), H. S. Gladstone (101), R. M. Garnett (80), J. F. Madden (76), J. F. Mitchell (68), W. Wood (60), Mrs. Rait Kerr (63), Mrs. T. E. Hodgkin (58), The London Nat. Hist. Soc. (58), Messrs. M. Portal (55), H. Bentham (52), W. H. Thorpe (50), Rev. E. Peake (49), Messrs. A. L. and E. B. Vesey (49), Miss C. M. Acland (38), Messrs. A. S. Corbett (38), P. E. A. Morshead (36), Major W. M. Congreve (35), Mrs. A. Gordon (33), Messrs. M. S. Curtler (33), J. A. Anderson (31), C. E. Milburn (27), C. H. Young (26), Miss M. Garnett (25), Miss B. A. Carter (22), and others who have ringed under 20 each.

#### Some Percentages of Recoveries.

Species.			Number Ringed 1909-21.	Number of these Recovered to date.	Percentages of Recoveries.
Starling			7,598	451	5.9
Chaffinch			3.747	42	I.I
Sky-Lark			1,882	15	·7
Meadow-Pipit			1,421	19	1.3
Pied Wagtail			891	20	2.2
Spotted Flycate	her		1,066	2	I.
Willow-Warbler			2,362	18	·7
Whitethroat			766	4	.5
Song-Thrush			11,381	151	1.3
Blackbird			6,980	176	2.5
Redbreast			3,623	127	3.5
Swallow			7,979	62	-7
Sparrow-Hawk			71	II	15.4
Heron			III	17	15.3
Mallard			686	152	22.I
Cormorant			<b>5</b> 63	96	17.0
Gannet			198	12	6.0
Wood-Pigeon			245	14	5.7
Lapwing			4,378	118	2.6
Redshank			336	20	5.9
Curlew			264	14	<b>5</b> ·3
Snipe			239	23	9.6
Woodcock			373	45	12.0
Sandwich Tern			792	IO	1.3
Common Tern			4,704	93	1.9
Black-headed G	ull		11,966	523	4.3
Herring Gull			518	17	3.2
Lesser Black-back	cked	Gull	3,366	142	42



EARLY NESTS OF HOUSE-SPARROW, SONG-THRUSH, STARLING AND REDBREAST IN THE NORTH OF ENGLAND.

It may be of some interest to record the following early nests in the north of England during January, 1923, these being due, no doubt, to the very mild weather.

HOUSE-Sparrow (Passer d. domesticus).—North Lancs., nest building first week in January, eggs laid second week, bird

sitting third week. Sheltered position.

Song-Thrush (*Turdus ph. clarkvi*).—North Lancs., two eggs on the 13th; four eggs on 20th, bird commenced to sit. Position very sheltered on banks of stream.

Starling (Sturnus v. vulgaris).—West Riding of Yorks, feeding young at least a week old during the third week in

January. Position sheltered.

REDBREAST (Erithacus r. melophilus).—South Westmorland, feeding young just hatched during the third week in January. Position sheltered.

H. W. ROBINSON.

## EARLY NEST OF SONG-THRUSH IN CUMBERLAND.

A Song-Thrush's nest at Raughton Head, north Cumberland, contained three eggs on January 21st, and five eggs on the 24th. Four young ones hatched out during the night February 9th to 10th, and the fifth the next night.

E. U. SAVAGE.

## SHORE-LARKS IN KENT.

Ox January 18th, 1923, on the sands near the mouth of the estuary, at Sandwich, I saw a small flock of birds about the size of the Snow-Buntings (*Plectrophenav nivalis*) seen shortly before, and which in the misty light I at first thought were a few more of the same birds. But through my glasses I saw points which at once showed me that they were Shore-Larks (*Ercmophila alpestris*)—birds I had not seen before. They flew about us and settled quite near and we saw the dark crown, the streak from the beak through the eye and the black throat. The mantle of the bird in that light looked an ordinary brown. They moved about so quickly that they were difficult to count, but twice I counted I3, and my companion the same number. I fancy there were a few more.

# GREY WAGTAIL BREEDING IN SUSSEX AND HAMPSHIRE

With reference to Mr. J. Beddall Smith's note on the breeding of the Grey Wagtail (Motacilla c. cinerca) in north-west Sussex (antea, p. 255), this is a far commoner breeding species in the county than is generally realized. To-day, in west Sussex, it is found breeding in most suitable localities, having considerably increased its numbers during the last fifteen years.

In 1910, for example, I knew of one pair breeding near Harting. In 1922 I knew of seven pairs nesting in this district. That it is as plentiful south as well as north of the South Downs, may be gathered from the fact that, during the last four years. I have found the nests of four pairs within

half a mile of Westbourne, every year.

In May, 1918, two pairs were discovered breeding on the River Medway, in N.E. Sussex, and it should be added that I have not had time, or opportunity, to work this area in anything approaching a thorough manner.

Moreover, it certainly breeds as commonly in that part of Hampshire, adjacent to Sussex, that I happen to be acquainted with, having found a nest at the Bedhampton Waterworks,

and in three or four spots in the Meon Valley.

Having devoted much time to the habits and local distribution of this most interesting bird, I can state that it is invariably double-brooded in West Sussex. The usual clutch of eggs laid is five, whilst six is not uncommon. It is a familiar sight to watch family parties of Grey Wagtails flitting up and down the rivers Ems and Rother in August.

CECIL SMEED.

For previous records for Hampshire see Vol. VII., pp. 170, 228, and for Sussex, Vols. II., p. 376; VI., pp. 17, 101; VIII., p. 200; XIII., p. 195, and XIV., p. 185. Mr. W. H. Thorpe also sends us records for 1919 and 1921 for a district in southeast Sussex whence breeding has already been recorded. Sufficient evidence seems to have now been published to enable us to conclude that the Grey Wagtail is now generally distributed as a breeding species in all suitable localities throughout Sussex and Hampshire with at any rate the adjoining districts of Surrey and Kent. To what extent it had been previously overlooked must be uncertain, but as Major Smeed points out, a great increase of numbers and spread have undoubtedly taken place since about 1906.—Eds.]

# ROOSTING HABIT OF THE TREE-CREEPER.

In September, 1922, Mr. K. C. Pryor drew my attention to a number of small holes in the trunks of the Wellingtonias in a garden near Bassenthwaite, mid-Cumberland, which, from the droppings below each hole, were obviously tenanted by some bird. He says that he went at dusk and found each one occupied by a Tree-Creeper (Certhia familiaris brittanica).

It clung in such a position that its back was on a level with the rugged bark of the tree, its beak pointing straight upward.

The holes are evidently made by the birds themselves in the soft bark; and, in the trees I examined both there and also here in north Cumberland, were between four and eight feet from the ground.

There are several on each tree and only those on the lee

side are occupied.

Mr. Pryor tells me that his mother has since found similar holes in the Wellingtonias in Co. Kilkenny, S.W. Ireland; and in the *Irish Naturalist*, January, 1923 [Vol. XXXII., No. 1, page 1], there is a description, with photograph, of these roosting holes by Mr. Nevin H. Foster, observed in Co. Down, N.E. Ireland. From this it would appear that the habit is a general and not a local one.

The tree in question, the Wellingtonia (Sequoia gigantea), was not, according to Johnson's Gardeners' Dictionary, introduced into this country until 1853. So that the habit is evidently a recent one.

E. U. SAVAGE.

# BLACKCAP IN WINTER IN CARMARTHENSHIRE FEEDING ON MISTLETOE.

On January 13th, 1923, and again on the 15th, a Blackcap (Sylvia atricapilla) appeared in an apple tree not five yards from a window near which I was sitting at Laugharne in Carmarthenshire. The bird had a brown cap, and was, therefore, a female, or more likely a young bird. On the apple tree there grows a large bunch of mistletoe, and the Blackcap was feeding on the unripe yellow-green berries. The only other birds that I have noticed tackling these berries are the Song- and Mistle-Thrush.

J. F. Thomas.

# SWALLOW RINGED IN CARMARTHENSHIRE FOUND IN THE TRANSVAAL.

A Swallow (*Hirundo r. rustica*) ringed by Mr. J. F. Thomas as a nestling at Laugharne, Carmarthenshire, on August 18th,

1922 (No. 9623), has just been reported from near Springs, which is some thirty miles east of Johannesburg. This is the seventh Swallow ringed under the *British Birds* Scheme which

has been reported from South Africa.

I am much indebted to the Editor (Dr. Engelenburg) of *De Volkstem* and also to Mr. W. M. Worssell of the Union Observatory, Johannesburg, for the information that this Swallow was accidentally killed by a herd boy on January 14th, 1923, on Mr. F. P. J. Prinsloo's farm designated Rietfontein 327, which is some three or four miles from Springs.

When announcing the recovery of the sixth African Swallow I gave details of the previous cases and also published a map (antea, pp. 81–83) to which I may now refer those interested.

H. F. WITHERBY.

#### CUCKOO'S EGGS IN DOMED NESTS.

On May 18th, 1922, accompanied by Mr. R. Ware and a keeper, I located a nest of the Common Wren (Troglodytes t. troglodytes) in Sussex, which to my surprise contained the egg of a Cuckoo (Cuculus c. canorus). There were five eggs of the Wren which, as well as the Cuckoo's, were quite fresh, though the bird was sitting. On examining the surroundings to ascertain how the Cuckoo had deposited her egg, we came to the conclusion that while it did not seem very easy for the Cuckoo to have laid into the nest, it was, on the other hand, quite possible for such a feat to have been accomplished. The hole appeared to be slightly damaged and the Cuckoo's egg was nearest the entrance. Of course, there is practically no "drop" in the case of a lined nest.

In 1920, Mr. Ware obtained a Cuckoo's egg in the same district in a nest of the Common Wren. This, however, only contained one egg of the foster parent, due, perhaps, to the fact that the nest had been forsaken. Mr. Ware informs me that the entrance hole was obviously disarranged. The distance between the two nests was about 1½ miles. Both Cuckoo's eggs are of the same type and the nests were similarly situated, i.e., in brambles and dead bracken.

In 1908, I found a nest of a Chiffchaff (*Phylloscopus c. collybita*) in Wiltshire containing three eggs of that species with an egg of the Cuckoo. All the eggs were fresh, but the nest had been forsaken and the entrance hole was out of shape and widened.

Regarding the deposition of these eggs I hardly see that a Cuckoo would have a more difficult task than in laying in the nest of a Meadow-pipit (Anthus pratensis), which is sometimes

invisible and situated at the end of a run in short gorse and grass.

If my experience with regard to Cuckoos' eggs in domed nests is the general experience of others, it goes some way to support the theory that the egg is laid into the nest rather than placed in it by the beak; at least it seems that there is more likelihood of the nest being interfered with if the former action is adopted.

D. W. Musselwhite.

# KESTREL CAPTURING HOUSE- AND SAND-MARTINS.

In connection with the note (antea, p. 219) on a Kestrel (Falco tinnunculus) capturing a Swift (Apus apus), an instance of a bird of the same species supporting itself for some days on Hirundines may be of interest. The boat on which I was travelling to Egypt in May, 1920, passed Malta, and when about a mile off shore a host of small black flies joined us. At the same time about a dozen House- and Sand-Martins (Delichon urbica and Riparia riparia) appeared, possibly in pursuit of the abundant food. Although they were at that season presumably on migration northwards, they accompanied the boat on its eastward passage almost to Port Said. At least, the survivors did, for a female Kestrel came aboard about the same time as they, and she must have very considerably reduced their numbers. I never actually saw her make a capture, and wondered at the time how she accomplished it, but two or three times a day she would be seen feeding at her favourite post on the top of one of the funnelguys, and the feathers which floated down as she methodically plucked her kills, first the black or brown from their backs, then white from their underparts, left no doubt of the victims' identity. R. F. MOREAU.

## NIGHT-HERON IN BERKSHIRE.

An immature Night-Heron (Nycticorax nycticorax), which had been seen about the place for some days previously, was shot by a keeper at Pusey, near Faringdon, Berkshire, on February 22nd, 1922. Recently I had an opportunity of examining it, as it is still in the taxidermist's hands, and found it to be the streaked brown plumage of immaturity. F. C. R. JOURDAIN.

# EARLY NESTING OF CORMORANT IN DORSETSHIRE.

It has been my experience that a comparison of notes by field-workers in different districts—often, even those not very widely separated—frequently reveals strange discrepancies in the nesting times of certain species.

Having recently read the Rev. F. C. R. Jourdain's article (Vol. VII., p. 94) on the breeding season of the Steganopodes, I think my own experiences of Cormorants on the Dorset coast may be of interest and should be recorded, as they show marked differences and also bring to light a few perhaps unknown facts.

Howard Saunders ("Manual") states:—"In this country eggs (Cormorants') are laid in the latter part of April or in May." As generalizations of a similar misleading character occasionally occur elsewhere I always imagined the author's conclusions to be based on experiences on the Welsh coast and in the north, as judging from my own few visits to breeding stations of this species in Wales, etc., the statement, so far, holds good.

From 1905 to 1913 I paid annual visits to the Cormorant settlements on the Dorset coast and at one, consisting of about eight pairs, I always found the birds sitting on their nests, most of which held full complements of eggs in the last week of March and I see by my notes that I evidently considered that to be the usual time for first eggs and of insufficient importance to note after the first few seasons. As these nests contained eggs several days earlier than the earliest date from the south of Ireland, viz., April 4th, as quoted by Mr. Jourdain, this was apparently the earliest nesting colony in the British Isles.

By far the earliest nest, however, was one I found when searching for a Raven's nest on February 27th, 1907. It contained two eggs upon which the bird was sitting and from which I had some difficulty in dislodging her by throwing clods of earth down the cliff side. Two other partly-built nests were close by in one of which a bird was arranging the nest material. Unfortunately, owing to persistent persecution this colony gradually dwindled—in 1918 I saw one or two pairs only—until at the present time I believe there are none nesting on the cliffs between Lulworth and Weymouth. Although it is probable that many Cormorants nesting in the south of England do not commence to lay until mid-April, I am nevertheless of the opinion that March nesting birds are not confined to the cliffs of Dorset. W. J. Ashford.

#### GANNET IN STAFFORDSHIRE.

An immature Gannet (Sula bassana) in the speckled plumage stage was picked up injured at Dilhorne, near Cheadle, Staffordshire, on November 15th, 1922. It survived only a few days and was then killed by a dog. There are some half-dozen previous records of this species having been observed in the county and generally in autumn. John R. B. Masefield.

# GREAT CRESTED GREBE NESTING IN KIRKCUD-BRIGHTSHIRE.

IT may be worth recording that on June 6th, 1922, I found a pair of Great Crested Grebes (*Podiceps c. cristatus*), nesting on Loch Ken, New Galloway. The conspicuous nest—discernible at a long distance—was built in a sparse reed-bed in a shallow bay towards the upper end of the loch and contained one egg. Both Grebes were swimming and diving in the vicinity and from time to time added materials to the nest, as is their habit. Misses L. J. Rintoul and E. V. Baxter in their paper on this Grebe as a Scottish breeding species (*Scot. Nat.*, 1919, pp. 67-77), give no localities in Kirkcudbrightshire, though some records are given for Dumfries, Wigtown and the Solway area.

S. G. Cummings.

# WOOD-PIGEON NESTING IN JANUARY IN SURREY.

In Surrey on January 28th, 1923, accompanied by Capt. F. J. Musselwhite and Mr. C. H. Chadwick, I discovered a nest of a Wood-Pigeon (*Columba p. palumbus*) in a larch tree. The nest was about forty feet high and the bird could be seen sitting. I climbed the tree and found the nest to contain one young bird about two or three days old and an egg highly incubated.

I notice in A Practical Handbook of British Birds that this species has been found breeding in about ten months of the year, including January, but records of young birds in that month may be sufficiently rare to make the present instance worth reporting.

D. W. Musselwhite.

# GREEN SANDPIPER IN SURREY IN SUMMER AND WINTER.

SINCE the following list of occurrences of the Green Sandpiper (*Tringa ochropus*) in Surrey includes its appearance in summer and winter it may prove of interest.

My mother and I have had the species under observation, near Woking, for two years, during which we have had several opportunities of watching the birds at close quarters, and have only once failed to find one when we have visited the marshes.

10	)21		19	2.2	
April	7th	one bird	March	15th	one bird
,,	8th	two birds apart	April	26th	,, ,,
,,	13th	,, ,,	,,	28th	,, ,,
July	31st	five birds together,	May	3rd	,, ,,
		feeding	June	15th	two birds together
Dec.	26 <b>th</b>	one bird	,,	16th	" " " feeding

1922		19.	2.2	
June 17th	two birds together, feeding, one was			four birds together, feeding
	later put out of an old oak where	,,		two birds together three birds to-
	it had perched on a branch	,,	29th	gether four birds together,
Aug. 2nd	one bird			feeding
		//	ILLIA	M P. G. TAYLOR.

#### GREENSHANK IN WINTER IN CORNWALL.

On January 20th and 23rd, 1923, I saw a Greenshank (*Tringa nebulariu*) at Hayle, near Penzance. The recurved bill, dull green legs, and size (intermediate between a Redshank and a Bar-tailed Godwit) rendered its identity unmistakable. The bird was solitary and did not associate with a flock of Redshanks near by.

G. H. HARVEY.

#### GLAUCOUS GULL IN LANCASHIRE.

While out shooting on Formby shore about January 2nd, 1923, a friend of mine noticed a very large Gull among a flock of Herring-Gulls. He shot the bird, and sent it to me for identification. Mr. Cutmore of the Liverpool Museum kindly confirmed my opinion that it was a Glaucous Gull (Larus hyperboreus).

Thos. L. S. Dooly.

GLAUCOUS GULL IN OUTER HEBRIDES IN SUMMER. ON June 4th, 1922, near the northern end of South Uist, one of the Outer Hebrides, I was interested to see a Glaucous Gull (*Larus hyperboreus*). It was by itself, inland, and appeared tired, taking short flights only, and flying close to the surface of the ground.

SETON GORDON.

# THE QUAIL AS A NORFOLK BREEDING BIRD.

A FEW notes which I sent to the late Mr. John Henry Gurney reached him too late to be incorporated in his "Annual Report," but my old friend wrote to me a few days before his death acknowledging my letter and showing undiminished interest in his favourite pursuit.

I believe the definite proof of the Quail (Coturnix c. coturnix) having nested in north Norfolk last year was an item he would have gladly incorporated in his "Report." I have always believed that a pair or two nest annually within a few miles of the sea in the large fields of clover and grain between Sheringham and Wells, as one or two are seen or heard every spring, and I have known of several being shot in the early autumn. They must take their departure early, however, as they are not met with when partridge shooting. When I

was staying at Cley, in October, 1922, I was shown some Quail's eggs which had been taken from a deserted nest when harvesting, and I have kept two of them. I am glad of this record, which confirms my previous idea that this is a scarce, but pretty regular breeding bird in the county.

Clifford Borrer.

HOODED CROW IN CORNWALL.—Mr. G. H. Harvey writes that he saw a Hooded Crow (*Corvus cornix*) in company with three Carrion-Crows (*C. corone*) near Penzance, on January 29th, 1923. The former appears to be but an irregular winter visitor to Cornwall.

MEALY REDPOLLS IN YORKSHIRE.—Mr. W. S. Medlicott reports a flock of twenty *Carduelis linaria* between Sleights and Ruswarp on January 14th, 1923.

COAL-TIT HIDING FOOD.—With further reference to the notes on this subject (antea, pp. 216, 252), we are indebted to Messrs. A. Astley and Jasper Atkinson for the information that this habit has been fully described by Mr. Granville Sharp in his Birds in the Garden, where at p. 51 it is attributed equally to Parus ater and P. palustris.

BLACKCAP IN JANUARY IN BERKSHIRE.—Major B. van de Weyer has sent me a female Blackcap (Sylvia a. atricapilla) which he found in a water-tank at Hungerford Park on January 23rd, 1923. The bird was alive when taken out of the water but died shortly afterwards. It had probably been in the tank some time as the gizzard was quite empty, but the bird though not fat was in good condition. Judging by the sexual organs it was a bird of the year.

H.F.W.

Lesser Spotted Woodpecker in Cornwall.—Mr. G. H. Harvey informs us that he satisfactorily identified a female *Dryobates minor* at Trevaylor, near Penzance, on January 26th, 1923. The species is rare and extremely local in Cornwall.

HEN-HARRIER IN YORKSHIRE.—Mr. W. S. Medlicott informs us that on January 16th, 1923, he saw a male *Circus cyaneus* on the high moor, south of Glaisdale.

Unmarked Egg of Coot.—Mr. H. B. Cott informs us that on May 16th, 1919, he found in a nest of the Coot (Fulica atra) at Camberley, Berks, three eggs, two of which were normally marked but the third was white, without spots or markings of any kind. Such unpigmented eggs occur occasionally in most species, but in the case of the Coot any variation from the normal type is so unusual that this instance seems worth recording.



#### "SCAMELS" IN SHAKESPERE'S "THE TEMPEST."

To the Editors of British Birds.

SIRS,—Mr. Armstrong's ingenious suggestion (antea, p. 259), that the "young Scamels" which figure among Caliban's promised offerings to Stephano are really Sheld-Ducks, though adding another to the already very long list of conjectural readings, is surely literally too far-fetched to be probable; while his further suggestion that, possibly, "like our word 'Sea-gull,' as used popularly, 'Scamel' was a general name for various sea fowl," is rendered most unlikely by the fact that this is the only known occurrence of the word (if it be a word) in all the vast body of Elizabethan literature. The editorial note to Mr. Armstrong's letter, in preferring the reading "Stannels," follows Dyce, who pinned his faith to it mainly because Kestrels often nest "in rocky situations and high cliffs on our coast." But both "Stannels" and "Sea-mells" (i.e. Sea-mews) were originally suggested long agoby the acute Theobald; and, as experts state that palæographically there is nothing to choose between the two, the latter will certainly be preferred by many students of Elizabethan literature and ornithology.

William Strachev in his letter describing the Bermudas (1610), which was most probably one of Shakespere's sources for the "local colour" in "The Tempest," mentions "Sea-meawes." Moreover, in the account of the capture of his so-called "Sea-Owles" he refers to "our men standing upon the sands or Rockes." The following passage from Richard Carew's The Survey of Cornwall (London, 1602, leaf 35), which I believe has never hitherto been cited in this connection, seems to me to offer still stronger support of the reading "Sea-mells." After mentioning various coastal birds including "Meawes," "Murres" and "Burranets," Carew writes: "These content not the stomacke all with a like savoriness, but some are good to bee eaten while they are young, but nothing toothsome, as they grow elder. The Guls, Pewets, [i.e. Black-headed-Gulls] and most of the residue breed in little desert Islands, bordering on both coastes, laying their egges on the grasse, without making any nests, from whence the owner of the land causeth the young ones to be fetched about Whitsontide for the first broode. and some weekes after for the second. Some one, but not euerie such Rocke may yield yeerely towards thirtie dozen of Guls."

Here—remembering that in Shakespere's day young sea-gulls were

considered a specially palatable dish—we may remark:

(I) The "desert Islands" and (particularly) the "Rocke" from which the young birds were fetched at intervals. "Sometimes I'le get thee young Scamels from the Rocke" says Caliban (Text of the First Folio).

(2) The rough differentiation of the various species of Gulls, etc., as "Meawes," "Pewets" and "Guls"; remembering that even to-day our poets are often delightfully vague as to the species of "Sea-Gull" or "Sea-Mew" whose praises they sing.

TRING, 14th February, 1923.

BERTRAM LLOYD

#### SONG-PERIOD OF THE CORN-BUNTING.

To the Editors of British Birds.

SIRS,—The statement in the *Practical Handbook* that the song-period of the Corn-Bunting extends from February to October, to which Mr. W. H. Thorpe has drawn attention (antea, p. 257), was a generalization and referred to the normal song-period, but was by no means intended to imply that the song is not uttered, exceptionally, in winter. This bird is a common resident along the escarpment of the Chilterns between Dunstable and Wendover, and I have occasionally heard an odd bird singing there during the winter months. Mr. Thorpe asks for information about November and December, and the following cases may interest him:—Nov. 3, 1907, Bulbourne, nr. Tring, Herts; Nov. 14, 1914, Dunstable Downs, Beds; Nov. 20, 1915, Ivinghoe, Bucks; Dec. 23, 1917, Ivinghoe, Bucks (a sharp frost); Dec. 24, 1918, Weston Turville, Bucks.

C. Oldham.

BERKHAMSTED, Feb., 1923.

[The male reported as singing on Jan. 2nd, 1923, by Mr. C. J. Pring, was heard in Essex and not in Somerset as stated (antea, p. 252).—EDS.]

#### SNOW-GOOSE IN NORFOLK.

To the Editors of British Birds.

SIRS,—Is Mr. J. Beddall Smith certain of his identification of Snow-Goose at Holkham (cf. antea, p. 255)? I have not seen the bird myself, but several good ornithologists of my acquaintance have told me that the bird had pure white flight feathers, and that they were satisfied that it was a white Pink-footed Goose.

I believe the bird survived the shooting-season safely.

EAST DEREHAM, NORFOLK, February 3rd, 1923. HUGH WORMALD.

#### SHORE-BIRDS' METHOD OF OBTAINING WORMS.

To the Editors of British Birds.

SIRS,—With reference to Mr. Astley's letter on the above subject (antea, p. 228), the Kentish Plever (Charadrius alexandrinus) also obtains food by a rapid vibration of one foot on the wet sand. This takes place on stopping, after a long or short run, and is immediately followed by the bird pecking at the sand. Whether there is food everywhere or why it stops at a particular spot I cannot say, but it always seems to obtain a morsel.

W. S. Medlicott.

GOATHLAND, YORKS.

# BRITISHBIRDS

WITH WHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST."

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

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# RECENT OBSERVATIONS ON SOME IRISH BREEDING BIRDS.

BY

C. V. STONEY, M.B.O.U.

Since the publication, in 1900, of the Birds of Ireland, by Messrs. Ussher and Warren, many additions have been made to our knowledge of the avifauna of Ireland. Yet, although the results of this knowledge have, for the most part, been put on record from time to time, little has hitherto been done to collect and bring them up to date. As it would, however, be impossible, within the compass of a short article, to enumerate all the additional facts concerning the bird-life of this country which have been ascertained during the last twenty-two years, it has occurred to the writer that it might be of interest to trace the history of those birds which had not bred in Ireland prior to 1900, but have done so subsequently, and, in the case of others, to set down some recent facts in relation to breeding and distribution, many of which have not hitherto been recorded. For this purpose the article has been divided into two heads, and the arrangement followed under each is that adopted by Messrs. Ussher and Warren. The notes have been carefully verified, in many cases by personal observation.

A. Birds which have only been known to breed in Ireland subsequent to 1900.

EIDER DUCK (Somateria m. mollissima).

The Eider Duck was discovered breeding on an islet off the coast of Co. Donegal in 1912. A gentleman who visited this spot found 2 nests with eggs (Brit. B., Vol. VI., pp. 106, 166). Natives have since informed me that they were familiar with this duck for several previous summers, but could give no details about nesting. I visited the locality in 1916, 1917, and 1920. On June 11th, 1916, I saw 3 broods of ducklings, 5 in each, and 2 nests with 5 and 4 eggs, on the point of hatching. On May 27th, 1917, there were 6 nests, containing from 1 to 6 eggs. This seems to have been a late season, as on June 17th, 1920, I saw 6 broods of from 7 to 4 ducklings, accompanied by the females, and a nest containing 3 eggs. which may have been a second laying. The islet is uninhabited, and being inaccessible except in the calmest weather, there is hope that this interesting addition to the Irish avifauna will continue to increase its numbers. I can find no trace of the Eider Duck breeding elsewhere in Ireland.

The colony is probably an offshoot from the west coast of Scotland.

COMMON SCOTER (Oidemia n. nigra).

This duck was first reported as breeding in Ireland in 1904, by the late Major Trevelyan, who discovered a pair nesting on an inland lake (*Brit. B.*, Vols. II., pp. 86-87, III., pp. 197-8, IV., p. 154, V., p. 79). In 1915 there were at least 5 pairs breeding in this locality, and I saw 3 nests with eggs, which were subsequently hatched off. (cf. Vol. X., p. 191 for 1916.) In 1917 there were 7 pairs or more and several nests were found, and I have either known of or seen birds and nests in each successive year until 1922, when I was unable to visit the place. Up to and including 1921 they seemed to be increasing slowly and extending their breeding range (vide also Vol. XIII., p. 87), though I cannot agree with Mr. Seton Gordon's estimate of as many as 17 pairs in 1918 (Field, August 10th, 1918, p. 133; cf. Brit. B., Vol. XII., p. 215).

RED-NECKED PHALAROPE (Phalaropus lobatus).

Our first definite record of the breeding of this species was obtained in 1902, when a chick was sent to the late Mr. Edward Williams of Dublin (Irish Nat., 1903, p. 41), but according to Mr. H. S. Gladstone (Brit. B., Vol. I., p. 174) it was in June, 1900, that 2 or 3 pairs were first noticed in the locality, a marshy tract not far from the sea-coast. The numbers had risen to 50 pairs in 1905—a truly remarkable increase —and the breeding range had been considerably extended. I visited the locality in 1907 and 1908 and estimated the numbers at about 30 pairs, but the breeding area was so extensive that there may well have been more. Owing to careful protection, the birds have continued to maintain their strength up to the present day.

On June 11th, 1916, I saw a pair on a freshwater pond in a remote islet off the west coast, where Dunlins were breeding. They remained on the pond all day and may have been nesting, but I was unable to establish the fact. It is a late nester, and on June 16th, 1907, some had only commenced

BLACK-NECKED GREBE (Podiceps n. nigricollis).

This Grebe is a comparatively recent addition to the Irish breeding list. It was observed in several localities in 1915 (Brit. B., Vol. IX., p. 125) under circumstances which left little doubt that it was nesting, and definite proof of this was obtained in 1918, when adults, and young in down, were procured (Vol. XIV., p. 210); while in 1921, 4 nests with eggs

were found near the same spot and several pairs of birds were seen. This locality is probably its stronghold in Ireland, but there is presumptive evidence that it is extending its breeding range to other parts of the country.

FULMAR PETREL (Fulmarus g. glacialis).

In April and May, 1908, I observed Fulmars about the seachiffs of Co. Donegal, and in 1910 I discovered 2 pairs breeding, and young were successfully reared. In 1911 several pairs bred at Horn Head, and it has increased there so rapidly that some 30 pairs now inhabit one portion of the cliffs (*Irish Nat.*, 1912, p. 181; *Brit. B.*, Vol. VI., p. 165), while colonies have been pushed out to some of the larger islands, and a few pairs are found at intervals along the coast (*Brit. B.*, Vol. VII., p. 175). In May, 1911, I found it breeding on the Stags of Broadhaven (*Brit. B.*, Vol. VIII., p. 56), and the late Mr. R. J. Ussher subsequently discovered a larger colony on the North Mayo coast in the same year (*Irish Nat.*, 1911, pp. 149-152; *Brit. B.*, Vol. V., p. 141). In these two parts of Co. Mayo it has continued ever since.

Ten or twelve pairs bred on the Great Skellig Rock, Co. Kerry, in 1913, according to Miss M. J. Delap (vide also Barrington, Brit. B., Vol. VII., p. 56), and in 1915 these had increased to 50 pairs, and they have remained there ever since, though now separated into three distinct groups (t.c. Vol. X., p. 123). It is probable that fresh information about other settlements in the west and south-west will be forthcoming. In 1922 Mr. Stendall reported it breeding on Rathlin Island,

off the coast of Co. Antim. (Irish Nat., 1922, p. 56.)

B. Birds which have bred in Ireland prior to 1900, but about which fresh facts have since been ascertained.

BLACKCAP (Sylvia a. atricapilla).

In May, 1921, Mr. G. R. Humphreys found a nest and 5 eggs of the pink type in Co. Kildare, and the Rev. T. M. Patey discovered a similar set in the same year in Co. Wickl w. This type has not previously been reported from Ireland, where the bird is extremely local and nowhere common.

GARDEN-WARBLER (S. borin).

In June, 1911, I found a nest with 5 eggs in Queen's County, from which there had been no previous record.

WOOD-WARBLER (Phylloscopus s. sibilatrix).

In June, 1910, I heard several males singing and saw a nest with 6 eggs in Co. Wicklow, and a nest with 5 eggs found in that county in the same month was presented to the Natural

History Museum in Dublin. Hitherto the nest had not been recorded from this county, though the birds had been observed in several localities. Definite breeding records are extremely rare.

Rock-Pipit (Anthus spinoletta petrosus).

Besides the locality in Co. Kerry referred to by Mr. Ussher, I have records of erythristic eggs of this species from Co. Wexford (1905, 1906); Co. Dublin (1911); Co. Donegal (1917); and Co. Wicklow (1919, Rev. T. M. Patey).

TREE-SPARROW (Passer m. montanus).

Described in the Birds of Ireland as resident in one district in Co. Dublin; here it is still well represented. The late Mr. R. J. Ussher knew of a colony at Belmullet in Co. Mayo in 1902, and this was subsequently recorded in 1905 by Mr. R. Warren (Irish Nat., 1905, p. 72), who later mentioned (Zool., 1907, p. 344) another colony at Killala in the same county. Mr. Nevin H. Foster found it breeding in Co. Derry in 1906 (Irish Nat., 1906, p. 221) and in Co. Antrim in 1915 (Brit. B., Vol. IX., p. 119). In Co. Donegal, 4 nests with eggs were found in 1907 by Mr. R. Patterson (Irish Nat., 1907, p. 239), and I discovered two fresh colonies on the coast, 20 miles apart, in 1913 (Brit. B., Vol. VII., p. 175) and 1915, which still exist. It breeds also on Inistrahull (Brit. B., Vol. VII., p. 38), and possibly on some other of the larger inhabited islands off the coast. Owing to the scarcity of suitable timber along the sea-board, the Tree-Sparrow in Ireland almost always, if not invariably, builds in ruins, cliffs, under eaves of cottages, or in matted ivv. increasing and spreading, especially on the north-west coast. SISKIN (Carduelis spinus).

I saw a nest with eggs and several pairs of birds evidently breeding, at Downhill, Co. Londonderry, in May, 1918. This is a new record for the county.

CROSSBILL (Loxia c. curvirostra).

On March 16th, 1908, I watched a female Crossbill building in a fir wood in Co. Dublin. On March 28th the nest contained 3 eggs and the bird was sitting. This is the first breeding record for the county (*Brit. B.*, Vol. II., p. 203). A pair nested in the same wood in 1917, but has not done so since. Although the Crossbill is probably resident in the south of Ireland, it is most erratic as a breeding species in other parts of the country. Thus in Co. Wicklow, one of its strongholds, I have records of nests containing either eggs or young in 1907, 1909, 1911 and 1921. In the intervals it seems to have

abandoned some at least of its most favoured haunts. However, in 1922, birds reappeared in one locality and 2 nests with 5 and 4 eggs were found in April and May. In Co. Tipperary I knew of two nests, also containing 5 and 4 eggs, in 1920. I have only these two records of sets of 5 from Ireland.

Dunlin (Calidris a. alpina).

In May, 1920, I found a nest with 4 eggs in Co. Fermanagh where several pairs were breeding. This is a new record for the county.

QUAIL (Coturnix c. coturnix).

There is strong presumptive evidence that the Quail has bred in Ireland during several seasons since 1900, and two definite instances. In July, 1905, Mr. C. J. Carroll saw a brood of young in Co. Tipperary, which could only fly a few yards (*Brit. B.*, Vol. IX., p. 302). Birds were also heard in the same county throughout the summer of 1922 by Mr. Carroll. A chick was obtained at Ballynahinch, Co. Down, on August 10th, 1909, and was preserved by Messrs. Sheals, of Belfast. It has been observed in Co. Dublin during May and June in 1905, 1907 and 1913, and in June, 1905, in Cos. Kildare and Waterford, while Mr. C. B. Moffat records an unusually large number in Co. Wexford in the summer of 1917 (*Irish Nat.*, 1905, pp. 164, 182, 264, 1917, p. 155).

SANDWICH TERN (Sterna s. sandvicensis).

In the Birds of Ircland, reference is made (one in the Addenda) to two breeding resorts. Since 1900, however, this Tern has greatly increased its numbers and breeding range. In 1904, when I visited the original colony in Co. Mayo, there were over 100 pairs, and small numbers have since spread to neighbouring lakes. A few pairs were found with eggs on islands off Co. Down in 1906 (Irish Nat., 1906, p. 192). Co. Fermanagh, about 60 pairs were breeding in 1911. These had decreased in 1920, owing to encroachment by Blackheaded Gulls, but several smaller groups had been formed in the vicinity. I have records of eggs and nestlings having been seen at another locality on the north-east coast in 1914, where it still breeds. 25 birds and 5 nests with eggs were counted on Mutton Island, Co. Galway, by Mr. Glanville in June, 1917 (t.c., 1918, p. 15). Mr. C. J. Čarroll found a colony in another part of the country in 1917 (Brit. B., Vol. XI., p. 122), and Mr. G. R. Humphreys discovered a few pairs breeding in a fresh locality in 1922. In the same year

I saw about 20 pairs nesting in company with Roseate Terns in yet another resort (*Irish Nat.*, 1922, p. 129). These colonies are so widely separated that fresh records may yet come from those areas which are at present deficient. In Ireland the Sandwich Tern often breeds on islands in freshwater loughs at a considerable distance from the sea.

ROSEATE TERN (S. d. dougallii).

In the Birds of Ireland, Mr. Ussher says:—"There is not sufficient evidence to show that the Roseate Tern breeds in Ireland at the present day." This statement was undoubtedly true in 1900, for since the visit of Watters to Rockabill, off the Dublin coast in 1850, no definite particulars had been recorded concerning the breeding of this rare Tern in Ireland. A nestling was obtained from a locality on the north-east coast in 1908, and adults were subsequently seen there in 1914 and 1917, but it is to Mr. G. R. Humphreys that the credit is due of being the first to discover and record a breeding colony in 1913 (Brit. B., Vol. VII., p. 186). This locality was visited by me in 1921 and at that date there were from 15 to 20 pairs in company with other Terns. A further colony of some 23 pairs was discovered and recorded in 1917 by Mr. C. J. Carroll (Brit. B., Vol. XI., p. 122), and in 1922 I found a third breeding resort, and estimated the numbers at from 100 to 150 pairs which were "nesting" along with Common, Arctic and Sandwich Terns on a small islet off the coast (Irish Nat., 1922, p. 129). I strongly suspect that these are not the only localities where this Tern now breeds in Ireland, and further information on the subject will be awaited with interest.

In conclusion, the writer makes no claim that this list is exhaustive. It is simply a record of his own observations and those of others which it has been possible to verify. Recent events have made it extremely difficult, and in many cases impossible, to carry out anything in the nature of prolonged research. It is hoped that with a return to more normal times many fresh facts will be forthcoming about the birds of Ireland.

#### RECOVERY OF MARKED BIRDS.

THE following have kindly sent in subscriptions towards the expenses of the scheme since the last acknowledgment was made: Messrs. I. Bartholomew, C. H. Bentham, A. W. Boyd, G. Brown, Miss B. A. Carter, Messrs. T. L. S. Dooly, R. M. Garnett, Sir Richard Graham, Mr. A. H. Greg, Mrs. Leyborne Popham, Major W. F. Mackenzie, Mr. A. Mayall, Miss Mellish, Dr. H. J. Moon, Mr. P. E. A. Morshead, Mrs. Patteson, the Rev. E. Peake, Messrs. J. Stephens, J. F. Thomas and C. Woodhouse.

JACKDAW (Colœus m. spermologus.)-67,940, 68,418, ringed at Eton. Buckinghamshire, as adult birds, by Mr. A. Mayall, on January 8th, 1921. Reported near the same place, on December 30th, 1922, by the ringer. Rings replaced and birds released.

28,172, ringed at Bradfield, near Reading, Berkshire, as a nestling, by Messrs. N. H. and D. Joy, on June 9th, 1921. Reported three miles north of Reading, on May 16th, 1922, by Mr. C. E. Satchell.

STARLING (Sturnus v. vulgaris).—95,172, 95,140, 98,997, 55,788, ringed at Eton, Buckinghamshire, as adult birds, by Mr. A. Mayall, on December 28th, 1919, October 12th and December 11th, 1920, and August 15th, 1922. Reported at the same place, on January 17th, 1923. November oth and December 6th, 1922, and January 11th,

1923, by the ringer. Rings replaced and birds released. 94,993, 94996, 51,022, ringed at West Park, Leeds, by Mr. C. F. Archibald, on November 11th and 13th, 1921, and January 24th 1922. Reported at the same place on September 28th, December 2nd, and at Stretford, near Manchester, on November 22nd, 1922, by Messrs. J. W. Haigh and H. Child, and Miss Brackhand. 54,309, ringed at Patterdale, Westmorland, as a young bird, by Dr. H. J. Moon, on May 30th, 1922. Reported at Sunderland, early November, 1922, by Mr. A. Hudson.

99,916, ringed at Broughty Ferry, Forfarshire, as a young bird, by Messrs. J. N. D. and T. L. Smith, on August 15th, 1921. Reported at Carnoustie, near Dundee, Forfarshire, on September 7th, 1922, by Mr. M. M. Forrest.

100,852, ringed at York, as an adult, by Mr. V. G. F. Zimmerman on May 25th, 1921. Reported at the same place, on August 18th,

1922, by Major I. S. Strangwayes.

81,912, 98,863, 98,899, 96,251, ringed at Cheadle, Staffs., as nestlings, by Mr. J. R. B. Masefield, on May 29th, 1915, May 16th and June 6th, 1921, and May 26th, 1920. Reported where ringed, by the ringer, in spring, 1921. August 8th, 1922, January 17th, 1923, and December 29th, 1922.

95,882, ringed near Gt. Budworth, Cheshire, as a nestling, by Mr. A. W. Boyd, on May 7th, 1921. Reported at Rode Heath, near

Stoke-on-Trent, late in January, 1923, by Mr. J. Leeson.

51,017, ringed at West Park, Leeds, by Mr. C. F. Archibald, on January 24th, 1922. Reported at Headingley, Leeds, in February, 1923, by Mr. C. E. Petty.

GREENFINCH (Chloris ch. chloris).—KR.82, ringed at Torrance, Stirlingshire, as a young bird, by Mr. J. Bartholomew, on June 23rd, 1919. Reported near the same place, early in January, 1923, by the ringer. QS.79, ringed at Cheadle, Staffs., as an adult, by Mr. J. R. B. Masefield, on May 31st, 1921. Reported at the same place, on

May 9th, 1922, by the ringer. Ring replaced and bird released. GOLDFINCH (Carduelis c. britannica).—2,829, ringed at Bluntisham, Huntingdonshire, as a nestling, by the Rev. E. Peake, on July 26th,

1922. Reported at Chatteris, Cambridgeshire, on November 2nd. 1922, by Mr. R. Taylor.

LINNET (Carduelis c. cannabina). -7,314, ringed at Southport, Lancashire. as a nestling, by Mr. F. W. Holder, on June 12th, 1922. Reported at Eccleston, near St. Helens, Lancashire, in October, 1922, by Mr. S. Hill.

TREE-PIPIT (Anthus t. trivialis).—53,089, ringed at Patterdale, Ullswater, Westmorland, as a young bird, by Dr. H. J. Moon, in June. 1922. Reported at Alpedriz, near Alcobaca, Portugal, in September, 1922, by Mr. W. C. Tait. Published in "Seculo," September 10th, 1022.

Meadow-Pipit (Anthus prateusis),—4,826, ringed at Kilmacolm, Renfrewshire, as a nestling, by Mr. and Mrs. R. O. Blyth, on July 13th, Reported at Azur, Landes, France, on October 11th, 1922.

by Monsieur S. Gratiannette.

PIED WAGTAIL (Motacilla a. lugubris).—6,632, ringed at Bradfield College, Berkshire, as a nestling, by Mr. A. Elliston, on June 8th. Reported at Bramley, near Basingstoke, Hants, on August

8th, 1922, by Mr. G. Evans.

SPOTTED FLYCATCHER (Muscicapa s. striata).—4,068, ringed at Cogshall, near Northwich, Cheshire, as a nestling, by Mr. A. W. Boyd, on July 2nd, 1921. Reported at St. Christophe-des-Bardes, near St. Emilion (Gironde), France, on September 10th, 1922, by Monsieur A. Choski.

Song-Thrush (Turdus ph. clarkei).—92,503, ringed at Bardowie Castle, Stirlingshire, as a young bird, by Mr. J. A. Anderson, on May 7th, 1918. Reported at Victoria Park, Manchester, on June 29th, 1922, by Mr. M. M. Kay.

97,421, ringed at Lytham, Lancashire, as a young bird, by Dr. H. J. Moon, on May 5th, 1920. Reported on board a ship in the River

Clyde, on October 26th, 1922, by Mr. C. Bersin.

11,627, ringed at St. Mary's, Scilly Islands, as a nestling, by Mr. S. Austin (for the Lon. Nat. Hist. Society), on June 9th, 1920. Reported at the same place, on June 17th, 1922, by Mr. J. Cross.

BLACKBIRD (Turdus m. merula).—99,944, ringed at Broughty Ferry, Forfarshire, as an adult, by Messrs. J. N. D. and T. L. Smith, on January 2nd, 1922. Reported at the same place, in July, 1922, by Mr. R. Ferrier.

99,940, ringed as 99,944, on November 27th, 1921. Reported at the same place, on January 21st, and again on May 11th, 1922.

Ring replaced by 99,981 and bird released.

KS.38, ringed at Torrance, Stirlingshire, as an adult, by Mr. J. Bartholomew, on August 10th, 1919. Reported at Dunning, Perthshire, on July 13th, 1922, by Mr. A. H. Donaldson.

98,619, ringed in Charnwood Forest, Leicestershire, as a nestling, by Mr. F. W. Preston, on July 18th, 1920. Reported at Aspley Guise, Bedfordshire, on May 19th, 1922, by Mr. A. A. Holmes. 101,128, ringed at Patterdale, Westmorland, as a young bird, by Dr. H. J. Moon, on April 29th, 1921. Reported at Kilcock, Co. Kildare, Ireland, in mid-January, 1923, by Mr. A. C. Higgins. 101,498, ringed at Pyrford, Surrey, as an adult, by Mr. W. P. G. Taylor, on December 26th, 1921. Reported at the same place, on December 24th, 1922, by the ringer. Ring replaced and bird released.

REDBREAST (Erithacus r. melophilus).—MT.74, ringed at Burnham, Buckinghamshire, as a young bird, by Mr. A. Mayall, on May 3rd, 1920. Reported at Farnham Common, near Slough, in July, 1922,

by Mr. F. Dancer.

PW.34, ringed at Streatham, S.W., as an adult, by Mr. F. I. Mitchell, on October 2nd, 1921. Reported on October 22nd, 1921. and again on June 24th, 1922, at the same place, by the ringer.

Ring replaced and bird again released.

QV.35, 5,683, ringed at Broughty Ferry, Forfarshire, as adults, by Messrs. J. N. D. and T. L. Smith, on October 30th, 1921, and January 31st, 1922. Reported at the same place, on October 17th and May 3rd, 1922, by Miss S. Forbes and the ringer.

5,826, ringed at Maidstone, Kent, as an adult, by Mr. W. Wood, on February 17th, 1922. Reported at the same place on August 6th, 1922, by the ringer. Ring replaced and bird released.

4,132, ringed at Tiehborne, Hants, as a nestling, by Mr. A. W. Boyd, on June 5th, 1922. Reported at Ropley, near Winchester,

on January 5th, 1923, by Mr. S. A. Giles.

A2,831, 5,412, ringed at Laugharne, Carmarthenshire, as a bird of the year and an adult, by Mr. J. F. Thomas, on August 20th and January 10th, 1922. Reported where ringed, on January 18th and 21st, 1923, by the ringer. Rings replaced and birds released.

MARTIN (Delichon u. urbica).—4,052, ringed at Frandley, near Great Budworth, Cheshire, as a nestling, by Mr. A. W. Boyd, on June 28th, 1921. Reported 13 miles away, on June 14th, 1922, by Mr. M. H.

Sherwin.

SWIFT (Apus a. apus).—5,310, ringed at Fovant, Wiltshire, as an adult, by Dr. R. C. C. Clay, on July 15th, 1921. Reported at the same place, on May 12th, 1922, by the ringer. Ring replaced and bird released.

Сискоо (Cuculus c. canorus).—96,691, ringed at Gryffe Reservoir, Renfrewshire, as a nestling, by Mr. and Mrs. R. O. Blyth, on July 9th, 1921. Reported at Gattatico, Reggio, Emilia, Italy, on

August 21st, 1922, by Signor A. Tragni.

MERLIN (Falco c. asalon),—63,826, ringed at Knowl Hill, near Rochdale, Lancashire, as a nestling, by Mr. A. W. Boyd, on June 23rd, 1920. Reported on Longshaw Moors, near Chesterfield, Derbyshire, in August, 1922, by Mr. D. N. Turner. 71,883, ringed on Bardon West Moor Bolton Abbey, Yorkshire, as a young bird, by Mr. S. Birch, on July 7th, 1922. Reported at Spittat, Berwick-on-Tweed, Northumberland, on September 16th,

1922, by Mr. Wm. Patterson. KESTREL (Falco t. tinnunculus).—39.443, ringed at Torrance, Stirlingshire, as a young bird, by Mr. J. Bartholomew, on June 28th, 1921. Reported about twenty miles west of Edinburgh, on August 26th,

1922, by Mr. James Robb.

71,742, ringed near Malvern, Worcestershire, as a nestling, by Mr. P. E. A. Morshead, on July 11th, 1922. Reported near Kidderminster, Worcestershire, on October 17th, 1922, by Mr. E. H. Berriman.

Sparrow-Hawk (Accipiter n. nisus).—71,504, ringed at Kinclune, Kingoldrum, Forfarshire, as a nestling, by Messrs. J. N. D. and T. L. Smith, on July 8th, 1922. Reported at St. Fink, Blairgowrie, Perthshire, on December 7th, 1922, by Mr. J. Stewart.

Mallard (Anas p. platyrhyncha).—33,465, ringed at Alnwick Park, Northumberland, by Mr. W. Meech (for Lord Wm. Percy), on July 8th, 1915. Reported between Alnwick and Alnmouth, on January 20th, 1922, by Mr. Collingwood Thorpe.

20,534, ringed at Leswalt, Stranraer, Wigtownshire, as an adult, by Mr. M. Portal, on March 3rd, 1922. Reported at Petsmo, Kvev-

laks, Wasa, Finland, in August, 1922, by Mr. A. J. Ronn.

37,391, ringed as 20,534, on February 28th, 1921. Reported at Skaraborgs Lan, near Väner Lake, Sweden, on August 1st, 1922, by Professor L. A. Jagerskiold.

37,376, ringed as 20,534, on June 20th, 1821. Reported at Loch

Connel, Strangaer, on August 19th, 1922, by the ringer.

37,713, ringed at Southport, Lancashire, as a nestling, on May 22nd, 1918. Reported on Quoile River, one mile from Downpatrick, Co. Down, Ireland, on November 2nd, 1922.

Teal (Anas c. crecca).—64,619, ringed at Alnwick, Northumberland, by Mr. Wm. Meech (for Lord Wm. Percy), on August 16th, 1913.

Reported at the same place on August 16th, 1915.

PINTAIL (Anas a. acuta).—33,462, ringed at Alnwick Park, Northumberland, by Mr. Wm. Meech (for Lord Wm. Percy), on August 11th, 1915. Reported at the same place, on August 4th, 1919, by the ringer.

CORMORANT (*Phalacrocorax c. carbo*).—101,816, ringed at Castle Loch, Mochrum, Wigtownshire, as a nestling, by Mr. J. G. Gordon, on June 14th, 1919. Reported near Port William, Luce Bay, Wig-

townshire, on July 17th, 1922, by Mr. David Ewing.

RINGED PLOYER (Charadrius h. hiaticula).—99,136, ringed at Holy Island, Northumberland, as a nestling, by Mrs. T. E. Hodgkin, on June 26th, 1922. Reported at Cardross, Dumbartonshire, on September 18th, 1922, by Mr. S. McFarlane.

Lapwing. (Vanellus vanellus).—72,047, ringed at Towny Meadow, Beenham, near Reading, Berkshire, as a nestling, by Dr. N. H. Joy, on May 21st, 1922. Reported near Saint Hilaire de Riez, Vendée, France, on November 11th, 1922, by Monsieur E. Pontoizeau. Kept in captivity for a few days then released with ring 55,202.

52,234, ringed at Pitewan, Glenisla, Forfarshire, as a young bird by Messrs. J. N. D. and T. L. Smith, on July 15th, 1922. Reported at Stonehaven, Kincardineshire, on November 20th, 1922, by Mr. A. T. Bell.

53,205, ringed at Lann, Dumfriesshire, as a young bird, by Mr. J. Murray (for Mr. H. S. Gladstone), in the spring, 1922. Reported on River Clyde, on October 14th, 1922, by Mr. L. Currie.

Common Sandpiper (*Tringa hypoleucos*).—54,821, ringed at Hornby, Lancaster, as a young bird, by Mr. H. S. Greg, on June 30th, 1922. Reported about five miles from Carmarthen, in August, 1922, by

Mr. J. R. Thomas.

SNIPE (Gallinago g. gallinago).—55,301, ringed at Torrance, Stirlingshire, as a young bird, by Mr. J. Downie (for Mr. J. Bartholomew), on June 14th, 1922. Reported at the same place on September 2nd, 1922, by Mr. J. Bartholomew.

6,886, ringed at Lann, Dumfriesshire, as a young bird, by Mr. J. Murray (for Mr. H. S. Gladstone), on May 23rd, 1922. Reported on the Earl of Caledon's estate, Armagh, Ireland, on December 8th, 1922, by Mr. Hampton A. Gray in *The Field*, 23. xii.'22, p. 938.

WOODCOCK (Scolopax r. rusticola).—2,691, ringed at Lann, Dumfriesshire, as a young bird, by Mr. J. Murray (for Mr. H. S. Gladstone), on May 20th, 1922. Reported at the same place, on December 26th, 1922, by the ringer.

Ringed "W. A. Sligo 12" in the summer of 1912 in Co. Sligo, Ireland; caught with a brood of four at the same place, on June 21st, 1915, and ringed on the other leg "W. Ashley"; caught again at the same place on July 11th, 1922. (Wilfred Ashley, Field, 11. xi.'22, p. 692.)

- COMMON TERN (Sterna h. hirundo).—1,114, ringed at Ainsdale, Lancashire, as a nestling, by Mr. F. W. Holder, on June 13th, 1921. Reported at Sedburgh, Yorkshire, in mid-September, 1922, by Mr. T. S. Bracken, per Country Life.
- Black-headed Gull (Larus r. ridibundus).—60,044, ringed at Delamere Forest, Cheshire, as a young bird, by Mr. A. W. Boyd, on June 14th, 1913. Reported at Reddish, near Stockport, Cheshire, late November, 1922, by Mr. W. Rainford. 62,112, ringed at Ravenglass, Cumberland, as a young bird, by Mr. H. W. Robinson, on June 11th, 1913. Reported at Walney Island, Lancashire, on September 11th, 1922, by Mr. W. Dick.
- Lesser Black-backed Gull (Larus f. affinis).—39,594, ringed at Foulshaw, Westmorland, as a young bird, by Mr. H. W. Robinson, on July 21st, 1921. Reported at Saltend, Hull, on July 7th, 1922, by Mr. T. Johnson.

39,616, ringed as 39,594. Reported at Grantown-on-Spey, Morayshire, Scotland, on August 14th, 1922, by Mr. G. G. Mortimer. 39,613, ringed as 39,594. Reported in River Mersey, Lancashire,

on September 6th, 1922, by Mr. Ernest Myles.

20,104, ringed as 39,594, on July 20th, 1922. Reported near Kendal, Westmorland, on November 9th, 1922, by Mr. A. Jesper. 20,159, 20,078, ringed as 39,594, on July 20th, 1922. Reported at Nazareth and Oporto, Portugal, in September and October 22nd, 1922, by Miss de Cardoso and Senor Fernando de Castro.

39,894, ringed as 39,594, on July 12th, 1922. Reported near Cwm Dwythwch Lake, on the slopes of Snowdon, on September 10th,

1922, by a "Snowdonian."

20,022, ringed as 39,594, on July 18th, 1922. Reported at L'Aberwrach, Landéda, Finistère, France, on August 23rd, 1922, by Monsieur S. Le Breton.

39,891, ringed as 39,594, on July 12th, 1922. Reported at Azurara, near Villa do Conde, Portugal, on October 9th, 1922, by Mr. W. C. Tait.

39,857, ringed as 39,594, on July 12th, 1922. Reported at Marsden Rock, near South Shields, Co. Durham, on September 29th, 1922,

by Mr. G. H. Peters.

Guillemot (*Uria t. troille*).—20,889, 20,890, ringed at Ailsa Craig, as young birds, by Mr. Duncan Macdonald, on July 3rd, 1922. Reported at Kilbrenian Sound, off Skipness, and Loch Fyne, Argyll, late September and December, 1922, by Messrs. T. Jackson and D. McIntosh.

#### MARKED ABROAD AND RECOVERED IN ENGLAND.

Lapwing (l'anellus vanellus).—Fr-Sund, Danmark, 47, ringed as a nestling, on an island in Roskilde Fjord, near Frederikssund, Denmark, on May 15th, 1921. Reported at Colchester, Essex, on October 13th, 1921, by Mr. B. Carter.

Black-headed Gull (*Larus r. ridibundus*).—Museum Leiden, 31,519, nestling, ringed at Kerkwerve, Zeeland, Holland, in July, 1921. Reported at Baguley, Altrincham, Cheshire, on January 1st, 1922, by Mr. R. Topping.

P. Skovgaard, Viborg, A984, ringed at Randers Fjord, N.E. Jutland, Denmark, on July 7th, 1919. Reported at St. Leonards-on-Sea, Sussex, on February 20th, 1922, by Mr. R. D. M. Cleaver. P. Skovgaard, Viborg. A1,195, young bird, ringed in Limfjord, near Lögstör, N. Jutland in the summer of 1920. Reported at

Ormsby, Gt. Yarmouth, Norfolk, in March, 1922, by Dr. B. B.

Rossitten, 2,242E, nestling, ringed in Schleswig, on July 6th, 1910. Reported on Caldicot Moors, near Chepstow, Monmouthshire, on

February 17th, 1922, by Mr. A. Silver.

Viborg, Danmark, 4,034, nestling, ringed near Lögstör, Jutland, on July 3rd, 1912. Reported near Boston, Lines., in October, 1912, by Mr. H. Sharp. (H. Chr. Mortensen, Dansk Ornith. For. Tids., XVI., p. 86.)

Viborg, Danmark, 4,133, nestling, ringed on Egholm, West Zealand, Denmark, on July 7th, 1913. Reported at Aldeburgh, Suffolk, on December 6th, 1916, by Mr. C. C. Clarke. (H. Chr.

Mortensen, Dansk Ornith. For. Tids., XVI., p. 86.)

Viborg, Danmark, 4,131, nestling, ringed as 4,133. Reported near Ramsgate, Kent, on December 15th, 1913. (H. Chr. Mortensen,

Dansk Ornith. For. Tids., XVI., p. 86.)

H. Pedersen, Fr-Sund, Danmark, 40,407, nestling, ringed on an island in Roskilde Fjord, near Frederikssund, Denmark, on June 1st. 1922. Reported in Gloucestershire, on September 23rd, 1922. by Mr. F. H. L. Whish.

H. Pedersen, 41,214, young bird, ringed as 40,407, on June 10th, 1922. Reported at Sculthorpe, Fakenham, Norfolk, in October, 1922, by Mr. W. Crane. Published in Fakenham Post, October 20th. H. Pedersen, 40,621, ringed as 40,407. Reported at Bradninch. Devon, on January 3rd, 1923, by Mr. E. Blackmore.

H. Pedersen, 40,166, ringed as 40,407. Reported at Belvedere,

Kent, on August 8th, 1922, by Mr. A. Vinson.

H. Pedersen, 41,324, ringed as 40,407, on June 14th, 1922. Reported at Widnes, Lancs., on October 19th, 1922, by Mr. D. Neil. H. Pedersen, 478, ringed as 40,407, on June 29th, 1921. Reported at Grimsby, Lincs., on October 26th, 1922, by Mr. W. Hollings-

H. Pedersen, 41,015, ringed as 40,407, on June 14th, 1922. Reported at Blaydon, Durham, on November 21st, 1922, by Mr. M.

Nicholson.

H. Pedersen, 40,037, ringed as 40,407. Reported at East Boldon, Durham, on January 2nd, 1923, by Mr. J. Preistley.

H. Pedersen, 41,094 ringed as 40,407, on June 14th, 1922. Reported on the Thames, on December 20th, 1922. Published in Shooting Times.

H. Pedersen, 992, ringed as 40,407, on July 11th, 1921. Reported at Morecambe, Lancs., on January 10th, 1923, by Mr. G. Rawcliffe.

Lotos, Prag, 20,589 or 20,539, nestling, ringed at Liboch, Bohemia, on May 25th, 1922. Reported near Middlesborough, Yorkshire, on September 20th, 1922, by Mr. H. W. Robinson.

Lotos, Prag, 47,951, nestling, ringed on Lake of Kirchberg, N. Bohemia, on June 1st, 1921. Reported at Halling, near Rochester, Kent, on December 26th, 1922, by Mr. G. J. Scholey.

COMMON GULL (Larus canus).—H. Pedersen, Fr-Sund, Danmark, 50,028, young bird, ringed on an island in Roskilde Fjord, near Frederikssund, Denmark, on June 22nd, 1922. Reported at Flordon, Norwich, on December 22nd, 1922, by the Rev. I. Easton. H. Pedersen, 40,214, ringed as 50,028, on July 6th, 1922. Reported at Portsmouth Harbour, on December 31st, 1922, by Mr. L. Wheeler.



## LAPLAND BUNTINGS AND RICHARD'S PIPIT IN NORFOLK.

It is several years since we have had a good "Lapland" year in north Norfolk, but considerable numbers of Lapland Buntings (Calcarius l. lapponicus) turned up in the autumn of 1922, and I have been waiting to see if they have been noticed in other localities.

This is a bird very likely to escape observation unless the note is known, and during the past few years only one or two have been obtained even in their favourite haunts, which are arable fields close to the sea. In some years indeed, no birds are recorded, and it is always a very uncertain visitor.

In the autumn of 1922 the prevailing wind was S.W. throughout nearly the whole of September and the first part of October. On the evening of October 14th I shot a Black Redstart on the coast, and the wind was east next morning, and continued so, increasing in strength for several days. On the morning of the 21st the wind blowing hard E. and N.E., I shot three Lapland Buntings on the beach, and others were seen either singly, or among the parties of Larks and Snow-Buntings. In the course of the next few days at least a score were identified at the same place, and it is evident that a considerable number arrived, as these notes only refer to a very limited area.

A few Buntings were still about in the early part of January, 1923, as Edward Ramm, the well-known gunner, saw several as late as that date. He tells me that some years ago when there was a big rush of Lapland Buntings he saw and shot some in January, but they are not generally seen after November.

It may be worth adding that on the morning of October 21st, when the Lapland Buntings arrived, a Richard's Pipit (Anthus r. richardi) was also shot. I saw it standing up on some short turf by the sea, and it was quite easy to identify by its great length of leg. This is the third specimen of Richard's Pipit which I have seen during the last twelve years within a couple of hundred yards of the same spot. CLIFFORD BORRER.

AUTUMN SINGING OF WOOD-LARK AND STONECHAT. DURING a visit to North Devon, extending from October 16th to 28th, 1921, I heard the Wood-Lark (*Lullula a. arborea*) singing almost every day. The notes were somewhat

imperfect, but the song was repeated frequently from shortly after surrise until late in the afternoon. It was only during brief periods of cold windy weather that the birds were silent. On one occasion I heard a party of five Wood-Larks singing in chorus.

Stone-Chats (*Saxicola t. hibernans*) were singing on October 16th and 26th, both days being exceptionally warm and sunny.

HOWARD BENTHAM.

#### ROOSTING HABIT OF TREE-CREEPER.

With reference to Mr. Savage's note (antea, p. 284) on the Tree-Creeper (Certhia familiaris brittanica) roosting in selfmade holes in the trunks of wellingtonias, my young friend, Ernest Blezzard, a member of the Carlisle Natural History Society, tells me that near Burgh-by-Sands in Cumberland, there is an old alder stump about to ft. high in which are several circular holes about 11 inches diameter, at varying heights from the ground, made and used by these birds for roosting in, some of the holes containing droppings. years ago one of the holes, deeper than the others, was occupied as a nesting site and the young successfully reared. Close by the alder there stood at one time a dead and decaying willow from which the bark had fallen, and several similar holes cut into the exposed wood were to be seen. This habit of the Tree-Creeper's would appear, therefore, to be of older standing than its connection with such a recently introduced tree as the wellingtonia would seem to suggest. F. H. DAY.

# NUTHATCH CONCEALING ITS EGGS DURING INCUBATION.

On May 26th, 1919, at Rossett, Denbighshire, I examined a nest of the Nuthatch (Sitta eu. britannica), which was in a hole in an oak about four feet from the ground. The bird was off the nest at the time and the eight eggs—much incubated—were completely covered over with a layer of small pieces of dried oak leaves the size of a halfpenny, this being the only material made use of in this nest. Although much has been written on the nesting propensities of this bird, I have never seen this habit commented on in any publication, or met with a similar case myself before or since. It is probable that when the nesting hole is at a considerable height, as is so often the case, no concealment of the eggs is attempted, but if near the ground it is occasionally done as an extra precaution.

S. G. CUMMINGS.

[I do not think the habit is so unusual as might be inferred from the above note. Owing to the nature of the nest material the eggs readily slip down out of sight among the fragments of dead leaves or scales of bark. Thus F. Norgate (Zool., 1880, p. 42) speaks of eggs "buried in a bed of bark of Pinus sylvestris," "the birds buried the eggs in scales of pine bark" and on p. 43, "The eggs were covered with thin scales of pine bark." On p. 44 he states that "the eggs were covered with pine bark" in two cases, though the birds were sitting hard. Similar cases have also come under my own notice.—F. C. R. JOURDAIN.]

# LONG-TAILED TITS FEEDING ON THE GROUND.

On January 21st, 1923, while in Epping Forest with Mr. S. Austin, I flushed a party of Long-tailed Tits (Ægithalos caudatus roscus) from a clump of low rushes, and an examination of the ground showed that it was plentifully strewn with the seed of the birch. The Tits flew a few yards away and settled on the open ground where we were able to approach them very closely, at one time my companion was not more than two yards from them. We could see clearly that they were feeding on the seeds. We followed the party after its next flight and again found them feeding on the ground. was of interest to note how the tail was jerked as the birds progressed. It is not improbable that the sharp drop in temperature at this date may have reduced the usual supply of insect food in the trees and driven the birds to the ground. This is the only occasion on which I have seen Long-tailed Tits feeding on the ground and other observers, including Mr. C. Oldham, consider this experience as unusual. No reference is made to such a habit by Yarrell, Hudson, Coward and the Practical Handbook. Macgillivray apparently considered it of sufficient interest to quote an instance of these Tits settling on stems of hemlock, which had been cut to within three inches of the ground, and then settling on barley stubble. WILLIAM F. GLEGG.

# BLACKBIRD LAYING IN OLD NEST OF SONG-THRUSH.

WITH reference to Mr. Guthrie Hall's note (antea, p. 253), I found on May 14th, 1922, the old nest of a Song-Thrush (T. ph. clarkei) with four newly laid eggs of a Blackbird (T. merula) on a circular pad of roots at the bottom.

When I visited the young birds to ring them one was lying under the others and looking hardly likely to live. On lifting it out it disgorged a whole Cockchafer (M. vulgaris) of about I inch in length and obviously felt much better.

L. E. TAYLOR.

#### LITTLE OWLS IN NORTH DEVON.

ON October 18th and 25th, 1921, I heard a Little Owl (Athene noctua mira) in the village of Mortehoe, and on October 27th one was calling near Braunton Burrows. The bird does not appear to have been previously recorded from North Devon. HOWARD BENTHAM

#### FERRET SEIZING A LITTLE OWL.

I was a witness of the following incident which occurred on January 27th, 1923, in a large cut over wood in Gloucestershire. where I was ferreting. Two rabbits had bolted and nothing further happening, I approached the burrow and was surprised to hear a curious prolonged screeching, unlike anything I had heard before. With the aid of a line ferret and a spade the source of the noise was discovered—a Little Owl (Athene n. mira) firmly held below the left eye by the muzzled ferret.

GUY CHARTERIS.

On page 274, Vol. XIII., a Little Owl was described as chasing a ferret out of a rabbit-hole.—EDS.]

### KESTRELS CHASING A LINNET.

On October 8th, 1922, on the downs near Salisbury, while watching a couple of Kestrels (Falco tinnunculus) near their regular haunt and nesting-place, I saw one of them at a considerable distance chasing a small bird which I afterwards recognized as a Linnet (Carduelis cannabina). The Linnet, very closely pursued by the Kestrel, came up on the wind towards a young fir plantation where I was standing, and I watched it foil the latter twice by jerking sharply upward in its flight. It shot into the shelter of the low firs, uttering the squealing terror-cry usual when a Sparrow-hawk is hunting. Just as it reached the trees the second Kestrel, which had been hovering low down close to the copse, stooped at it, and darting into the firs, drove it out again—though only for a moment, for seeing the first Kestrel hovering above it, it instantly turned and shot back into thicker cover.

Kestrels of course take a good many small birds—mostly from the ground; but a definite chase of the kind here recorded must, I imagine, be rare. BERTRAM LLOYD.

#### HEN-HARRIERS IN SUFFOLK.

THERE were said to have been eight Hen-Harriers (Circus cyaneus) on the heath-land between Woodbridge and the sea during the winter of 1921-22. I saw several alive and two which had been shot. This winter there have been three, I saw them all together. I am afraid they kill a large number of Partridges; the keepers say they drive them into the wire netting which surrounds most cultivated land in the heath country and I can to some extent confirm this.

Bernard J. Ringrose.

# THE BRENT-GOOSE IN IRELAND IN 1708.

The following observations on the Brent-Goose (Branta bernicla) in Ireland seem to be worth including amongst the annals of British ornithology, for it is unusual at the beginning of the eighteenth century to find anything relating to the habits of birds of any permanent value. Curiously enough they are almost identical with Pennant's remarks on the same subject (ed. 1776), though written eighteen years before he was born, yet it hardly seems probable that they can be the source whence he derived his information.

They are taken from the Letter Book of Samuel Molyneux of Trinity College, Dublin, now preserved amongst the muniments of the Corporation of Southampton, and occur in a letter from Charles Norman of Londonderry, dated February 13th, 1708, in reply to a request from Molyneux for "an account of your Barnacles in the Lough of Derry." Norman writes:—

"As to the account which you desire of our barnacles, all that I can be informed of them is, that they come in here in vast flocks about the beginning of September and goe away I suppose to a colder climate about the middle of March. They are the shyest birds that can be when they are abroad, but no sooner are they taken, but they become as familiar as any Tame fowl whatsoever, and will feed and grow fat upon oats or any other food that is thrown to common Poultry. They are usually taken here by Netts in dark nights, sett in the places which they frequent. You are rightly informed that the reason why they are good meat here and not fit to be eaten in other places is from their feeding upon a certain kind of sweet grass; but it is the roots and not the stalks which they eat, of which according to your desire I send you some inclos'd. The same kind of grass is also in Lough Swilly in the county of Donegall where the barnacles also are very good."

There is no doubt that the greater part of this account applies to the Brent, though the sentence describing the ease with which the birds are domesticated presumably refers to the Barnacle (B. leucopsis), the two species being generally confused in the north of Ireland even to this day.

In August of the same year Molyneux relates to a correspondent the following observations, of a Col. Solomon Richards of Wexford, culled from his father William Moly-

neux's notes. These must have been written at least as far back as 1608:—

"It is most certain the Barnacles in the Harbour of Wexford from the 21st of August on which they come to the 21st May on which they goe every year, are in numbers wonderfull, but on May the 21st they all leave it going northwards by sea, and in the opinion of many curious observers they goe to the northern Isles of Scotland to breed, for on the 21st of August following they doe certainly and constantly return, bringing their young ones with them in numbers beyond expression. This relator, as he rode forward and backward between Dublin and Wexford, hath often seen them at sea, coming a day or two before their arrival as also going a day or two before their departure, and for about 20 years hath observed their not failing the time of going and coming, as also of their swinning when the Tide is with them, and flying when against them, and now and then resting on the water."

These remarks, of course, also in reality refer to the Brent-Goose for which Wexford Harbour has long been known as a favourite resort.

N. F. Ticehurst.

#### POCHARD NESTING IN WEST SUSSEX.

On May 24th, 1922, whilst visiting a decoy pond in West Sussex, I noticed a drake escorting two ducks amongst rushes fringing the border. All three birds were Pochards (*Nyroca ferina*). After half an hour's wading, I came across a nest of this species with a little down and several feathers, from which eggs had evidently been taken. A friend kept these ducks under observation for three weeks subsequently, but failed to find any evidences of their nesting again.

In the *Practical Handbook* (Vol. II., p. 317), it states: "Distribution increasing and now breeds," etc., "Sussex," etc. This is a species I have particularly looked out for as a breeder, throughout several years; and in my experience this has always been one of the very rarest ducks to breed in the county.

CECIL SMEED.

## NUPTIAL DISPLAY OF VELVET-SCOTER.

On March 3rd, 1923, I walked east from Rye, Sussex, along the road between the dunes and the marsh, and while passing a large reedy mere, on which some errant farmhouse ducks were getting an easy living, I saw a large black bird (which for the moment I took for a Coot) flying towards me. As it settled on the water, the fact that its secondaries were entirely white woke me to the fact that it was a Velvet-Scoter (Oidemia fusca). As soon as it lit it began an obviously ceremonial display towards another of the same species, already on the water, but which I had not noticed previous to the arrival of the drake. The display consisted in raising its bill towards the zenith and making shuddering leaps forwards towards the other bird—

which I assume to be the female, as it was much browner and less strongly marked about the head; but which, unless I am mistaken, somewhat later went through the same antics.

They then began diving, not always in the same fashion, some dives were quiet, some a leaping plunge, and some (or one at any rate) a flight submersion, the wings being open—as Mallards sometimes dive. This last I take to be part of a courtship display. During such dives as I timed they were under water for 25 or 26 seconds. They were within a hundred yards of where I stood and through my glass I had a good view of them.

Donald Gunn.

## NESTING DATES OF CORMORANTS AND SHAGS.

I was glad to see Mr. W. J. Ashford's note (antea, p 286) on the early nesting of the Cormorant (Phalacrocorax carbo) which I can corroborate. Mr. Jourdain's article (Vol. VII., p. 94), quoting Ussher's Birds of Ireland, gives Ireland as furnishing the earliest eggs, with the date, April 4th.

In 1914 I paid special attention to the nesting of both Cormorants and Shags in the Isles of Scilly. On April 20th I first visited the main western colony in these islands. Here I found young Cormorants in all stages, from fully fledged youngsters to naked chicks just out of the egg. Some nests were empty, pointing to the young having already flown. I have never seen it mentioned how long the young of the Cormorant remain in the nest. The time is fully a month, for young just hatched on this April 20th were still in the nest on May 19th, some being still there on June 2nd, and it was not until I visited the colony on June 16th that I found it empty.

When were the eggs deposited from which these fully fledged youngsters of April 20th were hatched? The incubation period is four weeks. These youngsters were at the very least three weeks old on April 20th, so that their parents had full clutches of eggs and commenced incubation on or about March 3rd, therefore they commenced laying at the end of February. It must also be remembered that some young had on the 20th of April probably already flown.

With regard to the Shag (*P. graculus*), I found them nesting very late on the Isles of Scilly in 1914, and the fishermen inform me that they have found early nests of this species, which points to the Shag being double-brooded. It must, however, be borne in mind that these fishermen do not discriminate between the two species, calling them all Shags, so what they saw may have been Cormorants. In *The Annals* 

of Scottish Nat. Hist., 1908, p. 51, I pointed out that Shag's nests contained eggs that year on the Island of Sule-Skerry,

in Orkney, on February 24th.

In Scilly, in 1914, on April 21st, I saw only one egg of the Shag and two young just hatched. On May 14th many were just hatching; on June 2nd some were large enough to "ring." On June 16th there were hundreds just hatched and hundreds of eggs still unhatched; and on June 25th the same applies, and it was not until July 16th that the majority of the remaining eggs seemed to have hatched off. Unfortunately on July 18th, owing to the coming great war, I had to leave these islands, leaving many problems still unsolved, but this late nesting of the Shag certainly looked as if it was the second broods.

H. W. ROBINSON.

#### INCUBATION-PERIOD OF LITTLE TERN.

I have often tried to determine the incubation-period of the Little Tern (Sterna a. albifrons) in Fife, but up to the present I have only been successful with three nests, each of which contained two eggs. So far as these were concerned, there was little variation.

In two which I watched in 1920, the second eggs were laid early on 26th June, and the clutches hatched on the mornings of 15th and 16th July, giving incubation-periods of nineteen and twenty days respectively.

In the third case, in 1921, the first egg was laid on 25th June and the clutch hatched on 16th July. In my experience the Little Tern lays an egg each day until the clutch is complete, so the incubation-period of this nest was probably twenty days after the second egg was laid.

J. N. Douglas Smith.

# QUAIL IN ESSEX IN JANUARY.

A Quail (Coturnix c. coturnix) was shot by a keeper at Langenhoe in Essex on Saturday, January 19th, 1923. The feathers sent were recovered from the dustbin after a meal had been made of the bird which, according to my informant, was in fine condition.

Guy Charteris.

Great Grey Shrike in Worcestershire.—Mr. T. J. Beeston informs us that a female *Lanius c. excubitor* was shot at Wolverley on February 6th, 1923. Its gizzard contained the bill of a Finch.

Lesser Spotted Woodpecker in Cornwall.—With reference to the note on this subject (antea, p. 200), the Rev.

D. P. Harrison writes that he found *Dryobates m. comminutus* at Trevaylor in 1876 and saw it there almost annually up to about 1883. The only other place in west Cornwall where he met with it was at Tregadjick in the parish of Ludgvan.

Mr. Edgar Chance's Observations on the Cuckoo during 1922.—Mr. Chance has kindly given us an opportunity of examining and making extracts from the notes of his 1922 observations of the Cuckoo (Cuculus c. canorus) which he has watched so closely since 1918. That it is the same Cuckoo seems clearly proved by the series of eggs which are all of the same type and by the fact that the bird has a white patch on back of the head. In 1922 observations were even more intensive and constant than before.

The Cuckoo was first observed on April 29th, and on this occasion it was seen to be received by a male by demonstrations of the same kind as those described by Mr. Chance in his book (*The Cuckoo's Secret*, p. 113) when the bird was first observed in 1921 on April 30th. The first egg was laid in 1922

on May 11th, and in 1921 on May 12th.

The same methods were used in manipulating the Meadow-Pipits' nests as described by Mr. Chance in the account of his 1920 observations (see Vol. XIV., pp. 218–232), and there being a large number of Meadow-Pipits on the common in question in 1922, the Cuckoo was induced to lay 25 eggs, all in nests of this species. Of the 86 known eggs from this Cuckoo 83 have been laid in Meadow-Pipits' nests, 2 in Tree-Pipits', and 1 in Skylark's. With one exception the eggs in 1922 were laid every alternate day. All the eggs were laid in different nests, one pair of fosterers was victimized five times and several three times.

The laying of all the 25 eggs, except one, was closely watched, often from hides within a few yards, by a number of observers. The bird was also filmed and photographed by Mr. Oliver G. Pike and Mr. H. M. Lomas (ultra-rapid camera) on several occasions with the nest fully exposed. Observations show that this Cuckoo invariably sat upon the nest and laid her egg in it while holding in her bill one of the Meadow-Pipit's eggs which she had taken up previous to sitting upon the nest.—H.F.W.

Bewick's Swans in Cardiganshire.—Mr. W. Miall Jones informs us that a Bewick's Swan (Cygnus b. bewickii) was shot from a flock of about forty individuals near the mouth of the Dovey on February 24th, 1923.



Report on Scottish Ornithology in 1921, including Migration. By Leonora J. Rintoul and Evelyn V. Baxter. Reprinted from The Scottish Naturalist, 1922, pp. 69 to 84, and 109 to 129.

This excellent yearly report is once more before us and contains many items of interest conveniently arranged. We notice this year a strong inclination to brevity which seems to have resulted in some instances in a want of detail which would, we fancy, have been of value, but this no doubt was due to difficulties of space. The following interesting items have not been previously referred to in our pages.

Northern Bullfinch (*Pyrrhula p. pyrrhula*).—A number reported —one Haddingtonshire, October; several Fair Isle, November and to the end of the year; several Fifeshire, November; some Berwickshire, December.

SCARLET GROSBEAK (Carpodacus e. erythrinus).—Three at Fair Isle, September 19th.

ORTOLAN BUNTING (Emberiza hortulana).—One Isle of May, May 12th and 13th.

Lapland Bunting (Calcarius lapponicus).—One Fair Isle, September 7th and two Isle of May, September 14th.

WOOD-LARK (Lullula arborea).—One Isle of May, May 12th.

SHORE-LARK (Exemophila a. flava).—Single birds Isle of May, May 4th, and Fair Isle, November 7th.

Blue-Headed Wagtail (Motacilla f. flava).—At Fair Isle in Septem-

ber and October.

Scottish Crested Tit (Parus c. scoticus).—Seven were seen at Cullen (Banffshire) on July 7th, where it seems they bred; they have previously been observed in the same locality in winter.

WOODCHAT SHRIKE (Lanius s. senator).—A male at the Isle of May on May 12th is only the fourth recorded occurrence of the bird in

Scotland.

RED-BREASTED FLYCATCHER (Muscicapa p. parva).—One on the Isle

of May on September 18th.

WILLOW-WARBLER (Phylloscopus t. trochilus).—A pair lined with feathers a "cock" Wren's nest in a gooseberry bush in a garden near Colinsburgh (Fifeshire), and, closing the original entrance hole on the south side, made a new one on the north side. The nest had eggs and the Willow-Warbler was seen by the authors to leave it.

YELLOW-BROWED WARBLER (Phylloscopus h. præmium).—One on

the Isle of May on September 20th.

HOOPOE (*Upupa e. epops*).—Single bird at Fair Isle on October 3rd and 4th.

LITTLE OWL (Athene noctua? subsp.).—One is reported from Melrose (Roxburghshire) on April 28th, but no further details are given. It should be noted that one was reported from Northumberland in May,

1919 (see Vol. XV., p. 297). These records appear to be sporadic as the bird does not seem inclined to spread northwards.

BITTERN (Botdurus stellaris).—Single birds in Berwickshire, January; Wigtonshire, August-September; Perthshire, December.

Great Crested Grebe (*Podiceps c. cristatus*).—Breeding is recorded in Avrshire and in Forfarshire.

GARGANEY (Anas querquedulu).—One at Possil Marsh, May 29th.

Lapwing (Vanellus vanellus).—Three nests with eggs were found at Hareshawmuir (Ayrshire), which is 600 ft. above sea-level, as early as March 2nd. The incubation period of eggs at the same place in June is given as 23 days, but there are no details.

GREY PHALAROPE (Phalaropus fulicarius).—One at Hyskeir (Inner

Helrides). September 11th.

HERRÍNG-GULL (Larus a. argentatus).—While in the Isle of May in May the authors noticed several Herring-Gulls amongst the breeding birds which were not in fully mature plumage, having still black markings on the wings and tail. One of these on May 18th was observed to be pairing with an adult female.

#### LETTER.

#### SHORE-BIRDS' METHOD OF OBTAINING WORMS.

To the Editors of British Birds.

SIRS,—With reference to the letters on the above subject (antea, pp. 228, 292), I have just come across the following entry in the diary of the Rev. R. N. Dennis of East Blatchington, Sussex, under date of April 11th, 1849. "I watched a Purre jumping and dancing on the sand to draw up the sand-worms and he seemed to succeed. His companions seemed glutted; and were enjoying themselves in the shoal water or squatted at the edge." This observation would have been made at the mouth either of the Cuckmere or of the Ouse, on the Sussex coast.

N. F. Tieenurst.

# BRITISHBIRDS

With which was Incorporated in January, 1917, "The Zoologist."

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

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#### FIELD-NOTES ON THE NESTING OF DIVERS.

BY

#### NORMAN GILROY.

Although the breeding grounds of both the Black-throated Diver (Colymbus arcticus) and the Red-throated Diver (C. stellatus) as well as their nesting economy are sufficiently well known to call for little comment, the following observations, taken over a number of years, may not perhaps be without interest. Both species are denizens of wild and remote solitudes—areas that are infrequently visited, except by fishermen, in the spring and early summer, when they possess their greatest interest; both are sufficiently uncommon to merit rather more than a passing notice.

It may, I think, be accepted as a fairly well established fact that the Black-throated Diver shows a very decided and almost invariable preference for the larger sheets of water—especially such as contain islands. It is seldom, if ever, met with on the peaty tarns or "dhu-lochans" which are beloved by the Red-throated, and which generally lie at a considerably greater elevation and are altogether more desolate and remote.

These larger lochs are frequently quite close to roads on which there is always a certain amount of traffic; they are generally provided with boats for the use of fishermen and are altogether easier of access. But the Black-throated Diver, at any rate until the eggs have actually been laid, shows little concern at the human presence. Fishing operations will be carried on quite near the road, quiet bays will be visited without fear, and the curious and fascinating love-making will take place—annually too with presumably quite old birds—without anxiety.

After the eggs are laid, however, the birds become much more secretive and wary. The male keeps out of sight as much as possible, generally feeding close to where his mate is sitting, and swimming in shadow. When danger threatens at all he will sink low in the water so that on a roughish day he is scarcely visible, and should he have been able to warn the sitting bird so that she may slip off her eggs and join him without attracting attention, both birds, in addition to the curious sinking of the body, will repeatedly dip their bills in the water after the fashion of a Mallard drake when he is courting. Both actions are generally a certain sign that the Divers have eggs.

The nest of the Black-throated Diver is nearly always on the shore of an island in the inhabited loch, sometimes even on an isolated rock or on a green bank, bared by an abnormally dry season. I know of one loch in Sutherland, however, on which there are five islands of considerable size. From time to time I had found the Diver's nest on every one of these, but in one year not so long ago, when I knew positively that the birds had eggs, and after swimming laboriously to all five in arctic weather, I found the eggs on a grassy spit in a little bay on the mainland. Should no definite attempt be made to reach her, the sitting bird will remain quite calmly on her eggs and does not appear to shun observation.

It is a very pleasurable and beautiful thing on a bright and sunny day in Sutherland to see a Black-throated Diver sitting on her eggs with the vivid contrasts of her perfect

plumage reflected in the velvet water.

I remember on one occasion visiting a certain loch on which a pair of Black-throated Divers had nested from time immemorial. I could only see one bird, but as there was a very considerable ripple on the water (and when such is the case they are exceedingly difficult to pick up, especially when they adopt the sinking trick), I determined to lie down for a little to watch for the second one. After half an hour or so, as she had not put in an appearance and as I could not see a sign of her on any of the islands, I decided to strip and search them. The first and most likely island yielded nothing but a Wigeon and a Common Gull; the second one had steep heathery banks, and after going hurriedly round it I was about to swim ashore again, when the Diver crashed out from right under the bank, where she was quite invisible, bowling me clean over into the water. I have never known one to sit so closely as this.

The nest was very substantially built of grass, heather stalks and weeds on a dry, rather powdery bank of peat, and was well underneath the overhanging fringe of heather—altogether an unusual situation. The two eggs were absolutely fresh, and, as I have generally found to be the case with this

species, perfectly clean and bright.

As a rule the eggs are deposited towards the end of the third week of May, but I have found them as early as the 12th of that month, and some pairs do not commence nesting before the beginning of June. The nest is generally a fairly substantial structure of turf, grass, heather and water-plants carelessly put together, but the whole showing a very decided rim and general formation; it is probably added to considerably in the event of floods, as it is so placed that the sitting bird can reach or leave it with ease and the outer edge is generally almost if not quite in the water, although I have seen at least three nests which were fully four yards from it. The nest is most commonly found on a softish bank, but may occasionally be met with on a stony beach. When leaving the

nest the bird disappears so smoothly below the surface as to leave scarcely a ripple. The eggs are normally two in number and when only one is found one can be fairly certain either that the clutch is incomplete or that something untoward has befallen the other. They are nearly always considerably larger than those of the Red-throated Diver, although very occasionally the measurements may overlap. As a rule the Black-throated Diver begins to nest at least a fortnight earlier than the Red-throated, and should the eggs not have been seen *in situ*, the date, taken in conjunction with the actual location of the nest, may be of some assistance.

I very much regret to have to conclude my observations on the infinitely rarer of the two species by stating that of recent years the Black-throated Diver has steadily and noticeably decreased as a breeding-species in Scotland. The reasons may not be far to seek, but I do not propose to particularize the areas in which these notes were taken.

The Red-throated Diver, although in reality a much more abundant species than the foregoing, is perhaps not so generally met with in the breeding season owing to the nature of the dreary solitudes in which it dwells. Tiny, lonely tarns lying high amongst the hills or far out on vast stretches of squashy "flow"—even areas of wet moss and peat on which there is scarcely a square yard of open water at all. These are the home of this bird in the summer. And curiously enough, there are abundant pairs in such favourite areas! I know one "flow" of comparatively limited extent in Sutherland on which I have seen nine nests of the Red-throated Diver in a day!

The pairs may be observed on the tarns for a considerable time before nesting begins, and one is frequently treated to the extraordinary display which takes place not only during courtship and pairing, but even when actual breeding has commenced—when both birds propel themselves through the water almost vertically!

I imagine that the Red-throated Diver seldom feeds, if indeed at all, on the small pools or "dhu-lochaus" to which it resorts for nesting purposes. I have on many occasions seen the non-sitting bird bring food both to its mate and to the young evidently from a great distance—once most certainly from the sea. The Black-throated Diver on the other hand, as a dweller on the larger sheets of water, which are as a rule provided with a plentiful supply of trout and other fish, undoubtedly procures the greater part of the food required for the young, as well as for himself, on the spot.

The weird and discordant cries uttered by the Divers, both on the wing and from the water, are probably too well known to need description. Both species fly at a great height, the flight being remarkably rapid and powerful. The descent to the water is a truly wonderful performance; its almost incredible velocity—swifter even than the dive of the Gannet—is accompanied by a sound of rushing wings that I can only liken to the scream of a mighty wind through the rigging of a ship. The impact with the water, terrific though it seems, is a little disappointing after the breathless moments of the descent.

The Red-throated Diver does not breed nearly so far to the south as the Black-throated. On the other hand, it is found commonly in the Orkneys, whilst in Shetland it is abundant, and a pair or two have nested for a number of years in the extreme north-west of Ireland.

As a rule it is useless to look for the eggs of the Red-throated Diver much before the first week of June. I have, however, seen young in Sutherland on June 2nd—several days old. I visited this particular tarn again on May 17th of the present year (1922), and found that the Divers had two fresh eggs, but this date is quite abnormally early, although I have found eggs occasionally as early as May 21st. In 1920, when I saw the young above mentioned on June 2nd, the eggs must certainly have been laid in the first week of May. I have no knowledge or information as to the incubation period, but I imagine it to be well over three weeks.

The nest, which is a very crude structure indeed, being little more than a hollow trampled down in the peat or ooze, with a fairly well defined rim, is often almost in the water. Occasionally, however, it is well up on the bank, and when such is the case, it is much more substantial. It is frequently on a soft "spit" running out into the tarn, or possibly on a tiny islet of peat, separated from the shore by only a yard or two. Except for its remoteness from human habitation, the nest of this species is nearly always more accessible than that of the Black-throated Diver. The eggs vary a good deal in size, many being much elongated, and when clean show considerable variation in ground-colour, some being of quite a pronounced green, whilst others are as noticeably brown. Many eggs are quite heavily blotched, especially at the larger end.

The Red-throated Diver is very prolific. I know of one hill loch in the Orkneys, where the eggs are taken by boys over and over again, but where the unfortunate bird generally manages to hatch off a single young one some time in August.

One rather interesting difference between the two species I have omitted to mention is that whereas the Black-throated Diver on the approach of danger will remain resolutely in the vicinity of her nest, the Red-throated, after perhaps sinking almost out of sight two or three times, will take to wing and fly right away.

# NOTE ON THE SPECIFIC NAME OF THE COMMON GUILLEMOT.

REV. F. C. R. JOURDAIN.

THE Common Guillemot has been generally known by the name of Uria troille (L.). This name was first used by Linnæus in the second edition of the Fauna Svecica in 1761, where. under No. 149, he describes "Colymbus troille." Only one reference is quoted, "Martens. Spitsb. 57 t. M. f.a. Lumbe." As the bird figured by Martens was obtained at Magdalena Bay, Spitsbergen, it was undoubtedly a Brünnich's Guillemot. Linnæus, however, adds, "Habitat in alto mari septentrionali, A Martin." By some commentators this has been regarded as merely a slip in the spelling of Martens's name. Others have supposed that a specimen was supplied to Linnæus by A. Martin, the Swedish botanist, who might have obtained his material from the Norwegian or even the Swedish coast. In this case the name could of course be retained for the Common Guillemot and the citation of F. Martens's Spitsbergen bird dismissed as erroneous.

However, while investigating the literature of Spitsbergen, I ascertained that Anton Rolandsson Martin did actually visit Spitsbergen in 1758. Further research showed that he described and figured a species of "Procellaria" (Fulmarus glacialis) from there, and finally a reference to Martin's Dagbok, published in 1882 in a Swedish periodical entitled Ymer, resulted in the discovery of a passage in which he describes a new species of Colymbus. His brief Latin diagnosis agrees almost word for word with that of Linnæus and he adds a note that Linnæus described this bird in the new edition of the Fauna Syccica under No. 149 as Colymbus troille.

It is therefore clear that by a curious coincidence both A. Martin and F. Martens obtained their specimens from Spitsbergen. The name *Uria troille* thus becomes a synonym of Brünnich's Guillemot (*U. lonwia*).

The next name appears to be *Colymbus aalge* of Pontoppidan's *Danske Atlas* (1763), which, as Messrs. Mathews and Iredale have pointed out (*Austral Avian Rcc.*, V., pp. 49, 50), takes precedence of Brünnich's names *U. Ringvia* and *U. alga* (1764). So that in future the name by which the Common Guillemot must be known is *Uria aalge* (Pontoppidan).

Dr. Hartert calls attention to the fact that the term "Aalge" was on page 621 of the *Danske Atlas* in Gothic characters, and could therefore be rejected, as in every other case Roman letters were used and Pontoppidan's names were when barbaric names were used, latinized—cf. "Risse" of the Icelanders into rissa. But C. aalge may be used from Pontoppidan's plate XXVI., where it is used in the same way as the other Latin names

#### NOTES ON THE COMMON GUILLEMOT— A NEW BRITISH FORM.

BY H. F. WITHERBY.

When working out the plumages of the Common Guillemot for the *Practical Handbook* I found that some birds were much blacker on the upper-parts than others. I have now made a careful comparison of the series in the British and Tring Museums by the courtesy of the authorities in those institutions, in addition to which specimens have been kindly lent to me by Dr. J. Ritchie from the Royal Scottish Museum, Prof. E. Lönnberg from the Riksmuseum, Stockholm, the Director of the Christiania Zoological Museum and Prof. H. T. L. Schaanning from the Stavanger Museum.

From this material it is evident that there are two distinct forms of Common Guillemot in Western Europe and that both of these occur in the British Islands. These may be

differentiated as follows:-

NORTHERN GUILLEMOT—Uria aalge aalge (Pontoppidan).— Upper-parts in adult winter and summer and first winter black, streaks on flanks black and often wider and more prominent than in the southern form; in breeding-plumage throat of a deep chocolate-brown. Of this form I have examined breeding-birds from Iceland, Faeroes, Bear Island, Norway and Sweden (Gotland) and also from north-east America. Available material is insufficient for me to state which form breeds in Heligoland. This dark northern bird would appear also to breed in the Orkneys and Shetlands and probably St. Kilda, but unfortunately I cannot be positive about this, as I have been able to examine only one dated skin of a bird in summer plumage, viz., Shetland, June 22nd; this and others in summer plumage, but undated, from the Orkneys and Shetlands and two from St. Kilda were all of the dark form. The want of dates on the labels is important, because the summer plumage is often acquired as early as February or even January, and the stage of plumage therefore affords no proof in itself that the bird is a breeding one. The northern bird also occurs on all our coasts in winter and I have seen a specimen from as far south as Ferrol, north-west Spain.

As Mr. Jourdain has explained above, Linnæus's *Colymbus troille* must unfortunately be discarded and Pontoppidan's *C. aalge* used instead, and as this was given to a bird from

Iceland it must be used for the dark northern form.

Prof. Lönnberg, when sending me for comparison a series of eight breeding birds from Karlsöarne, off the west coast of Gotland, remarked that they were paler than birds from Tromsö, northern Norway. I agree that two or three are

not so jet-black as northern birds usually are, but the colour is slightly variable and the palest is darker than British birds. Karlsoärne, Prof. Lönnberg tells me, is the typical locality for Nilsson's Uria intermedia (Skandinav. Fauna, II., p. 506, 1835) and this I regard as a synonym of *aalge*, as these birds are not in my opinion separable from other dark northern ones, though they may be considered by some to be worthy of separation as an intermediate form. I must also mention that a single bird from Aalesund (July 28th, 1908), kindly lent by the Christiania Museum, and another from Stavanger (June 15th, 1917), kindly lent by Prof. Schaanning, though larger, are as pale as British specimens, but others from Norway are jet-black. Better series of breeding-birds from southern Norway, Heligoland, north Scotland, Orkney, Shetland and Outer Hebrides are required to define the limits of the two forms.

Colymbus minor Gmelin, Syst. Nat., 1., 2, p. 585, 1789, is evidently described from Pennant's "Lesser Guillemot," Brit. Zool., No. 235, which was a winter bird and may be regarded as a synonym of aalge since Pennant described it as darker on the upper-parts than the "Foolish Guillemot" which was the breeding bird. In any case the name cannot be used for the pale British breeding form and as there appears to be no name available I propose to call it

URIA AALGE ALBIONIS subsp. nov.

Upper-parts brownish mouse-grey, considerably paler and less black than U. a. aalge in adult summer, winter and first winter, streaks on flanks brown, paler and usually narrower and less prominent, throat in summer paler chocolate-brown. Size averaging smaller, twelve adult males examined, wing 193–204, tail 41–48, bill from feathers 41–49 mm.\*

Type Q, Flamborough, Yorks, June 1881, in Brit. Mus.,

Reg. No. 1884, 1.30.31.

This form breeds in England, Wales and Ireland and certainly at Ailsa Craig, whence Dr. Ritchie has kindly sent me specimens, but how far north in Scotland it extends and whether it is found in the Outer Hebrides remains to be proved. It seems probable that this also is the form breeding on the north-west coast of France and in the Berlenga Islands off Lisbon, but I have seen no specimens from these localities and the exact distribution of this and the typical form requires further investigation.

\* Prof. Lönnberg informs me that he has measured Norwegian birds up to 213 mm. in the wing, and Le Roi states that birds from Bear Island reach even 227 mm., but I have not measured any so large. My measurements of 18 males of U. a. aalge are as follow:—Wing 196 (one 192)-210, tail 40-50, bill from feathers 42-52 mm.



NOTES FROM HOLY ISLAND, NORTHUMBERLAND, 1922.

GREAT GREY SHRIKE (Lanius c. excubitor).—A single bird was seen on October 6th and two on November 4th. A female was killed on October 17th.

RED-BREASTED FLYCATCHER (Muscicapa p. parva).—A male was shot on September 26th and a male and female on

the following day.

YELLOW-BROWED WARBLER (*Phylloscopus humei præmium*).—Single birds were obtained on September 29th and 30th and October 7th. All were males.

Bluethroat (Luscinia svecica ?subsp.)—One, seen on October 18th, was shot at the same place the next day but

not recovered from the undergrowth.

WRYNECK (Jynx t. torquilla).—An adult male and female were shot on September 2nd. Three others were seen the same day.

Snowy Owl (*Nyctea nyctea*).—A Snowy Owl appeared on the bents during the afternoon of May 20th and remained until 9. p.m., when it flew northwards. This may possibly be the identical bird observed in Norfolk (*antea*, pp. 232, 233).

MANX SHEARWATER (Puffinus p. puffinus).—There were three or four pairs not more than two miles from the land on

May 13th.

FULMAR PETREL (Fulmarus g. glacialis).—On March 13th and following day I saw two. None were noticed during May, either at the Farnes or Holy Island, but at the latter place two appeared on August 26th and one on September 7th.

Red-necked Grebe (Podiceps g. griseigena).—An irruption of this species took place on February 3rd, when one was shot on the Lough. On the 7th several were picked up dead and by the 11th some twenty specimens had been brought to me, the weights ranging from 2 lbs. 2 ozs. to 1 lb.  $1\frac{1}{2}$  ozs. On the 10th, when out in a boat, I found that this species far outnumbered the Slavonian Grebe (P. auritus) (usually the most abundant Grebe here).

Black-necked Grebe (Podiceps n. nigricollis).—A male on

January 7th.

BLACK-THROATED DIVER (Colymbus a. arcticus).—One, in complete summer plumage, was seen on Fenham Flats on May 10th. Mr. Abel Chapman saw five on the 11th, while I noticed three on the 16th and a single bird on the 20th.

Turtle-Dove (Streptopelia t. turtur).—One or two appeared

on May 17th.

RUFF (*Philomachus pugnax*).—A female was shot on September 14th and one seen on the 17th. Dr. Eagle Clarke saw four at Beal Road End on the 18th.

Green Sandpiper (Tringa ochropus).—A female was seen

on August 21st and shot on the 25th.

LITTLE GULL (Larus minutus).—On September 22nd Dr. Eagle Clarke and I saw an immature Little Gull outside the harbour.

GREAT SKUA (Stercorarius s. skua).—One, first noticed on September 21st, remained about the harbour for the next

few days.

LONG-TAILED SKUA (Stercorarius longicaudus).—On May 10th Mr. Abel Chapman and I watched for some time a Buffon's Skua harrying the Terns. It eventually flew close past the boat in which we were crossing the harbour.

BLACK GUILLEMOT (*Uria g. grylle*).—A male, in first plumage, was shot near the Longstone on September 22nd. There were at least five outside Holy Island harbour on January 18th,

1923.

Dr. W. Eagle Clarke, who stayed on the Island from September 18th to October 2nd, during which period the majority of the more interesting observations were made, kindly identified for me all the birds obtained.

W. G. WATSON.

LATE BREEDING OF GREY WAGTAIL IN SUSSEX. On July 22nd, 1922, I discovered a nest of the Grey Wagtail (Motacilla c. cinerea) in N.E. Sussex containing two young fully fledged, which would seem to be a somewhat late date. I can fully confirm Major C. Smeed's remarks (antea, p. 283) that the bird is almost invariably double brooded in this district, where I have found many nests within the last ten years.

H. H. FARWIG.

#### RED-BREASTED FLYCATCHER IN LINCOLNSHIRE.

I OBTAINED a specimen of the Red-breasted Flycatcher (Muscicapa p. parva) at North Cotes on October 23rd, 1922. It was perched on a strand of barbed wire under an old hedgerow and was very tame. It is distinguishable from the Pied Flycatcher (M. h. hypoleuca)—a very common migrant—by the absence of white in the wing and much smaller size. This is, I believe, the second appearance of this bird in Lincolnshire.

G. H. CATON HAIGH.

#### WOOD-WARBLER NESTING IN SUFFOLK

The Wood-Warbler (*Phylloscopus s. sibilatrix*) is not common in Suffolk, but on visiting a park some twenty miles from Woodbridge on May 18th, 1922, I found a pair building and on May 24th the nest contained five eggs. I also came across another pair in a wood, a short distance away. There are many beech trees in the park and woods, and these are the only places in this neighbourhood that I know of where these birds can be found.

Bernard J. Ringrose.

#### DOMED NEST OF WHINCHAT.

While working a moor in Surrey on May 31st, 1922, I flushed a Whinchat (Saxicola rubetra) from a nest containing six eggs hard set. On examining the nest, which was situated in swampy ground, I was surprised to find it completely domed like a Willow-Warbler's, and believe this must be very unusual for the species.

H. H. FARWIG.

#### REDBREAST FEEDING ON HAWS.

WITH reference to the note by Mr. Chas. Oldham (antea, p.253), in which he mentions that wild berries are occasionally taken by the Redbreast (Erithacus rubecula), I find in my records the two following entries bearing on this subject:—

September, 1919. Rusland, Ulverston. Feeding on Yew berries.

November, 1907. Ebberston, Yorkshire. Feeding on the berries of Hawthorn. C. F. ARCHIBALD.

#### SNOW-GEESE ON THE SOLWAY.

From early October, 1922, until sharp frosts at the end of the month, there were three white Geese on the Solway. Two of these had black flight-feathers and were clearly Snow-Geese (Anser hyperboreus), while the third was, I think, an immature bird as it was always with them. There was also what at the distance appeared to be a white Pink-footed Goose (Anserbrachyrhynchus), but a keeper who was within forty yards of it once, said it was not as pure white as the others, but slightly cream-coloured. All of them left one day, together with some 2,000 Pink-footed Geese, and three days later a friend wrote to me of a great increase at Holkham, including a white Goose.

M. PORTAL.

[cf. Mr. Gurney's Report for 1922, antea, p. 235; the note by Mr. J. Beddall Smith, p. 255, and Mr. Hugh Wormald's letter, p. 292.—EDS.]

#### BARNACLE-GEESE IN WILTSHIRE.

On March 22nd, 1923, I noticed on a large piece of water at Compton Park, near Salisbury, three Barnacle-Geese (Branta leucopsis). I had them under observation through glasses for about fifteen minutes and could easily see the white patch on the head. They seemed very nervous and unsettled and flew away after the above-mentioned period in a north-easterly direction, uttering what sounded to me like a rather painful scream, continually repeated.

Since that date these birds were again seen at the end of

March and for a short time on April 3rd.

GEORGE PENRUDDOCKE.

#### BLACK-TAILED GODWIT IN CORNWALL.

As the Black-tailed Godwit (*Limosa limosa*) seems to be of very casual appearance in Cornwall it may be of interest to record that one frequented the Marazion Marsh, near Penzance, between March 17th and 21st, 1923, inclusive. The reddish-chestnut breeding plumage was well developed.

G. H. HARVEY.

#### RED GROUSE FLYING OUT TO SEA.

About the last day of December, 1917, H.M. Destroyer Ophelia was on a course almost due east from Lerwick to Bergen. When at least thirty miles out at sea a covey of Red Grouse (Lagopus scoticus) flew to the ship and settled on deck. They were not seen till on the point of settling, so that their direction of flight was not ascertained. Lt. H. B. Anderson, R.N., who has lived on a grouse moor, and so of course knows the birds well, and Eng.-Commander A. K. Dibley were within ten yards of the covey, so that a mistake can hardly have been possible. Both these gentlemen have been communicated with and their accounts agree. The distance from Lerwick was calculated from the speed of the ship and the time from when land was left; the weather was calm and fine and the observers cannot remember any fog.

A. H. R. Wilson.

There are several instances given in the Scottish "Faunas" of Red Grouse crossing from island to island, the longest seapassage being about eleven miles, from Scrabster to Hoy. They have also visited Bardsey Island twice, nearly twenty miles from their nearest habitat, though in this case the actual sea-passage need not have been more than two miles. In all of these land would have been in sight the whole journey from start to finish. Suitable ground appears to be very limited

in extent in Shetland, and it may well have happened that it became overstocked during the war and so the birds were induced to seek fresh feeding grounds, as seems to have been the case in most of the instances above referred to. In such a species as the Red Grouse the wonderful faculty, by which migrating birds find their way, may be presumed to be at its lowest development, and whether or not these particular birds flew through a belt of fog after leaving land they seem to have hopelessly lost theirs.—N.F.T.]

ALBINO CHAFFINCH IN CHESHIRE.—Mr. F. A. Bruton reports seeing a perfectly white *Fringilla cælebs* on March 3rd, 1923, between Ashley and Rostherne. It was in company with a normal male of the same species.

YELLOW-BROWED WARBLERS IN LINCOLNSHIRE.—Mr. G. H. Caton-Haigh informs us of three specimens of *Phylloscopus humei præmium* obtained by him at North Cotes; the first on October 1st, 1919, does not appear to have been previously recorded; the second on September 23rd, 1921, was mentioned without date in Mr. Gurney's *Ornithological Notes from Norfolk for* 1921 (Vol. XV., p. 286); the third on September 28th, 1922, was reported erroneously by Mr. Gurney (antea, p. 232) as having been obtained on August 28th.

Early Arrival of Cuckoo in Hampshire and Devonshire.—Sir Thomas H. C. Troubridge informs us that Lord Montagu saw two *Cuculus c. canorus* in the garden at Palace House, Beaulieu, on March 24th, 1923. They were being mobbed by small birds and he got quite close to them. Mr. Lewis R. W. Loyd informs us that he put up a Cuckoo within 200 yards of the sea at Branscombe, Beer, Devon, on March 19th. The bird settled on a stone wall and allowed him to approach to within a few feet and examine it for some minutes. It was obviously tired and eventually flew about thirty yards and settled again in a tree.

EARLY NESTING OF LITTLE OWL IN HUNTINGDONSHIRE.—Mr. A. E. Lees states that on March 21st, 1923, he found a Little Owl (*Athene noctua mira*) sitting on four eggs in a hole in an elm tree near Huntingdon.



#### SISKIN NESTING IN CO. LONDONDERRY.

To the Editors of British Birds.

Sirs,—Mr. Stoney (antea, p. 297), states that his discovery of a nest of the Siskin (Carduelis spinus) at Downhill constitutes a new record for the county. The Beliast Naturalists' Field Club visited Downhill in May, 1910, when they found the Siskin nesting there. This is recorded in their Proceedings for the year 1910–11 (Ser. II., Vol. VI., p. 362).

#### THE BRENT GOOSE IN IRELAND IN 1708.

To the Editors of British Birds.

SIRS,—With regard to Dr. N. F. Ticehurst's remarks on this subject (antea, p. 310). It must be borne in mind that similar information appeared in print on more than one occasion before the publication of Pennant's 1776 edition, viz.:—

Boate's Natural History of Ireland, 1726. Harris's History of the county of Down, 1744. Smith's History of the county of Waterford, 1745. Rutty's Natural History of the county of Dublin, 1772.

In passing it might be of interest to draw attention to the following remark by Harris when describing the habits of the Brent Goose (*Branta bernicla*):—" The Barnacle, called by the English, Brant Goose."

GEO. R. HUMPHREYS.

[Mr. Humphreys has no doubt indicated above where Pennant obtained his account of the Irish "Barnacles." I have not been able to ascertain who was responsible for including it in the 1726 edition of Boate, but it seems to be not unlikely that it may have been obtained from Samuel Molyneux himself.—N.F.T.]

#### THE MIGRATIONS OF DUCKS.

To the Editors of British Birds.

Sirs,—In reading Dr. A. L. Thomson's most interesting article on this subject (pp. 262-276) I have been struck by one circumstance to which he does not seem to refer. It appears to me that the remarkably interesting cases of what Dr. Thomson calls "abmigration," which, in the face of so many records, he is inclined to regard as " an irregularity which is to some extent characteristic of the Ducks," ought to be considered in conjunction with the fact that most Ducks, although they have wide ranges, are not divisible into separate geographical forms. It appears from Hartert (l'og. pal. Fauna, Vol. II., pp. 1306-1384), that the only Duck clearly divisible into separate geographical forms in the Western Palæarctic region is the Common Eider (Somateria mollissima). It is certainly remarkable that none of our British Ducks are separable as subspecies, although, from the ringing records, it appears that most of our breeding Ducks do not migrate in the autumn. It is obvious that if the "homing instinct" were liable to these surprising modifications in the case of such birds as the Titmice, Goldcrest, Thrush, Pied Wagtail and others—and in some of these species our insular races, as

well as their continental cousins, are known to migrate each autumn—the differentiation of the geographical races could not have occurred. I have myself seen Continental and British Song-Thrushes (*T. ph. philomelus* and *T. ph. clarkei*) associating together during the winter, and doubtless such association of different races of a single species constantly occurs at that season; but it seems clear that, when the time for returning to breeding-haunts arrives, these birds must separate out again and return to their native haunts, or somewhere near them, with scarcely an exception. Otherwise the geographical races would quickly disappear. And the fact that amongst the Ducks this homing instinct sometimes fails seems likely to be the cause of the comparative lack of geographical differentiation in this group.

BIRMINGHAM, 10th April, 1923.

H. G. ALEXANDER.

SIRS,—The view advanced by Mr. Alexander in the foregoing letter is an interesting one, but I may be allowed to express an opinion that the indications are less clear than he appears to suggest. I had the advantage of discussing the question with Mr. Witherby while my paper was in preparation, and reference to it was eventually omitted because the evidence seemed too slight to allow of any very definite theoretical conclusion.

One of the factors necessary for the evolution of geographical races or sub-species would appear to be segregation during the breeding season, and the phenomenon to which I have ventured to give the tentative name of "abmigration" certainly constitutes a partial breach of this condition. Mr. Alexander seems to overstate the case, however, when he postulates that there must be segregation "with scarcely an exception." Quite an appreciable number of "abmigratory" individuals could surely be absorbed by a large population of another form without exerting any very noticeable influence upon racial characters. These characters represent for the most part differences of degree rather than of kind and would readily blend if inter-breeding occurred; in point of fact they are notoriously variable and liable to show intermediate gradations.

So far as our knowledge goes, "abmigration" as a relatively frequent occurrence is confined to the Ducks, and it is therefore quite probable that it does not take place in those species of birds which show racial differentiation. It is equally true, however, that there is no evidence of its common occurrence among other birds than Ducks, which are likewise not divisible into geographical races. In the case of the Lapwing, to take an example which has been studied by the marking method to as great an extent as the Mallard, there is in the British Isles a winter mixture of native and Continental birds but apparently no "abmigration" on the part of the former; yet there is no racial differentiation in this case either. Obviously we have also to take into account other factors than segregation which may contribute to differentiation, such for instance as the inherent tendency of a given species to produce those variations which constitute the raw material of evolution.

LONDON, 15th April, 1923.

A. Landsborough Thomson.

#### THE ROSEATE TERN IN PRELAND,

To the Editors of British Birds.

SIRS,—Mr. Stoney's article on Irish birds was one calculated to warm the cockles of every Irish naturalist's heart. In connection

with the breeding of the Roseate Tern a few further details may be of interest.

The "locality on the north-east coast" mentioned by Mr. Stoney (antea, p. 299) never contained more than a few pairs of Roseates, breeding among the Common and Arctic Terns. There was never a "colony" and the birds appear never to have had a chance to found one, as several were killed. The birds on this Lough are being severely harried by vandals collecting for English firms. Last year very few Terns of any species nested there, and when the Common Terns are so reduced, the survival of the one or two pairs of Roseates is not to be expected. I doubt if any nested in 1921, as I went over the ground fairly thoroughly and saw no sign of them.

Mr. Stoney, however, seems to leave unnoticed a reference to the breeding of the Roseate Tern recorded in the very reliable Guide to Belfast drawn up by the Belfast Naturalists' Field Club on the occasion of the meeting of the British Association in Belfast in 1874. The note runs:—" The Common, the Arctic, and the Roseate Tern all breed on the Copeland Islands, at the entrance of Belfast Lough—the two first very numerous; the last appears to be gradually diminishing in numbers." The birds on the islands mentioned have been much persecuted and there can be little doubt that in consequence many migrated to the "locality on the north-east coast" mentioned above. The result is that several birds hitherto unknown in this locality have recently been breeding there. The Great Black-backed and Herring-Gulls are typical examples. It may then be safely concluded that the Roseate Terns recorded in this district were the lingering remnant of the colony at the Copeland Islands. The abortive attempt to found a colony in the "locality" is thus to be regarded rather as the death-struggle of an ancient colony than as the birth of a new one. EDWARD A. ARMSTRONG.

CORLEA, SOMERTON ROAD, BELFAST, April 13th, 1923.

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