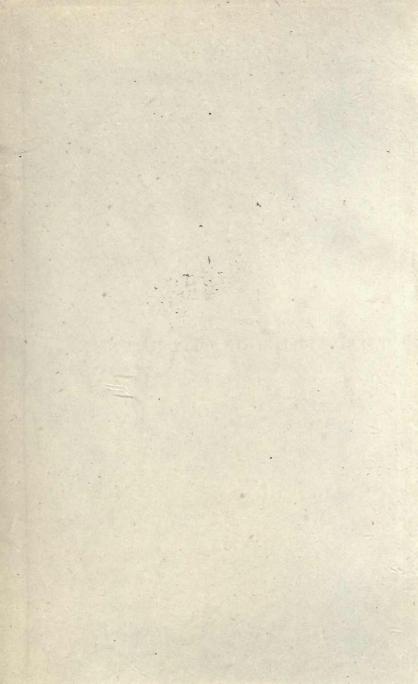


BIOLOGY





Matri meæ
Opusculum hoc primum
Primogeniti dedicatum.
Die IX. Aug: MDCCCIXVI.

THE BIRDS OF MIDDLESEX.

WHE BIRDS OF MIDDIESEK.

Burracethren has provinced





THE HEAD OF KINGSBURY RESERVOIR.



BIRDS OF MIDDLESEX.

A CONTRIBUTION

TO

The Natural History of the County.

BY

JAMES EDMUND HARTING, F.Z.S.

LONDON:

JOHN VAN VOORST, 1, PATERNOSTER ROW.

M.DCCC.LXVI.

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BIOLOGY

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INTRODUCTION.

"The advantages of local Faunas," says Professor Bell,* "are too generally understood and acknowledged to require any lengthened proof or illustration.

"It may, indeed, be doubted whether the study of the animals of particular tracts of country have not contributed, more than any other means, to the advancement of Zoological knowledge, especially as regards those important branches of it, the geographical distribution of animals, and the influence of climate, of soil, and of other local circumstances, in determining the range of species, the changes of varieties, and the extent and periods of migration."

From time to time there have issued from the press various local Natural Histories; but no

^{* &#}x27;History of British Quadrupeds.'

work, so far as I am aware, has yet been published upon any branch of the Zoology of Middlesex.

To write the complete Natural History of a county is an undertaking for which few can find time, even if they possess the necessary qualifications; but by a division of labour the task becomes not only lightened, but more perfectly executed; and it has been with a view of contributing towards a Natural History of Middlesex that I have ventured to publish these notes on birds.

I do not profess to be a scientific Ornithologist, according to the modern acceptation of the term, that is to say, I neither understand nor take an interest in the endless and complicated subgenera, and other fanciful divisions, which some naturalists adopt; but I am an ardent lover of the study of the habits and manners of birds, and of the wonderful adaptation of their structure to those habits. With this love of the feathered race, and the advantage of constant observation owing to a continued residence in the country, I have endeavoured to note down such particulars, gleaned during my rambles, as may enable a stranger to form a good notion of

the distribution of our resident and migratory birds. I have not aimed at giving minute descriptions, which may be found in the works of Messrs. Yarrell, Jenyns, Gould, and other authorities. I have merely endeavoured to state, as concisely as possible, the name of the species, whether resident or migratory, the season of the year when each is most frequently seen, the length of time they remain with us, and the localities in which they are to be found during their stay. In many cases, also, I have added various particulars respecting their food and habits which I have noted down at different times from actual observation in the course of my rambles.

Amongst our British birds are many species so closely allied, and so nearly resembling each other, that it requires a practised eye to distinguish them. Of these I may mention the Willow Wren and Chiff Chaff, the Gold Crest and Fire Crest, the Cole Tit and Marsh Tit, the Pied and White Wagtail, and the Green and Wood Sandpipers. With regard to these and a few others, I have deemed it advisable to point out the distinguishing characteristics, for the advantage

of those who may wish to extend their ornithological inquiries in the county. In such cases I have necessarily been compelled to depart from my rule of abstaining from particular descriptions. In noticing, also, such scarce birds as the Spotted Sandpiper, Schinz' Sandpiper, and Sabine's Gull, here for the first time recorded as having occurred in Middlesex, with other rarities (as the Little Ringed Plover) which have fallen to my own gun, a particular description has been given, when practicable, either because the birds were obtained in a fresh state, or because the description of the species as British by other authors, has been taken from a limited number of specimens. This seemed advisable, in order to confirm or add to such former descriptions.

It frequently happens that we become aware of the presence of a bird long before it is seen, merely by its note. This is more especially the case with the waders. In order to distinguish birds when at a distance, we should be well acquainted not only with their flight but also with their note; and on this account, wherever it has been practicable, I have reduced the notes to a key by means of a

small whistle.* The musical expression thus obtained I have introduced into the text, but the reader must not attempt to interpret these notes by the piano; for by this means he will not obtain the faintest notion of the sounds which they are intended to convey. The reason of this will be obvious; the pipe of a bird is a wind instrument, the piano is a stringed one. A flute or flageolet will give the proper sound, but the most perfect expression will be obtained with a small whistle, two and a half inches long, and having three perforations, similar to the whistle used by the Sardinian Picco who performed so wonderfully in London some years since. By reducing the length of the tube by a stop or plug, the whistle may, by experiment with the bird, be adjusted to the exact pitch, and the stop be then fixed.

I have found a whistle so constructed very useful as a bird-call when I have been anxious to get a shot at Plovers, Sandpipers, and other waders.

^{*} The high notes of the smaller birds are so much above the reach of the ear that it is scarcely possible to take them down.

In enumerating the various species recorded, I have thought it expedient to follow some fixed plan or system, and I have adopted that pursued by Mr. Yarrell as being the most simple and natural of modern systems. Those who desire to see figures of the birds here noticed may refer to the 'History of British Birds' by that author, where they will be found faithfully and beautifully delineated.

It will be seen, from the following pages, that no less than 225 species of birds have been found in Middlesex. Of these 60 are resident, 68 migratory, and 97 rare and accidental visitants.

The woods around Hampstead, Highgate, Edgewarebury, Stanmore, Pinner, and Harrow, still afford protection to various members of the Hawk, Owl, Crow, and Woodpecker families, in spite of the persecution they are constantly receiving at the hands of keepers, birdstuffers, and mere collectors. The Warblers are found suddenly scattered over the country at the period of their vernal migration. Wheatears and Stonechats then appear on the fallows; Whinchats in every grass-field; Willow Wrens and noisy Whitethroats in the green lanes;

and the handsome Butcher-bird in the tall tangled hedges, while all along our brooks the Sedge Warblers and amusing Tits are found hunting incessantly for their insect food.

Owing to the greater portion of the farms in this county being grass-land, and to the comparative scarcity of stubble and root-crops, Partridges are by no means so numerous as in adjoining counties, and Pheasants are only to be found where strictly preserved.

Peewits breed regularly with us every year, and Golden Plovers are not uncommon in winter. At that time, too, Fieldfares and Redwings find plenty of food in the hawthorn hedges, and flocks of Wood Pigeons visit the cleared bean-fields and stubbles wherever these are to be found.

In the order to which the Peewit and Golden Plover above-mentioned belong, —viz., the Grallatores, or Waders, as well as in the Order Natatores, this county has proved singularly rich, considering that it is a midland county and cannot boast of the attractive sea-coast which Norfolk, Sussex, and other counties famous for this class of birds possess.

The large reservoirs of Kingsbury and Elstree, and the River Brent and Silk Stream, to say nothing of the Thames, appear to have a special attraction for various species of waders and wild fowl which visit us during the year; no less than forty-six species of the former and twenty-one of the latter having at different times occurred. Snipe, both the Common and the Jack, are numerous in winter; occasionally a Woodcock is killed, and, more rarely, a Solitary Snipe (Scolopax major). At this season, too, the Common Wild Duck and Teal are frequent visitants at the reservoirs above-named, as well as in the brooks and quiet ponds which lie out in the fields at a distance from any road.

The heronries at Osterley Park, in this county, and Wanstead Park in the adjoining county of Essex, send forth many a long-legged visitor, and, in the autumn particularly, this species is common enough. I have seen seven or eight of these birds at one time, fishing within a few yards of each other. When the water of the reservoirs has been drawn off for the service of the Regent's Canal, the herons obtain plenty of food among the shoals

of Roach and Gudgeon with which the tributary Brent abounds.* They also find plenty of frogs and water-rats along the brooks.

In the spring and autumn, when the wind blows from the east and south-east, we frequently find Gulls upon the river and larger pools; and flocks of graceful Terns may be seen fishing at the reservoirs when they visit us on their way to and from their breeding-stations. The subject of migration is a curious one, and the laws which govern it are yet imperfectly understood; but to advance here all that might be said in this regard would be beyond the limits of the present work. It appears highly probable, from their constitution, that most birds incline to remain as much as possible in the same temperature throughout the year, and hence their gradual movements north and south as they feel the effects of heat and cold. If a

^{*} The reservoirs here referred to are those at Kingsbury, Elstree, and Ruislip, and a sketch of the first-named, or rather of a portion of it, was selected as a frontispiece from the fact that so many rare and beautiful birds have been at various times observed there.

sudden change comes, like a sharp frost, we find birds lying dead under the hedges. This is a proof of their sensitiveness. Some species better able to endure cold, but still averse to it, if they do not die, disappear suddenly, and we are often surprised at the extraordinary scarcity of a species one day which on the previous day was plentiful. I have always attributed the cause to sudden change of weather. No doubt the abundance or scarcity of food has some influence upon birds in their migration, but not to the same extent, I conceive, as change of temperature.

The assistance I have received from various sources, whilst preparing these notes for the press, merits some recognition at my hands.

To my valued friend, Mr. Frederick Bond, I am particularly indebted for numerous communications respecting the birds of this county, with which, as a sportsman and a naturalist, he has been acquainted for more than thirty years.

Mr. W. H. Power has furnished me with some interesting information relating more particularly to the neighbourhood-of Ealing; and I am indebted

to Mr. Belfrage for many ornithological notes from Muswell Hill.

Several of the London taxidermists have sent me various particulars relating to rare species captured in this county and transmitted to them for preservation; and, whenever such captures have been previously recorded on such authority as that of Messrs. Yarrell, Jenyns, or Gould, I have noticed it in my text, generally in the author's own words.

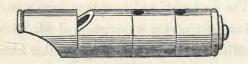
I have gleaned some information from the pages of 'The Zoologist,' and have thus been enabled to avail myself of the experience of Mr. Newman, Mr. Mitford, Mr. H. Hussey, and other observant naturalists in this county.

As before stated, these notes are offered rather as a contribution towards a Natural History of the county than as a complete treatise. Should they tend to awaken a taste for the study of Nature in those who have hitherto been unobservant, or induce those who already possess such tastes to prosecute the study with renewed vigour, and acquire fresh knowledge concerning our Fauna,

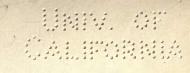
I shall rejoice to think that my task, besides being one of pleasure to myself, has proved a source of entertainment and utility to others.

J. E. H.

Kingsbury,
June, 1866.



WHISTLE USED AS A BIRD-CALL. (Reduced one-fourth.)



THE

BIRDS OF MIDDLESEX.

ORDER RAPTORES .- Family FALCONIDE.

Golden Eagle, Aquila chrysaëtos.

WHITETAILED EAGLE, Aquila albicilla. Although I am unable to record the actual capture of either the Golden Eagle or Whitetailed Eagle in Middlesex, both these birds have nevertheless been observed in the county, and therefore deserve a passing notice. During the autumn of 1859, a gentleman well acquainted with the bird saw a Golden Eagle on the wing in the neighbourhood of Barnet, and the following week the capture of one in Kent was reported. He conjectures that it was the same bird.

"The Whitetailed Eagle, as a species, is more numerous than the Golden Eagle, and on some parts of the coast may be seen frequently."

The individuals which have occasionally been observed straying inland, in search for food, have no doubt followed the course of a river from its

mouth. Yarrell records several instances in which the Whitetailed Eagle has been killed within a few miles of London, and mentions, amongst other places, Henley, Epping, Coombe Wood, and Wimbledon Common. It is more than probable, therefore, especially when we consider the great height at which an Eagle soars, that this bird has unperceivedly visited the county much oftener than has been stated.

OSPREY, Falco haliæëtus. Although the Osprey has several times been killed in the adjoining counties of Hertfordshire and Buckinghamshire, and has been shot on the Thames at Maidenhead, I am at present aware of one specimen only which has been actually obtained in Middlesex, though I have no doubt that this species, like the lastnamed, has frequently paid us a visit without being noticed.

On the 1st October, 1863, an Osprey was shot near Uxbridge, and on the following day I h d an opportunity of examining it. It proved on dissection to be a male, and was probably in its third year. The stomach was empty, with the exception of a small quantity of coarse sand, but the bird was nevertheless in good condition. It had been observed in the neighbourhood of Uxbridge for some days before it was killed, and many attempts were made to secure it before it was finally shot.

In September, 1865, a pair of Ospreys frequented for some days a sheet of water on the estate of Mr. J. D. Taylor, of Southgate. As this property is in a ring fence, and strictly preserved, the Ospreys no doubt discovered an agreeable resting-place, and finding themselves undisturbed for some time, remained, and were observed to capture fish, which they carried to the mast-head of a pleasure-boat, where they devoured it. In so doing, the boat was rendered so dirty as for some time afterwards to be unfit for use. At night it was supposed that they roosted in the adjoining wood. It would seem that the pleasure derived from observation of these noble birds in a state of freedom was excelled by a desire to possess one or both of them; and unfortunately, with this view, they were several times shot at. Instead of the desired result, however, this only had the effect of driving them away. They visited a piece of water about four miles distant, belonging to a friend of Mr. Taylor's, at Enfield, and soon afterwards disappeared, and were not again seen.

Peregrine Falcon, Falco peregrinus. This noble bird was formerly not uncommon in the winter and early spring, when gunners were not so numerous, and Ducks and Teal more plentiful than at present in our brooks and reservoirs. A pair of these birds for many years frequented the top of

St. Paul's, where it was supposed they had a nest: and a gentleman with whom I am acquainted has assured me that a friend of his once saw a Peregrine strike down a Pigeon in London, his attention having been first attracted by seeing a crowd of persons gazing upwards at the hawk as it sailed in circles over the houses.

In the winter of 1857, a young bird of this species was caught by a birdcatcher between Hampstead and Finchley; and I have seen a female Peregrine that was shot in January, 1862, at Forty Farm, in the parish of Harrow. During the second week of November 1865, a Peregrine was killed in Canon's Park, Edgeware, and another seen. The following week one was shot at Stanmore, and it is supposed that these were a pair. This Falcon has also been killed near Highgate, at Southgate, and on Old Oak Common.

Hobby, Falco subbuteo. This handsome bird, in appearance like a little Peregrine, is with us a summer visitant. It is, however, of such unfrequent occurrence, that it may be of interest to mention the instances of its appearance or capture which have come under my notice. A specimen in the collection of Mr. Bond was taken by a bird-catcher at Kilburn, and one in the possession of Mr. Spencer was caught on Primrose Hill, as late as the month of October. On the 13th May, 1861, three eggs of the Hobby were taken from an old

crow's nest in Pinner Wood, and one of these I have since added to my collection.

A correspondent sent me word that a Hobby had been killed at Harrow during the early part of 1862; and on the 24th April, 1863, Mr. Bond shot a beautiful bird of this species at Kingsbury. I saw it the same day and afterwards dissected it. Although the plumage was that of an adult male, it proved, to my surprise, to be a female, and a cluster of rudimentary eggs was apparent in the ovary. Upon opening the stomach, I found it full of the elytra and remains of large beetles and chafers, which confirms the statement of Mr. Yarrell respecting the food of this species.

I have seen a handsome male Hobby in the collection of Mr. James Dutton, of Hammersmith, which was shot at Chiswick, in July, 1863; and I am informed by that gentleman that a second was more recently obtained in the same locality. I once found the remains of a Hobby, which had been shot, in Bishop's Wood, Hampstead.

Meyer, in his 'Illustrations of British Birds,' says that the Hobby may be distinguished from the Merlin or Kestrel, when flying, by its narrow-pointed wings and slender form, and adds that it chooses for its prey, larks, swallows, and martins, which it pursues in the air, following them easily in all their evolutions, and strikes with such

unerring aim that it seldom fails to secure the selected prey.

I have seen a female Hobby which was killed on Hampstead Heath, while in pursuit of a wounded swallow. This was on the 22nd August, 1864.

Mr. Belfrage, who has kept the Hobby in confinement in his garden at Muswell Hill, observed that the note of this bird is so similar to that of the Wryneck, that in the spring, when he has had frequent opportunities of hearing both birds at once, he could scarcely distinguish the one from the other. This remark I am able to confirm, from observation of a tame Hobby which I have kept for some time, and which is still alive.

MERLIN, Falco asalon. Visits the South of England in October, about the time that the Hobby retires. In this county it is a rare visitant. Only two instances of its occurrence have come under my notice. In the winter of 1857, a birdcatcher netted an immature female Merlin on Hampstead Heath; and an unusually large bird of this species was shot at Stone Bridge, on the Brent, in April, 1861. The latter specimen I obtained for my collection. From the size and markings, I believe it to be also an immature female, but this fact was not ascertained when it was skinned. Meyer says that the Merlin, when on the wing, may be distinguished from the Hobby by the greater length of its tail in proportion to the wings, and by its more robust form.

Kestrel, Falco tinnunculus. By far the commonest hawk we have, and particularly numerous in autumn. It appears to be partially migratory, for comparatively few pairs remain here to breed. Mr. Belfrage informs me that he once found a pair of these birds nesting in a hollow tree. A remarkable instance of fearlessness in a Kestrel in defending its nest, came under my observation in the spring of 1864. A lad had climbed to the nest in a tall fir-tree, and was about to grasp the eggs, when the bird which he had disturbed from them swooped at his hand, which he withdrawing suddenly, one of the eggs was broken to pieces by the talons of the bird.

A curious incident occurred here one day in November, 1865. A cat belonging to a neighbour was lying concealed in a drain in a meadow, watching her opportunity to seize a field-mouse, when a Kestrel swooped upon a mouse, so close to her that with a sudden spring she caught the bird, and eventually killed it; a termination to her hunt as unlooked for by her as it was unexpected by the Kestrel, who had probably been so intent upon the moving mouse as to overlook the motionless cat. This was related to me by the owner of the cat, who took the bird from her a few minutes after the event.

During the autumn of 1862 I observed Kestrels almost daily, and frequently saw three or

four on the wing at once. The food of this bird appears to be chiefly field-mice (Mus sylvaticus and Arvicola agrestis), grasshoppers, and beetles. Occasionally, too, it will eat carrion; and it is to be regretted that farmers and keepers take every opportunity of shooting or trapping the Kestrel, under the mistaken notion that it is destructive to game and poultry, for it is in reality a most useful bird.

Sparrowhawk, Falco nisus. Formerly common in Caen Wood, Hampstead, and in the woods near Edgewarebury, Stanmore, and Pinner. It is still to be seen occasionally, but this species is gradually becoming scarcer, owing to the persecution which it meets with on all sides.*

It has been doubted whether the female Sparrow-hawk ever has a slaty-blue back like the adult male. That this is the case with this species, as well as with the Hobby,† I have little doubt. Mr. Bond informs me that he has more than once shot a Sparrowhawk in the male plumage, which

^{*} Unfortunately this is not the only bird that is becoming scarce here; for, under the mistaken notion that they do more harm than good, not only hawks and owls, but crows, magpies, jays, and even woodpeckers, and many other of our handsomest British birds, are alike shot down indiscriminately, and nailed against a tree or barn to rot.

[†] See ante, p. 4.

proved on dissection to be a female,* and I believe that the difference of plumage will be found to depend upon age. The Sparrowhawk is sometimes surprisingly bold, and I can vouch for the following fact, which I scribbled down in my note-book at the time:—

"June 7, 1863.—Old Powell, at Harrow Weald, was at work in his garden yesterday, when a Sparrow dashed up against him, closely pursued by a Sparrowhawk. The Hawk, nothing daunted by his presence, seized the Sparrow, which had fallen at Powell's feet, and bore it screaming away."

I have heard of other similar instances; and in the majority of cases the female Sparrowhawk, which (as is the case with all the females of the Raptores) is the larger bird, was the delinquent.

Of a pair of Sparrowhawks in my own collection, the male was obtained at Edgewarebury and the female at the Well Springs in this parish; and I have seen others which had been trapped or shot at the Hale, Edgeware, Brockley Hill, and Elstree. A nest was taken in the Mount, Harrow, in the spring of 1861, from the top of a Scotch fir; but it is rarely that the Sparrowhawk is found breeding here.

By far the greater number of specimens which

^{*} See a letter from him on this subject in the 'Magazine of Natural History.'

have come under my notice have been females; but I apprehend that the reason of this is, that the female Sparrowhawk is much bolder than the male, and that it more frequently comes near us when in search of food. The male bird, on the contrary, being of more retired habits, keeps to the woods. Mr. Belfrage tells me that he has remarked the same with regard to the Kestrel.

KITE, Falco milvus. A curious fact, touching the earlier Ornithology of Middlesex and the economy of London, is mentioned by the old naturalist, Charles Clusius, in a note to his translation of the works of the French Ornithologist, Pierre Belon. He says: "Vix majorem in Cairo milviorum frequentiam conspici existimo, quam Londinii Trenobantium in Britannia, qui nullo non anni tempore frequentissimi istic apparent, cum eos enim interficere vetitum sit, ut spurcitiam in plateas, vel etiam ipsum flumen Thamesin qui urbem alluit ab incolis ejectum, legant et devorent; maxima quantitate eo confluent, adeoque cicures redduntur, ut per confectas etiam homines prædam ab ipsis in alto volantibus conspectam, comissere non vereantur, quod sæpe numero dum istic essem, admiratus sum."-Op. C. Clusii, p. 108.

Clusius visited England during the reign of Elizabeth, in 1571, and a fact like this, of daily occurrence, and therefore little likely to be recorded by a native of London, would at once strike a foreigner. As

the Kite is now one of our rarest birds, and is hardly ever seen in the neighbourhood of London, this reminiscence of its former frequency, when it was a welcome guest, is most interesting to an ornithologist. According to Mr. Yarrell, "in the southern counties of England, the Kite is rare." The following notice of the occurrence of this bird at Kingsbury, I have extracted from 'The Zoologist' for 1850:—

"On Wednesday the 3rd inst., as I was standing in the village (Kingsbury) talking to a friend, a fine specimen passed over our heads within twenty yards: it is the only one I have ever seen in this neighbourhood."—F. Bond, April 9, 1850.

I have since been informed by Mr. Bond that, subsequently to this notice, and about five years later, he saw, from the windows of his own house, a Kite sailing over Grove Park, in the same parish. The forked tail was seen very plainly, and the general appearance of the bird was unmistakeable.

COMMON BUZZARD, Falco buteo. Accidental, being more partial to wooded districts. Some years ago, a fine male Buzzard was caught by a birdcatcher at Kilburn, and was purchased by Mr. Bond for his collection. I have only once seen a buzzard in this county. It was sailing in circles over the fields between Edgeware and Mill Hill; and although this bird has the reputation of being very sluggish in its

habits, with its large broad wings it certainly looks majestic when in flight. It has occasionally been seen in the neighbourhood of Harrow, and once at Harrow Weald. One day in May I paid a visit to an old keeper residing at the last-mentioned place, with whom I used frequently to converse on the subject of birds and shooting, and from whom at odd times I have received some useful information. His first exclamation on seeing me that day was, "Oh, Sir! you should have been here this morning, we had such a beautiful Buzzard-hawk flew over our garden." He knew the bird well, and had once kept a pair in confinement. His son also saw the bird, and told me of it before he knew that his father had seen it.

On my asking the old man how he could account for the appearance of a straggler of this species, at this time of year, and in a neighbourhood where it is so rarely observed, he replied that he had seen the bird more frequently in the midland counties, and he had remarked that whenever one of a pair had been shot or trapped, the survivor wandered often to a considerable distance in search of a new mate, and he had little doubt but that such was the case with the bird he had seen that morning.

HEN HARRIER, Falco cyaneus. Accidental. An adult male Hen Harrier was shot several years since in the parish of Willesden, and in 1862 another was seen near Blackpot Farm, Kingsbury. This latter

bird was observed several times, and many attempts were made to secure it, but in vain. From its size and markings, it was supposed to be a female, or "Ringtail." Yarrell observes that no less than twenty lizards were found in the stomach of one killed near London.

Family STRIGIDE.

EAGLE OWL, Strix bubo. I am only aware of one instance in which this rare British bird has been obtained in a wild state in Middlesex. The following notice of its occurrence at Hampstead is communicated by Mr. Thomas Hall, in 'The Zoologist':—

"On the 3rd of November, 1845, my father preserved for Mr. Burgess, Temple House, Hampstead, a female specimen of the Great Horned Owl (Strix bubo). It was caught, after much trouble, in a hedge near the house, and was kept for some time, until it died. It was very fierce during its captivity, and had been severely wounded in the wing by shot, previously to its capture."

From the rare beauty of this species, and the readiness with which it submits to confinement, it has always been a great favourite with those who delight in keeping live birds in their grounds, although its scarcity in England renders it, of course, difficult to procure. Many years ago, the Earl of

Burlington had an Eagle Owl alive in the park at Chiswick; and Edwards, in his 'Natural History of Birds,' mentions one that was kept "at the Mourning Bush Tavern, by Aldersgate, London." Sir Hans Sloane, too, had one of these birds which he kept for many years alive in London, and which was well known to the curious of his time.

Long-Eared Owl, Strix otus. This species is partial to woods and plantations, where it remains concealed during the day, and from its retired habits it is not often that an opportunity occurs for observing it. A male bird in the collection of Mr. Bond was obtained in Colin Deep Lane, Hendon; and one in my own collection was shot at the Well Springs, Kingsbury, on the last day of December, 1862. This latter bird was in company with another, which was also shot, but which I did not see. I think it very probable, however, that they were a pair. In June, 1861, some eggs of this species were taken from an old tree in Wembley Park, and one of the birds which was caught on the nest was afterwards sold in London. On the 29th May, 1863, I obtained four eggs of the Long-eared Owl from a hollow tree in Canon's Park, Edgeware; and more recently I have seen a Long-eared Owl, which was shot in January, 1865, in Forty Lane, between Kingsbury and Preston; and another in the collection of Mr. Mitford, of Hampstead, which was obtained in that neighbourhood. This species was at one time common in Caen Wood, Hampstead, and may still occasionally, though rarely, be seen there. It is also found in Pinner Wood, where I have reason to believe that it breeds, and in Ruislip Wood, on the north-west side of the county. The food of the Long-eared Owl is very similar to that of its congeners, consisting chiefly of field-mice and small birds.

SHORT-EARED OWL, Strix brachyotus. An occasional winter visitant. In the winter of 1840-41, a male and female of this species were killed in a field near Kingsbury Reservoir. A few years later, towards the end of October, a pair of Short-eared Owls rose with a covey of Partridges and were shot by Mr. Bond and his brother, each, oddly enough, killing a Partridge and an Owl. One of the Owls was of an unusual variety, being so light in colour as to look almost white at a distance. Since that time several Short-eared Owls have been killed in this neighbourhood. One was shot in November, 1860, near Caen Wood, Hampstead. Another was killed in an open field, near the same wood, in December, 1861. This bird I saw very shortly afterwards. Several examples have occurred near Scratch Woods, Edgewarebury, and on Edgewarebury Common. The last of which I have heard was killed at Edgewarebury in November, 1865.

It is asserted that the Short-eared Owl never perches, but roosts upon the ground, and a writer in "The Zoologist" (p. 8818) says, he has taken some pains to inquire from good authorities whether they ever saw this species perching, and he has invariably been answered in the negative. In all the examples that have come under my notice, the birds were shot in the open country, and not from trees. It is well known that the Short-eared Owl is more diurnal in its habits than any other of the genus; that it seeks its food by day in the open meadows and among coarse herbage, and is thus more frequently found by sportsmen upon the ground; but I think it not unlikely that it retires to a tree to roost at night.

The food of the Short-eared Owl consists of small birds and field-mice, particularly the latter; and I have often thought it a wonderful provision of nature that, just at the time when the ground is cleared of crops, and the field-mice are more easily seen and captured, the Short-eared Owl arrives to thin their numbers.

When we reflect on the great amount of devastation which is occasionally committed by mice, we cannot but consider the Owls as our best friends; and overlooking the small and unfrequent loss of a young rabbit or partridge, we should certainly extend to them protection and encouragement.

BARN or WHITE OWL, Strix flammea. This Owl, the commonest of our Strigidæ, breeds under the

church eaves, and here and there in hollow trees. The nest is generally placed so securely that the eggs are with difficulty obtained.

I have only once been able to reach the nest of a Barn Owl in Kingsbury Church, and then found but a single egg. I have several times, however, obtained eggs of this bird from hollow trees in Canon's Park, Edgeware, and I have reason to believe that the Barn Owl breeds regularly in Northolt Church and in the tower of the old church at Stanmore.

Upon examining a great number of pellets, picked up under the eaves of our village church, I was rather surprised to find that they contained a greater proportion of the skulls and bones of birds than of mice or voles. In some years, as for example the autumn of 1862, the short-tailed vole (Arvicola agrestis) was particularly numerous, a favourite cat often bringing in three or four a day for a period of about three months. I had, therefore, supposed that these voles, being so much easier to capture than small birds, would form the chief food of the Barn Owls; but it proved otherwise: the skulls I obtained were almost invariably those of Finches.*

^{*} I am told by two excellent naturalists that this is contrary to their experience.

The flight of an Owl, whether by day or night, is so peculiar as to distinguish it at once from every other bird. Shakespeare, who must have been a close observer of nature, has happily characterized it, when he speaks of "the night-owl's lazy flight."* Elsewhere, the same poet truly says that,—

"The Owl, if he arise by day, Is mocked and wondered at;"†

for although the Short-eared Owl is, to a certain extent, diurnal in its habits, the contrary is the case with the other members of the family, and it is unusual to see an Owl abroad before twilight. Nevertheless, a few instances of the Barn Owl flying by day have occasionally come under my own observation; but I have always considered that in every such case, the bird must have been disturbed or frightened, and that the flight was not a voluntary one. It is disputed by some naturalists whether the Barn Owl ever hoots; but although its usual note is a screech, I think there can be little doubt that it also hoots occasionally; and good evidence of this fact will be found in 'The Zoologist' for October, 1863, p. 8765.

TAWNY OWL, Strix aluco. Rare. An adult male of this species was shot at the Well Springs, Kings-

^{*} Henry VI., Part III., Act II.. Sc. 1.

[†] Henry VI., Part III., Act v., Sc. 4.

bury, in the spring of 1844, and another was killed in Caen Wood, Hampstead, in the spring of 1859. A third, in the collection of Mr. Mitford, of Hampstead, was also obtained in that neighbourhood. The Hon. F. C. Bridgeman, who has published a short notice of the birds of Harrow, says that a nest of this bird was found in a hollow tree in the Grove, Harrow, in the spring of 1862; and I am informed by Mr. J. W. Ford, of Enfield, that the Tawny Owl has occasionally been observed in that neighbourhood. The ordinary food of this bird consists of water-rats, field-mice, and small birds. I have, however, heard of its capturing fish; and in the stomach of an adult Tawny Owl, shot in April, which I examined, I found nothing but insects, the greater number of which were large moths.

Scops-eared Owl, Strix scops.* "One example of this little Owl was taken some time since near London." †

LITTLE OWL, Strix passerina. This Little Owl, which is occasionally found in England, is not the Strix passerina of Linnæus, but Strix passerina of Latham, Pennant, Montagu, Bewick, and Temminck.

^{*} This, and the two following species, I have inserted on the authority of Edwards and Yarrell as having been obtained in this county.

[†] Yarrell's British Birds, vol. i., p. 128.

[‡] Id. vol. i., p. 163.

The Strix passerina of Linnæus, which is also the Strix passerina of Bonaparte (Consp. Gen. Avium, p. 36), and Strix arcadica of Temminck (Man, vol. i., p. 96) has not been found in this country. It is a smaller bird, and corresponds with the Sparf-uggla (Sparrow Owl) of the Swedes. It is the Strix pygmæa of Bechstein and Meyer, and Strix noctua of Retzius.* As some confusion seems to exist in the identification of the smaller Owls, it may be as well to point out here the distinguishing characters of the bird which occasionally visits this country.

Mr. Wheelwright, writing on the Ornithology of Lapland, and referring to the Swedish Little Owl (Strix passerina of Linnæus) says: "It differs from the Little Owl of Britain, in that its toes are covered thickly with downy hair-like feathers, even to the very claws, and the tail extends nearly an inch and a half beyond the closed wings, whereas in the British bird it is scarcely longer than the wings themselves. Moreover, in the Little Owl of Britain, the first wing-feather is equal in length to the sixth, the second like the fifth, the third longest. In the Little Swedish Owl, the first is like the ninth, the second like the sixth, the third and fourth the longest."

^{*} The synonym of *Strix nudipes*, applied to our Little Owl by Nilsson, is a misnomer, as the bird has feathered toes like its Swedish congener.

Edwards gives a coloured plate and description of a Little Owl, and adds, that "the bird from which it was taken came down a chimney in St. Catherine's parish, by the Tower of London, and was supposed to be a foreign bird escaped from on board some ship in the river Thames; but I have since been informed by Peter Theobald, Esq., of Lambeth, that just such another Owl came down one of his chimneys, by which I imagine it is a native of England, though little known."

The first-mentioned example "was a hen, many eggs being found on opening it, and the bird being living when I made my observations on it, enabled me to make the description more perfect. It was the property of a gentleman in St. Catherine's, a neighbour of my good friend Mr. Joseph Ames, Secretary to the Society of Antiquaries, London, who procured me a sight of it."*

I have been assured by Mr. Constantine Minasi (brother to the late Consul for the Two Sicilies), a gentleman well acquainted with birds, that some years ago, while returning one evening from shooting at Kenton Park, Sunbury, he distinctly saw a Little Owl on the wing.

TENGMALM'S OWL, Strix Tengmalmi "In 1836, a specimen, recently shot, was purchased at a

^{*} Edwards' Gleanings in Nat. Hist.,' vol. i., p. 228.

poulterer's shop in London."* But this may have come from Holland. I have frequently seen Owls and Hawks of different species in Leadenhall Market, which had been sent from Holland with the wild fowl.

ORDER INSESSORES .- Family LANIADÆ.

Great Grey Shrike, Lanius excubitor. A winter visitant of rare occurrence.

Mr. Edward Newman, in a letter to me dated 10th January, 1863, made the following remark with regard to this bird, which I have thought of sufficient interest to quote here. He says: "It visits England regularly but rarely every winter, but very seldom in the summer. I have taken great pains to collect the occurrence of this bird in England. It passes southwards and northwards exactly at the same time as Collurio, but does not travel the same journey; so that Excubitor may be passing from the Orkneys to the Thames exactly at the same moment that Collurio is passing from the Thames to the Mediterranean."

In the "Zoological Journal" for April, 1825, p. 26, Mr. Yarrell says that, in January of that year, "a Great Grey Shrike was taken in a clap-net near

^{*} Yarrell's 'British Birds,' vol. i., p. 163.

London, by a birdcatcher, in the act of striking at his decoy linnet. This bird fed well in confinement, several times taking small birds or raw meat from the hand; but was very eagerly parted with by his new master on finding that the note of the Shrike, once heard, had stopped the songs of all his wild birds."

Mr. Spencer tells me that, in November, 1831, he saw a fine Grey Shrike in a field between Kilburn and Hampstead. A male of this species was shot at Wembley Park in January, 1841, by the gardener of the Rev. Mr. Gray, and two were obtained at Kentish Town and Kilburn in the winter of 1850, as recorded by Mr. Newman in 'The Zoologist' for that year. A keeper with whom I am acquainted caught one of these birds in a net near Harrow, and subsequently shot another in the same neighbourhood.

A specimen in my own collection was shot, in the adjoining parish of Hendon, in the winter of 1854. This bird, when first seen, was flying along the brook between Hendon and the Hyde, in pursuit of a small bird, and the shooter at the time was ignorant of the species. He told me afterwards that, although he had lived many years in the neighbourhood, and had shot a great number of birds, some of them rare, yet this is the only bird of the kind he had ever seen.

As recently as November, 1862, a specimen of this Shrike was killed near Kentish Town. Redbacked Shrike, Lanius collurio. A common summer visitant, usually arriving about the first week in May, and remaining until the end of August. After the young are hatched and able to fly, they keep together in families until the time comes for them to leave us. I have counted as many as seven together in a hedge-row in August. On examining the contents of the stomach of some specimens killed early in August, I found only the remains of beetles and chafers; no trace of any small bird, nor flesh of any sort. This bird has not been numerous here of late years. Perhaps this is owing to the prevailing habit of "plashing," * or "laying" the hedges, for the Butcher-bird delights in a tall tangled hedge.

Family MUSCICAPIDÆ.

SPOTTED FLYCATCHER, Muscicapa grisola. A regular summer visitant, in some years very numerous,

This description well applies to a modern plash'd hedge.

^{*} En passant, the word "plash" was, perhaps, originally written "pleach," meaning a fold or twist. In Shakespeare's play of Henry V., we read of France that—

[&]quot;... all her husbandry doth lie in heaps, Corrupting in its own fertility;
Her vine, the merry cheerer of the heart,
Unpruned dies; her hedges even pleach'd,
Like prisoners wildly overgrown with hair,
Put forth disorder'd twigs."—Act v., Sc. 2.

though in others scarce. It generally builds in enclosures and gardens, a favourite site being the branch of a peach or pear-tree against a wall. It is a fearless bird, usually allowing a near approach before taking flight, and then often it will return to the perch it has just left, or alight again at a little distance from it. One day in July I was much interested in watching a Spotted Flycatcher feeding her young. The little family, four in number, were perched upon a low bough of an elm, and huddled so close together that it was difficult to make them out until the old bird brought food, when their bills were opened simultaneously. The parent bird alighted in the road, and after a few seconds apparent rest, darted into the air, seized a fly, and then flew straight with it to the bough where her young were. This was repeated as long as I remained there, the old bird invariably alighting in the road, and with one motion seizing a fly and conveying it to its destination. Hence I was unable to ascertain, and have not vet discovered, whether the bird walks or hops, for it always rose from the spot where it alighted. It is a very silent bird, and I have never heard it utter any song.

Mr. Jesse, in the second part of his 'Gleanings,' mentions a nest of this Flycatcher which was found fixed in the ornamental crown on the top of a lamp near Portland Place in London, containing five eggs which had been sat upon!

A nest of this species, which I took in June, 1862, was lined with the flowering heads of grasses, and was bright green when four eggs were laid.

PIED FLYCATCHER, Muscicapa atricapilla. Accidental, and found only at the period of migration in spring and autumn. Pennant records one example of this bird, killed near Uxbridge; and Yarrell mentions a young male of the year, in his own possession, killed in September, "much nearer to London," but the precise locality is not stated. A full description of that bird, however, is given at p. 190, vol. i., of his 'History of British Birds.'

In May, 1842, a male of this species was shot at The Hyde, which is situate between Kingsbury and Hendon. In the spring of 1849, during the month of May, Mr. Spencer shot a Pied Flycatcher, also a male, in Mill-Field Lane, near Highgate. It was sporting in the lower branches of an oak, and at a distance he at first mistook it for a Goldfinch.

Early in May, 1859, four Pied Flycatchers, two males and two females, were taken alive by a bird-catcher in Bishop's Wood, Hampstead, and one pair of these I have in my collection. A fifth was caught the same week, at the same place, and was sold by the birdcatcher soon afterwards to an amateur collector.

The Hon. F. C. Bridgeman, in a notice of the birds of Harrow which has lately appeared in print, writes as follows: "I know of one authenticated

instance of this rare bird here: a nest with three eggs was taken in the Grove about the year 1836, and the eggs are still preserved."

Family MERULIDÆ.

The DIPPER, Cinclus aquaticus. This bird, as Mr. Yarrell observes, "may be said to be local rather than rare, and is seldom found in the counties around London." "The nearest spot," he continues, "in which I have heard of a Dipper being seen, was at a Watermill tail at Wyrardisbury, on the Colne, about two or three hundred yards above the place at which it falls into the Thames, just below Bell Weir."

Mr. Bond once saw a Dipper in a bird-stuffer's shop in London that had recently been shot at the stream which runs through Wembley Park. It had been sent to London for preservation, the sender, however, being ignorant of the species.

In the spring of 1862 a solitary Dipper was observed at the brook near Colin Deep Lane, Hendon. It was so accurately described, both as to appearance and habits, by the man who saw it, as to leave no doubt, apparently, of the species. On hearing it described as a dark brown bird with a white breast, I suggested that it was a Ring Ouzel, for that bird is often to be found here in spring and autumn; but he knew the Ring Ouzel, and said the bird in

question was more like a Wren in shape and action, and flew like a Kingfisher. This would seem conclusive; but it is singular that this solitary Dipper, if it really was one, should have found its way to our quiet brook.

I have had many opportunities of observing the Dipper in the north of England and in Ireland, and from a study of its habits, and an examination of several specimens which I have shot, I am led to believe that the character of this pretty bird has been greatly detracted from by those who assert that it lives on the ova of fish, trout, and salmon. That the Dipper may occasionally feed on ova, or even on small fry, when an opportunity occurs, I do not deny, but I consider this the exception and not the rule. The food more frequently consists of waterbeetles (Dytiscidæ) and their larvæ, water-spiders (Argyroneta), dragon-flies (Agrion) and their pupe, the larvæ of caddis flies, and small mollusca; such, at least, was the nature of the food in all the specimens which I examined.

MISSEL THRUSH, Turdus viscivorus. A common resident, but a shy bird, never admitting a near approach except when the cold of winter has tamed it. Unlike many of its congeners, it is seldom found feeding under hedges, but keeps rather to the open fields. It usually builds in the fork of a tree, preferring one that is ivy-covered, and it is one of the earliest birds to commence nesting. Some authors

have asserted that the Missel Thrush never makes use of *mud* in the composition of its nest, but in all those I have examined, I found a very distinct layer of mud between the outer frame-work of the nest and the inside lining of fine grass. The food of this bird consists of worms, snails, and hedge fruit, such as hips and haws, holly and ivy berries, and misseltoe.

As soon as the young fly, this species, like the Common Starling, is to be found in small flocks. I have no doubt that this fact has frequently led to their being mistaken for Fieldfares, and that, in consequence, the latter have been reported as appearing here long before their usual time of arriving.

FIELDFARE, Turdus pilaris. A regular winter visitant, generally arriving either the last week of October or the first of November, and remaining till the third week of April. Occasionally, however, I have observed a much later stay. In 1863 I shot one out of a flock, on May 4th. Mr. Bond tells me that a pair once remained in the neighbourhood of Kingsbury throughout the summer, but did not breed.

The Fieldfare is always a shy and suspicious bird, unless tamed by severe frost or scarcity of food. During the hard winter of 1854-5, these birds suffered so much that, on one occasion, I walked up to a Fieldfare in an open meadow, took it up in my

hand, and brought it home with me. I kept it alive for two days, providing it with a good supply of haws, but it died nevertheless on the third day. The favourite food of the Fieldfare, at least in winter, seems to be the fruit of the hawthorn, but it also lives upon the berries of the holly, ivy, and misseltoe, varying this diet with snails and worms.

Mr. Spencer tells me that he once saw a Fieldfare which was nearly black, in a field near Kilburn, and would have mistaken it for a Blackbird, except for its note, and the fact of its being with others of its species.

The call-note of the Fieldfare is a difficult one to imitate, and sounds like the word "fu-igh," while the alarm-note is more quickly repeated, and sounds like "tchă-chă-chă."

Song Thrush, Turdus musicus. A common resident, and one of the earliest breeders. Mr. Belfrage, when residing at Muswell Hill, once observed a Thrush sitting during and after a snow storm. And I once found a Thrush's nest, containing one egg, on the 23rd February.

Yarrell says, "Occasionally this bird has been known to make its nest in an open shed, or toolhouse;" and this statement I can confirm, for on the 18th April, 1862, I found a nest of this species, containing five young birds, placed upon a beam in an open shed.

We should protect the Thrush for its utility in

our gardens, no less than for its charming song. When the young are in the nest, the number of caterpillars and insects with which the parent birds feed them is almost incredible, while, throughout the year, this bird renders us good service by devouring the snails, which would otherwise devour our vegetables and plants. Every one must have observed the method which the Thrush employs to extract the snail from its shell by dashing it against a stone. But a curious fact, perhaps not generally known, is, that when a thrush has been frightened from a snail after he has chipped the shell without extracting the animal, the snail has power to repair the damage it has sustained, and a new shell forms where the old has been destroyed. My attention was directed to this, some time ago, by Professor Bell, who showed me several shells of the common garden snail (Helix aspersa) which had been curiously patched with new material, and looked as if the new piece had been "let in" and cemented round the edge. This, of course, could not have been the case where a piece was completely chipped out and detached from the shell; the new shell must have been formed by a secretion from the animal gradually hardening on exposure to the air.

The Rev. Leonard Jenyns and other naturalists have observed that the Thrush "does not collect in flocks during the winter." While shooting in September, I have been surprised to see the number of

Thrushes that we have put up in crossing a turnip-field. Sometimes twenty or thirty have appeared in this way, and although they did not rise en masse, still there were often a dozen or more on the wing at once; and, as they were all in the same field, we may, I think with propriety, speak of them as a flock. From this circumstance I am inclined to believe that Thrushes are partially migratory, moving southwards at the approach of winter.

REDWING, Turdus iliacus. A regular winter visitant, appearing about the second week of October, generally before the Fieldfare, and, as far as I have been able to observe, retiring before that species. It is easily distinguishable from the Common Thrush by the rufous colour of the sides, and particularly by the yellowish-white line over the eye. By means of the latter mark, I have with a good glass distinguished Redwings from Thrushes while feeding under a hedge at the distance of two fields from me. Great diversity of opinion appears to exist as to whether the Redwing sings in England, or not; but I cannot help thinking that the solution of the difficulty depends entirely upon the definition of the word "singing." What constitutes a song? The Rev. A. Matthews is as positive that he has heard a Redwing sing, as Mr. Doubleday and others * are certain that this bird does not sing in

^{* &#}x27;Zoologist,' pp. 8946, 9040, 9104, 9106, &c.

England; and yet I have little doubt but that each of them has heard exactly the same note, the only difference being that Mr. Matthews calls it "a song," and his opponents say, "it is no song; it is merely a clear, loud, and prolonged twittering, and very different from the real song of the Redwing, which the bird only utters in the breeding season during the months it is absent from England." In numerous instances I have approached very close to Redwings, and with a good glass watched them with open bills and distended throats, uttering the peculiar note to which I have alluded, and which is the same, I believe, to which Mr. Matthews refers. I think it is best expressed by the word "twittering." I have never heard a Redwing utter any other sound than this prolonged and really musical twittering, except the call-note, which is harsh and not unlike that of the Fieldfare. The conclusion, therefore, at which I arrive is this: if it be granted that this peculiar "twittering" is worthy to be called a song, and moreover that this is the only song which the Redwing has, then assuredly the Redwing does sing in England. But if, on the other hand, it be said that this "twittering" is not a song, and that the bird has another and a different note, which is as much a song as that of the Thrush, but is uttered only in the breeding season, then we must conclude that the Redwing does not sing in England, and that, if the bird has been heard to sing its breeding-song

in England, it must be considered an exception and not the rule. I am strengthened in this belief by Mr. Newman, who says: * "I am willing to admit that negative evidence cannot be fairly weighed against positive evidence like that of Mr. Matthews; but it is a little remarkable that Mr. Doubleday, Mr. Yarrell, Mr. Bond, Col. Newman, Mr. Fox, Mr. Bechstein (to say nothing of myself), all of whom have made this a special object of inquiry, should never have detected a Redwing in the act of singing; it certainly tends to show that the singing is very exceptional, and not the normal habit of the bird, as in the case of the Song Thrush."

A few instances are on record of a pair of Redwings having remained in this country throughout the summer, and nested here. In 'Charlesworth's Magazine of Natural History,' Mr. Blyth notices two or three such instances, and mentions the statement of a dealer that a nest was taken at Barnet.

BLACKBIRD, Turdus merula. A common resident, preferring tall hedgerows and the sides of copses. Like its congener, the Song Thrush, it loves to feed out in the clover and turnip-fields in autumn. On the 4th September, 1863, I counted seventeen Blackbirds in an acre of turnips. An unusual site for a Blackbird's nest is mentioned in 'The Zoologist.' A correspondent, writing from Willesden

^{* &#}x27;Zoologist,' p. 9040.

Green, says: * "On the 3rd of May, 1862, a Black-bird selected as a site for its nest a hole in the nearly perpendicular side of a ditch close to a footpath at Willesden Green; it was very carefully concealed, and overhung by luxuriant grasses. It afterwards contained four eggs; but before they could be hatched, the nest was taken. We more than once saw the parent fly from the hole."

On the 8th May, 1864, I found a Blackbird's nest made entirely of green moss, and placed in a yew-tree, ten or twelve feet from the ground. I can only account for this unusual circumstance by supposing that no other materials could be found, or, there being no trees but evergreens in the neighbourhood, the bird had made use of the green moss more effectually to conceal the nest.

Pied varieties of this bird have not unfrequently occurred in this county. Three or four have come under my own observation.

RING OUZEL, Turdus torquatus. A passing visitant, appearing in spring and autumn. I have three specimens of this bird in my collection, all obtained in the neighbourhood of Kingsbury; and I have seen others that were killed at Kilburn, Hampstead, Hendon, Edgeware, and Harrow Weald. Two of those which I have, were shot as late as the 25th April, and proved to be a pair. They had been

^{* &#}x27;Zoologist,' p. 8947.

observed on an unfrequented tract of land, with three others, for more than a fortnight previously, and it appeared, from a close examination, that both birds must have been sitting, inasmuch as the breast of each was destitute of the soft down which always covers it before incubation has commenced. I found, moreover, rudimentary eggs in the ovary of the female. I then regretted that the birds had been shot, for it would have been interesting to have established the fact of the Ring Ouzel breeding in this county. The remaining three birds I watched daily, in the hope of discovering a nest, until the 1st May, when they disappeared. I have since heard that, in 1861, a pair of Ring Ouzels were killed at Hampstead as late as the 11th May. They were shot by Mr. Ward, in Mill-Field Lane, while feeding on some ivy-berries within twenty yards of his house. The Ring Ouzel appears to be very partial to ivy-berries. A male bird, shot at Kingsbury on the 18th April, 1864, had the stomach filled with them.

The note of this bird, when on the wing, has been compared to the noise made by striking two large stones together; and this description is not inapt.

Golden Oriole, Oriolus galbula. A rare summer straggler. In 1857, a beautiful male Oriole was shot at the Well Springs, in the parish of Kingsbury, and was disposed of to a dealer in London. Mr. Bond has in his collection another specimen, also a male, that was shot on the 11th May, 1851, at Harlesden

Green. In May, 1862, two friends residing at Hampstead observed a male Oriole in a garden at Frognal. They obtained a near view of the bird, and were able to watch it for some minutes before it took flight.

In addition to these occurrences, I find the following entry relating to this species in my notebook for 1863:—

"May 1st.—Mr. Cottam, of Stone Grove, Edgeware, told me this evening that on last Easter Monday, April 21st, he saw a Golden Oriole on some park palings about five miles from Edgeware, on the high road between Edgeware and Barnet."

Family SYLVIADE.

Hedge Sparrow, Accentor modularis. Common everywhere—a harmless and confiding little bird, building within sight of our windows, and rendering good service by its destruction of insects in the garden. Its song is something like that of the Wren, but less varied, shrill, and rather sprightly. I have occasionally seen light-coloured varieties.

ROBIN REDBREAST, Sylvia rubecula. Commoner even than the last, owing, perhaps, to a current superstition that it is unlucky to kill a Robin, or to take its eggs. Hence it lives unmolested, while the nests of Hedge Sparrows, "Jenny Wrens," and other small birds, are plundered without remorse. The song of the Robin is of a plaintive character,

with and ante movements, and almost always in the minor key.

Although generally building a new nest every spring, the Robin occasionally makes use of the nest of the previous year. A friend writing from Norwood in the spring of 1863, says,—

"Last year a pair of Robins built a nest in my uncle's wood-house, and brought their young off safely, leaving an addled egg in the nest. I afterwards threw this egg away. This year a pair of Robins, I believe the same pair, built a nest in a basket in the wood-house, and brought their young off, leaving as before an addled egg. As the basket was wanted, nest and egg were inconsiderately thrown away. Last Friday I went into the wood-house, and from the behaviour of a Robin suspected a nest there. I looked about, and soon found that she had laid five eggs in the old last year's nest on the shelf. I took three eggs, and on Sunday another egg was laid. I regret to say, however, that the nest has since been deserted."

An instance, which I think very unusual, of a Robin making use of the deserted nest of another bird, came under my notice in the summer of 1865. A pair of Robins took possession of the deserted nest of a Hedge Sparrow in a yew-tree in a garden, and after the eggs were laid the hen bird sat so close that several times, on looking in upon her, my face was within a foot of the nest, so that I had full

opportunity of examining both bird and nest, and satisfying myself with regard to both.

A brood of young Robins was hatched in our garden, and, without being confined in any way, they became so tame that they would come through the window to the breakfast table for crumbs, and would follow my father in the garden and light upon his head, until, through their fearlessness, they at last fell prey to a cat.

REDSTART, Sylvia Phænicurus. A regular summer visitant, generally arriving about the second week in April, and remaining until September. Small beetles, flies, and spiders, form the chief food of the Redstart, while it fortunately visits us at a time of year when caterpillars become troublesome and require thinning. Its notes, which are short and weak, hardly deserve the name of song.

I am inclined to think that the males of this species arrive before the females, for I have observed males often ten or twelve days before any females, when I have been looking out for their arrival in April. I have seen this bird here as late as September 7th.

BLACK REDSTART, Sylvia Tithys. A rare winter visitant. This bird was first added to the British fauna by Mr. Bond, who shot a specimen in a brickfield at Kilburn, on the 25th October, 1829. A full description of this bird will be found in a letter from Mr. Gould to Mr. Vigors in the 'Zoological Journal' (Vol. May 1829 to Feb. 1830, p. 102).

Yarrell says: "Another example has since been seen in the Regent's Park." And a third, a female, was shot in a brick-field at Shepherd's Bush.

STONECHAT, Saxicola rubicola. Found here throughout the year, but less common in winter, the greater number departing as that season approaches. The song and call-note of this bird are not unlike those of its congener the Whinchat. The food also is similar, and consists of grubs, small beetles, and flies. One day in May I found a nest of this species, being attracted to the spot by the actions of the old birds. It was built in an old stone wall, but at such a distance from the hole or crevice by which the birds entered, that I was unable to see whether there were eggs or young. As I approached the wall, the old birds retired to a little distance, the male uttering an angry note; but no sooner had I discovered the nest, and commenced trying to dislodge a stone to obtain a better view, than the hen bird immediately returned, flew up against me, threw herself on the ground at my feet with all her feathers ruffled, at the same time uttering a peculiar angry note. I once thought to catch her, but she eluded my grasp, although continuing near me, and expostulating as before. I was so pleased with this show of affection that I at once desisted from examining the nest, and retired to some distance to watch the birds further. After some time, they both perched on the wall, close to the nest, and the hen, after some hesitation, at length found courage to enter. In a few seconds she issued from the crevice, and was then apparently satisfied, for she uttered quite a different kind of note, and joined the male bird in a short flight, returning again to perch upon the wall, where I then left them. How delighted Gilbert White would have been with such a display of "στοργη," as he has termed this natural love of animals for their young.*

Whinchat, Saxicola rubetra. A common summer visitant, much more numerous than the last. The Stonechat is generally found among heath and furze, which would account for its comparative scarcity in this county, but the Whinchat is common in enclosures as well as on wastes. In some seasons it is particularly numerous. In 1861 we had an extraordinary visitation of Whinchats, but although the birds themselves were so plentiful, but few nests were found, so carefully were they concealed in the long grass. A favourite situation for their nests is the banks of the railway between Kenton and Harrow, where they build in numbers.

Gilbert White says,† "Whinchats and Stonechats stay with us the whole year." I have never found this to be the case. I think it probable that a few pairs of Stonechats may remain in the winter, as

^{*} See Letter XIV. to Hon. D. Barrington.

[†] Id., Letter XXXIX.

I have observed this species in November and February. But with regard to the Whinchat, I believe that this species leaves us in September until the following April. I once saw a Whinchat on September 19, but this is the latest stay for the species which I have noted. This bird has rather a pleasant, although not very varied song, which it generally utters from the top of a spray or low bough of a tree. Its alarm-note is a double note, so given as to sound almost like one, and is followed by the sound "chook, chook."

WHEATEAR, Saxicola conanthe. Remains with us about six months in the year, from the middle of March to the middle of September. The Wheatear may be known at any distance by its peculiar motion on the ground—running instead of hopping, stopping suddenly when at full speed to pick up an insect, and flirting the tail up and down. The white rump is very conspicuous, and affords a good mark of distinction when the bird flies. Its favourite haunts are old gravel and chalk pits, and, above all, rabbitwarrens, where it makes its nest in a deserted burrow.

After the annual moult, which follows the breeding season, the plumage becomes very different. In few other birds, perhaps, is there so complete a change. The old males turn from bright bluish grey above to dull brown; in this respect in their winter plumage approaching in colour to the females in summer dress, while the latter, as the season

advances, become nearly of a uniform greyish brown. The white upper tail coverts, however, at all times remain conspicuous.

Gilbert White says,* "Some Wheatears continue with us the winter through;" but I have never seen any after September until the following March.

Mr. Belfrage, writing to me from Muswell Hill, says: "One day I wounded a Wheatear slightly, and succeeded in capturing it. I took it home, where I placed it in a lark's cage and fed it upon worms and insects. It fed well, and soon got so tame as to come down from its perch at my whistle. While I continued to whistle, it walked up and down in front of the cage, stretching its head out and apparently enjoying the sound. It would also, when called, come down and take a common housefly, of which it seemed very fond, from my fingers, without showing any signs of timidity." Flies and small beetles form the principal food of the Chats, and, indeed, of all the Warblers.

GRASSHOPPER WARBLER, Sylvia locustella.† A regular summer visitant, though not particularly numerous as a species. Several specimens have

^{*} Letter XXXIX.

[†] The rare Warbler, known as Savi's Warbler (Sylvia luscinoides), has been found breeding on the Thames, but not near enough to entitle it to be catalogued as a county bird. (See 'Zoologist, p. 1307.)

been obtained on Hampstead Heath, and I have frequently observed it at Willesden, Hendon, and Kingsbury. It is more often heard than seen, being a very shy and restless bird, as Yarrell very truly describes, "secreting itself in a hedge-bottom and creeping along it for many yards in succession, more like a mouse than a bird, seldom going far from a thicket, a patch of furze, or covert of some sort, and returning to it again on the least alarm." By lying down at full length, and keeping perfectly still for some time, I have occasionally been able to get a good view of this bird, and to watch it for some minutes. But it was not often I could do this, owing to its restless motion, small figure, and the usually dark background of bank or underwood against which it moved. I have more frequently heard this bird in the evening than at any other time; for, unlike other Warblers, it seems unusually silent in the daytime. I have on more than one occasion heard a Grasshopper Warbler singing as late as eleven o'clock at night. Its song, or rather trill, is most musical; quite unlike that of any other Warbler, somewhat resembling the tinkling of a little silver hell.

In the spring of 1861 a nest of this species, containing six eggs, was taken near Harrow by the Hon. F. C. Bridgeman, and I have known other nests to have been obtained at Hampstead.

SEDGE WARBLER, Sylvia phragmitis. A summer

visitant, arriving in April and leaving in September. Between these two months this bird may always be found along the course of our brooks, and at quiet reedy ponds. It is a noisy little bird, singing all day and throughout half the night. "The marshy banks of the Thames, on either side of the river, where beds of willows or reeds abound, are well stocked with this bird, although, from the wet and muddy nature of the ground, they are not very easy to get at."

REED WARBLER, Sylvia arundinacea. This species is local, perhaps, rather than rare, and is seldom seen in the north and north-west portions of the county, although common along the Thames and the Colne. It visits us about the same time that the Sedge Warbler does.

It may be distinguished from the Sedge Warbler by its being a longer and slimmer bird, and by its note and different flight. In the Sedge Warbler, the most conspicuous characters are a white line over the eye, a darker back, and dark centre to wing feathers, with lighter margins. In the Reed Warbler, the feathers are more uniform in colour.

Mr. Mitford, writing from Hampstead, gives the following interesting particulars relating to the Reed Warbler:—

"This very pretty little Warbler I had only associated years ago with what I then thought its only haunts, such as reed-beds in fens, marsh-ditches,

and river-banks; in short, wherever reeds were to be found; but the last few years I have become more intimate with it in quite another aspect, namely, so near London as Hampstead, where I have a garden far away from water in any shape, and bordered on two sides by a high road; yet here, for some years, it has not failed to appear about the middle of May, much later than the arrival of our common Warblers, and for the last three years a pair have bred in the garden,—the first year in a Corcorus,—the nest, as in reeds, being firmly attached to three stems; the last two seasons in a lilac, in the same manner. The lilac is close to my hall-door, and neither the noise of children or dogs disturbed them in their labours, and the male sang cheerily through the day, invariably accompanying the female in her search for materials for the nest; but never, that we could see, assisting her in actually carrying such matters, or in constructing the nest itself. They were so far from exhibiting any shyness in their habits, that they rambled over the standard roses, and were constant visitors to the balcony of a Venetian window which was full of plants, and near which some of us were usually sitting. These nests were fastened and held together by any little bits of twine, and thread, or hair, that they could pick up in the vicinity of the house. Mr. Bond suggested, the other day, that we might have two species of bird at present under this name, but the eggs were

exactly similar to those taken from reeds; and at Bath, where the river Avon is bordered by gardens, I have formerly found their nests in shrubs near the water; but I confess I was much astonished to find this bird entirely away from water and so near London. I may add that last summer (1863) I found four pairs of this bird here breeding in gardens under similar circumstances. The young I observed were very much fed on Aphides, taken from a sycamore, the adjoining tree to that containing the nest. As soon as the eggs were hatched, the male nearly discontinued his song, gave up his idle life, and devoted himself to his parental duties." *

This peculiarity in the Reed Warbler of breeding at a distance from water, has also been remarked by a friend at Ealing.† Writing to me upon the subject, he says: "This bird used to breed every year in some lilac bushes in our garden at Ealing. This was at least half a mile from the nearest stream of water. If a stone were thrown into the bush in which its nest was placed, it would instantly commence, even at night-time, its noisy chattering, as if in anger and defiance." On shooting one of these birds, it was pronounced by several naturalists to be the Reed Warbler (Sylvia arundinacea).

Mr. Mitford shot a pair of the birds observed at

^{* &#}x27;Zoologist,' p. 9109.

[†] Mr. W. H. Power.

Hampstead, but on a comparison with specimens of the Reed Warbler it was found that they differed from that bird in several respects. The head proved narrower and darker in colour, the tail longer, the wings slightly longer, and the tarsi shorter and thicker. Should more specimens be obtained agreeing in the above particulars, this difference, coupled with the fact of the bird being found at a distance from water (in this respect differing from S. arundinacea), would justify its being considered a distinct species. The subject is one of much interest, and deserving the attention of naturalists.

NIGHTINGALE, Sylvia luscinia. A regular summer visitant, arriving towards the end of April and departing in August. Before the discovery was made by London birdcatchers, à favourite locality for the Nightingale was Harrow Weald. It is now by no means so common a bird in the county as formerly.

A quondam keeper of my acquaintance, an adept in the art of birdcatching, told me that at one time he rented a cottage for which he paid £10 a year. If there was what he called "a good Nightingale season," he made more than enough to pay his rent by the capture and sale of these birds! In one season alone he caught fifteen dozen, receiving eighteen shillings a dozen for them in London. He told me also that, on one occasion, he caught no less than nineteen Nightingales before breakfast in

the grounds of one gentleman, and in sight of the windows; for which, as I told him, he ought to have been transported.

It is a pleasure to add that, in spite of such persecution, there are still many copses within a short distance of London where the wonderful song of the Nightingale may be heard throughout the summer evenings.

In the 'Monthly Magazine' for April, 1858, will be found (pp. 211, 212) an interesting article on the management of Nightingales, by a gentleman at Highgate, who was very successful in rearing these birds.

BLACKCAP, Sylvia atricapilla. An annual summer visitant, but not common, arriving early in April, and leaving about the last week of August. It has been called the contralto singer among birds, and this title is certainly not undeserved. Its song occupies about three bars of triple time; and, although frequently repeated, is somewhat varied in every repetition. Unlike that of some other birds, it is not commenced high and gradually finished diminuendo, but, on the contrary, it begins with two or three short double notes, gradually crescendo, up to a loud and full burst of song. This passage frequently occurs:—



Occasionally instances have occurred of Blackcaps being shot, and others heard, during winter, in the neighbourhood of London.

Mr. Shirley Hibberd says:* "At Dulwich, Hornsey, Kensington, and St. John's Wood, the Blackcap may be heard every season, soon after the last days of March, but it makes its way only into such of the more urban districts as enclose within their boundaries much rural scenery."

In a subsequent note the same writer remarks that "many true British residents are true migrants as to London, and all the true migrants come into song later near London than elsewhere throughout the land."

Garden Warbler, Sylvia hortensis. A summer visitant, but less common than the last. In some seasons, however, I have found both this and the last species very plentiful in the Hampstead woods. The Garden Warbler is a very beautiful songster, and will sometimes sit in the midst of a thick bush in the evening, like a Nightingale, and maintain a continued warble for twenty minutes without a pause. Its song is somewhat irregular, both in tune and time, but it is wonderfully deep and mellow for so small a bird. It sometimes commences its song like a Blackbird, but always ends with its own. In general habits it somewhat resembles the Willow

^{* &#}x27;Intellectual Observer,' No. XXXIX., p. 174.

Wren, for it seems constantly in motion, hopping from bough to bough in search of insects, and singing at intervals.

COMMON WHITETHROAT, Sylvia cinerea. A regular summer visitant, common everywhere. No one, while taking a country walk in June, can have failed to notice this noisy little bird, sometimes on a high spray, sometimes dancing and jerking in the air, pouring forth its garrulous song.

LESSER WHITETHROAT, Sylvia curruca. A summer visitant. This and the last-named species are two of the commonest Warblers we have. The song of this bird is less powerful than that of the Common Whitethroat, being merely a kind of convulsive laugh or call, occupying about half a bar of common time.

A correspondent, writing from Willesden, says:*
"For the last few years a pair of Lesser Whitethroats have regularly built in the tall hedge of our
garden at Willesden Green, at the height of nearly
six feet from the ground. It is the Lesser Whitethroat's usual habit about here to place its nest
higher than most of its congeners, excepting sometimes the Blackcap. The Lesser Whitethroat is one
of the earliest to arrive of our summer Warblers,
and usually has its nest completed early in May:
last year we found an egg on the 28th April. The

^{* &#}x27;Zoologist,' p. 8949.

Common Whitethroat, on the contrary, seldom builds till the end of May or June."

Wood Wren, Sylvia sibilatrix. A summer visitant, but, owing to its partiality for woods, somewhat local. Mr. Bond has obtained specimens of the Wood Wren at Kingsbury, where I have also observed it, and I have some eggs of this species that were taken near Edgeware. In the more wooded neighbourhoods of Stanmore, Bushey, and Pinner, the Wood Wren is more plentiful; and I have noticed this bird frequently in Lord Mansfield's woods at Hampstead. It may easily be recognized at a distance by its song, which is very different from the Willow Wren, or Chiff Chaff, the only two species with which it can be confounded. It has a graduated strain of twelve or fourteen notes, begun high, and finishing in demi-semiquavers diminuendo. And a peculiarity in this song is, that the first four or five notes are repeated moderato and staccato. while the remainder is hurried to the end. The nest of the Wood Wren differs from those of the Willow Wren and Chiff Chaff in never having the lining of feathers which theirs invariably have.

WILLOW WARBLER, Sylvia trochilus. A common summer visitant. Nest and eggs found every year. It has a pleasant, laughing song, repeated from time to time with considerable pauses between, beginning in a pretty high key, forte, and diminishing to lower tones, scarcely audible. Mr. J. V.

Stewart, in a list of the birds on the northern coast of Donegal, says: "Its song, if deserving of that name, consists of ten whistling notes, which it runs through the gamut of B, thus:—



The latter notes are very soft, and run into each other."

I am satisfied that the Willow Wren and Chiff Chaff do a vast amount of good in ridding the trees of caterpillars during the summer, for I have repeatedly seen the birds with their bills literally crammed with these insects (a small green species), which they carried to their young in the nest.

The latest stay which I have observed the Willow Wren to make in this county has been September 30th.

CHIFF CHAFF, Sylvia rufa. The commonest of the three Willow Wrens, and one of the first of our summer migratory birds to arrive. In 1862 the Chiff Chaff was very numerous, and I found a great number of nests. Its usual note sounds like "chiff-chaff, chiff-chaff, chiff-chaff;" now and then changing to "chaff-chiff, chaff-chiff;" or, by doubling them, to "chiffy-chaffy, chiffy-chaffy."

The Wood Wren, Willow Wren, and Chiff Chaff,

^{* &#}x27;Magazine of Natural History,' vol. v., p. 581.

all closely resemble each other, and by one not used to notice the distinctive characters of birds may be easily confounded. The Chiff Chaff, however, may be known by its smaller size and darker colour, and the colour of its legs, which are dark brown. The legs of the Willow Wren are pale flesh-colour, while the Wood Wren is a brighter green above and a purer white beneath, the yellow line over the eye more distinct, the tail shorter, and the wings longer in proportion. In addition, the song of each differs sufficiently to afford, when at a distance, a good means of distinction.

DARTFORD WARBLER, Sylvia provincialis. This species, as its name implies, is considered a very local one. It is peculiarly a southern species, but is, I think, more common than is generally supposed.

The fact of its being a very shy bird, and of retiring habits, has led to the supposition that it is rare; but if any one will take the trouble to visit any large patch of furze or gorse, and there lie down and wait patiently, when all is quiet, the chances are a Dartford Warbler will come forth from its retirement and soon make its presence known by its lively song, which is very pleasing, and not unlike that of the Whitethroat. In its search for insect food I have observed that the Dartford Warbler generally commences at the bottom of a bush and works its way to the top in a zigzag

direction, creeping more like a mouse than a bird, and, on reaching the highest spray, it pours forth a rapid, lively song, and then either dives out of sight or flies off to another bush, there to resume its search. Sometimes I have seen it rise into the air, and, like the Whitethroat, remain for several seconds, dancing and jerking in the air, singing noisily the whole time. In appearance it is one of the prettiest of our Warblers, for the rich claret colour of the under parts, and its bright pink eye, contrast greatly with the plain sombre hue of our other Sylviadæ. I have seen this species on Stanmore Common and Harrow Weald Common. A birdcatcher residing at Hampstead tells me that he has caught Dartford Warblers on Hampstead Heath, and has found their nests after a patient search. This species has also been obtained on Old Oak Common and Wormwood Scrubs.

Golden-Crested Regulus, Regulus cristatus. This beautiful little bird appears unable to bear much cold, and it is, doubtless, on this account that it moves southwards at the approach of winter, and is more numerous here during that season than at any other time of year. It is exceptional, I think, to find any remaining here to breed, although I have observed a pair building in some fir-trees in Colin Deep Lane, Hendon, and in the summer of 1863 a nest with six eggs was taken at Elstree. A friend residing at Hampstead tells me that the

Goldcrest is occasionally to be seen there in summer, wherever any larch or fir-trees abound, and that he has more than once taken the nest. Mr. Belfrage has found this species breeding at Muswell Hill, and I have obtained a nest and eggs in the neighbourhood of Pinner.

The song of the Goldcrest is a short strain, repeated at intervals, and although somewhat weak, is not disagreeable. It is generally warbled inwardly in such a way that the bird, although perhaps near, appears to be at some little distance.

It is erroneously supposed by many that the only difference between the Goldcrest and the Firecrest consists in the crest of the latter being of a more flaming yellow than that of the former. If this were so, the difficulty in distinguishing the two species would be great. A much clearer difference than this, however, exists. The Firecrest invariably has a white line both above and below the eye, and a black line running through the eye; hence Temminck calls it, "Roitelet à triple bandeau." These three lines are absent in the Goldcrest.

Family PARIDÆ.

CRESTED TIT, Parus cristatus. Mr. W. Warner, the lessee of the fishery at Kingsbury, has a small collection of birds shot in that neighbourhood. On looking through this collection, I was agreeably

surprised to find a specimen of the Crested Tit. This bird, he assured me, was shot in the spring of 1860 in a small spinney in Cool Oak Lane, Kingsbury. The person who shot it had large shot in his gun, so that the specimen in consequence was somewhat shattered; but it has been tolerably well preserved, and, as a British-killed and local specimen, much interest attaches to it. With the exception of one shot a few years ago at Blackheath, by Mr. Engleheart, in his own garden, this is the only instance that has come to my knowledge of the Crested Tit having been found so far south in England.

GREAT TIT, Parus major. A common resident. Two facts relative to this species I do not remember to have seen mentioned in print. The first, its change of note at different seasons of the year; the second, its diversity of habits. Not only does it closely resemble other members of the genus in its flight and actions, and, like them, is to be seen hanging, head downwards, in search of insect food, but I have frequently observed it climbing like a Creeper, and hammering at a crevice like a Nuthatch.

BLUE TIT, Parus cæruleus. Like the last-named, resident throughout the year, and in its habits one of the most interesting and amusing birds to observe.

Cole Tit, Parus ater. Appears most numerous

in autumn and winter, but resides with us all the year round. Owing to the great similarity which exists between the eggs of this bird and those of the Blue and Marsh Tits, great care should be observed in identifying the species before taking the nest. I have found the Cole Tit nesting at Kingsbury, Edgeware, Elstree, and Harrow.

Marsh Tit, Parus palustris. Of the five resident species of Parus, this is, perhaps, the most uncommon, although it can hardly be said to be rare. I have seen it at all the brooks, at Elstree reservoir, Stanmore Marsh, and at Kingsbury. Mr. Belfrage has observed it twice at Muswell Hill, and specimens have been obtained at Caen Wood, Hampstead. This species may be at once distinguished from the Cole Tit by the absence of the white spot on the nape, which is always present in the last-named.

Longtailed Tit, Parus caudatus. A common species, found here throughout the year. In the autumn and winter it may be observed in small parties, varying from five or six to ten or more. On the 31st December, 1862, I counted eleven together, and on the same day I saw a Longtailed Tit without a tail. I was at first puzzled to make out what it was, for the absence of tail gave it a very odd appearance.

It may not be out of place here to draw attention to the fact that continental specimens of this bird differ chiefly from those found here, in having a white head. Whether this peculiarity points to a difference of race only, or is sufficient to constitute it a distinct species, is a question for abler naturalists to determine. Further observation on this point may furnish some interesting results. I have, however, seen two British-killed specimens of the Longtailed Tit, both of which had white heads. One of these is in the Museum at Newcastle-on-Tyne, the other is in the fine collection of Mr. John Hancock.

On the 24th October, 1863, I saw rather an unusual sight, namely, four species of Parus within a few yards of each other. A little family of Longtailed Tits, and a pair of Blue Tits, were climbing about the low branches of an oak, while a Cole Tit and a pair of Great Tits were chattering and hunting in the hedge immediately below them. Earwigs, spiders, woodlice, and small beetles, form the principal food of the Tits, and they prove good friends to us in summer by carrying off great numbers of a small green caterpillar.

Bearded Tit, Parus biarmicus. I have not yet been fortunate enough to see the Bearded Tit in this county, although Mr. Yarrell says that it is to be found on the banks of the Thames, from London upwards, as far as Oxford; and the Rev. L. Jenyns, in his 'Manual,' observes that it has been found between Erith and London. I think the fact of its being partial to a fenny district, where reed-beds

abound, will account for its being but seldom seen Middlesex.

In the year 1743, the Countess of Albemarle brought with her from Copenhagen a large cage full of these birds, when she returned from her attendance on one of the princesses of Great Britain who was espoused by the Prince of Denmark; and some of these having made their escape, the Count de Buffon supposes that, from this circumstance, a colony was formed in England.

Edwards (who calls this species the Least Butcherbird, but refers to Albin's description of it under the name of Bearded Titmouse), writing in 1743, observes, that he was favoured with a sight of the birds brought over by the countess, and adds, "I have seen some others of the same kind, both cocks and hens, shot among the reeds in marshes near London, though they are not well enough known in England to have a name."

Family AMPELIDÆ.

Bohemian Waxwing, Bombycilla garrula. The earliest notice which I have been able to find of the occurrence of the Waxwing in this county, appears in an old quarto volume, 1794, entitled "Portraits of Rare and Curious Birds, with their descriptions, from the Menagerie at Osterley Park," by W. Hayes. A coloured illustration of this bird is

given, and the author says: "The subject of this plate, together with the female, was shot at Hanwell, in Middlesex, in December, 1783, by Mr. Westbrook, who kindly indulged me with the liberty of making this drawing. The female was killed, but the male being only wounded in the wing soon recovered, and became sociable and lively. It gave the preference to fresh juniper-berries rather than any other food. It was presented to Lady Ducie, and placed in the menagerie, where it lived some time."

Two beautiful specimens of the Waxwing were shot some years ago by a gardener in the service of a gentleman at Highgate. Great numbers of this bird visited this country in 1850, and several examples were obtained in the neighbourhood of London. In the 'Zoologist' for 1850 there is a note from Mr. Newman, the able editor of that periodical, dated January 22nd, in which he says: "I have notices of this bird having been killed last week in many localities round London,-Harrowon-the Hill, Kilburn (seven specimens), Eltham, Rainham, Wimbledon, &c., and I have seen these in the flesh." A male of this species, in the collection of Mr. Bond, was killed some years since near Cricklewood, on the Edgeware Road. Like most of our winter visitants, the Waxwing comes to us from the north, but from the infrequency and uncertainty of its visits, its habits in this country are little known.

Family MOTACILLIDÆ.

PIED WAGTAIL, Motacilla Yarrellii. A common species, resident throughout the year. I am satisfied, however, that the Pied Wagtail is partially migratory; for although common in summer, and most numerous in autumn, when it may be observed in small parties of seven or eight, yet very few are to be seen here throughout the winter, and I have no doubt that a great number of Pied Wagtails move southwards as that season approaches.

WHITE WAGTAIL, Motacilla alba. When we consider that this bird is common on the opposite shores of France, it is somewhat surprising that it is not more numerous in England, especially when we reflect how many short-winged birds, in migrating here, cross a much larger tract of water than that which separates us from France. But I have no doubt that, owing to its close resemblance to the Pied Wagtail, this species has been much overlooked, and that it visits this country regularly every summer in company with the numerous other small birds which flock hither at that season.

The following paragraph, relating to its occurrence in Middlesex, is extracted from 'Yarrell's 'British Birds' (vol. i., pp. 428, 429). "It happened that late in the month of May, 1841, my friend Mr. Frederick Bond found two pairs of this White Wagtail frequenting the banks of the Reservoir at

Kingsbury, and succeeded in shooting three of the birds, two males and one female, and very kindly gave me one of the males. Mr. Bond also told me in the spring of 1843, that he had again seen one example near Kingsbury Reservoir."

In the spring of 1859, Mr. Spencer obtained two specimens at the same place, and another pair was observed there in the spring of 1862. I have noticed this species at Harrow Weald, in May.

Mr. William Borrer, of Cowfold, Sussex, has so clearly pointed out the leading features by which this bird may be distinguished from the Pied Wagtail, and the two species are so frequently confounded, that it may not be out of place to quote his words here. In the White Wagtail, he says, "the head is covered with a distinct hood of pure black, perfectly defined, and not mixing either with the grey of the back, or with the white of the forehead; the white on the cheeks and sides of the neck completely separates the black of the head from that of the throat and breast, there being no black before the shoulders: the sides also are much lighter, and the tail somewhat longer. In the female there is no mixture of black on the back and nape, which there is in all the females of the Pied Wagtail that I have examined."

GREY WAGTAIL, Motacilla boarula. An uncertain winter visitant; in some years tolerably numerous, in others scarce. I have seen it at Kingsbury

Reservoir, at Hendon, and at Hampstead. Mr. F. Power has observed a Grey Wagtail running along the leads of his house in London, and Mr. Belfrage has seen this species at Muswell Hill. Although I have found the Grey Wagtail breeding in Northumberland in May, yet in the south it appears to be only a winter visitant. It is sometimes, though rarely, however, found here in summer. Edwards, in his 'Gleanings,' figures a male bird of this species in summer plumage, which was shot near London; and I have seen a second in summer plumage which was killed at Hampstead.

GREYHEADED WAGTAIL, Motacilla neglecta. I have inserted this species on the authority of Mr. Yarrell. At p. 439, vol. i., of his 'British Birds,' the following paragraph occurs: "Another was taken in April, 1837, "a short distance north-east of London. From this bird the figure at the head of this subject was taken. This bird was a fine male in full summer dress."

In May, 1864, Mr. W. H. Power shot an immature bird of this species at Kingsbury Reservoir. He was first attracted by the note, and in a letter to me upon the subject, some months later, he says: "It was not the plumage or size of the bird that made me think it was a Greyheaded Wagtail, so much as the *note*, which first attracted my attention, being certainly different from that of the yellow species, and this induced me to shoot the bird in order to examine it."

Much importance, I think, attaches to this remark, for practical ornithologists must be well aware how frequently they are enabled to distinguish one species from another at a distance by means of its note. In the case of nearly allied species, attention to this point is of great utility, and when taken in connection with the flight and motion on the ground, it is surprising at what a distance a bird may be named with certainty, even when too far off to distinguish colour.

The Greyheaded Wagtail is so very nearly allied to its congener the Yellow Wagtail, that it is not surprising that they are frequently confounded.

In the immature state it is not easy to distinguish them. When fully adult, the chief points of difference between these two species may, perhaps, be best set down as follows:—

Yellow Wagtail.

Head . . pale olive.

Over eye . . yellow line.

Chin and throat yellow

Two outer tail-feathers on
each side white, with a
streak of black on the
inner side.

All the others brownish-black.

Two outer tail-feathers on each side white, with a

Head . . grey.

GREYHEADED WAGTAIL.

Over eye . . white line.

. white.

black border on the inner side of each; that of the second feather being broader than that of the first. The third feather black, with a narrow outer edge of white. The six central tail-feathers nearly uniform black.

The females of both species most resemble each other. The measurements of each scarcely differ.

RAY'S WAGTAIL, Motacilla campestris. A regular summer visitant, remaining with us from April to September. But although it passes the breeding season here, the eggs are seldom obtained, for the nest is always very carefully concealed. It is very compact in form, and is usually placed in a hole in the ground (oftentimes the depression made by a horse's hoof), surrounded with tall herbage.

Family Anthidæ.

TREE PIPIT, Anthus arboreus. The Pipits hold an intermediate place between the Wagtails and Larks, having the slender bill of the former, and (with one exception) the long hind claw of the latter.

Few lovers of Nature, while walking through country lanes and fields in May, can have failed to observe a small brown bird, perched on the topmost twig of an oak. Rising ten or twelve feet into the air with joyous song, it hovers for a few seconds over the tree, singing the while, and then with wings expanded and almost meeting over its back, and legs hanging straight, it drops perpendicularly upon the twig from which it rose. A few seconds' rest, and the song and flight are repeated, often many times from the same branch. This is the Tree Pipit.

It is an annual summer visitant, arriving in April, and common enough throughout the summer months. It is much prized by birdcatchers for its song, being superior in that respect to the Meadow Pipit or Titlark, and may be at once distinguished from that bird by its larger size and short hind claw.

Meadow Pipit, Anthus pratensis. A common species, resident throughout the year. It prefers moist situations, such as water-meadows, brooksides, and turnip-fields, after rain, where it feeds on small flies and beetles. It may often be observed in company with Wagtails, following cattle and seizing the flies which they disturb with their hoofs.

ROCK PIPIT, Anthus aquaticus. This species, although common on some parts of the coast, is rarely found inland.

Mr. Bond killed seven at Kingsbury Reservoir, in October, 1845; and the Hon. F. C. Bridgeman, in a notice of the 'Birds of Harrow,' which has lately appeared in print, says: "A specimen of the Rock Pipit was caught by a birdcatcher here during November, 1862. Being uncertain what kind of Pipit this was, I skinned it, and took some trouble to discover its right name; it proved to be, without doubt, the Anthus obscurus." On the 20th March, 1866, while walking round the Reservoir at Kingsbury, my attention was attracted by two Pipits, which were feeding on some dead weeds at the edge of the water. On being disturbed they flew a short distance and

again alighted. Their large size, and peculiar flight and note, made me suspect that they were the Rock Pipit. To make certain I shot one of them, and found my suspicion verified. The wind had been blowing from E.N.E., which might account for the appearance of a coast-bird here.*

When visiting different portions of the coast, I have had good opportunities of studying the habits of the Rock Pipit, and many a walk along shore has been enlivened by the sprightly actions and short sweet song of this bird.

Like its congener, the Tree Pipit, it may be seen rising into the air with a sudden burst of song, till, having attained the height of thirty feet or more, it slowly descends again, with upturned motionless wings. Its favourite position seems to be on the very edge of the water, where it finds its principal food, and this consists of small insects, beetles, and mollusca. The nest is compactly formed of fine grasses, and is generally well concealed in a hollow of the ground among thick herbage. The eggs nearly resemble some varieties of the Tree Pipit, but are slightly larger, a greenish white ground colour, closely freckled over with pale brown and grey.

RICHARD'S PIPIT, Anthus Ricardi. This fine

^{*} The same day I saw a Gull (Larus ridibundus) at this sheet of water.

species was first made known as an occasional visitor to England by the late Mr. Vigors, M.P., who obtained a specimen that was "taken alive in the neighbourhood of London in October, 1812." Mr. Gould, in his 'Birds of Europe,' mentions two instances that have occurred of the capture of this species, also "near London," in the spring of 1836; and Mr. Rennie, in his edition of 'Montagu's Ornithological Dictionary,' notices two specimens, one of which was "taken alive in Copenhagen Fields." This last, I believe, was the bird referred to by Mr. Vigors.

Richard's Pipit is a native of the east, and, as may be supposed, is of rare occurrence in England. It may be distinguished from the other British Pipits by its superior size, measuring seven and three-quarter inches in length, and by the greater length and stoutness of the tarsus.

Pennsylvanian Pipit, Anthus Pennsylvanicus.

Anthus ludovicianus, Audubon, 'Birds of America,' 1841, 40, pl. 150.

" Buonaparte, 'Conspectus Avium,' 1850, 2119.

,, spinoletta,* Buonaparte, 'Synopsis,' 1828, 90.

Alauda Pennsylvanica, Brisson, 'Ornith.,' i. 419.

^{*} This is not the Anthus spinoletta of Linnæus, but the Alauda ludoviciana of the Systema Naturæ, 1788, i. 793.

Alauda rubra . . Gmelin, 'Syst. Nat.,' 1788, i. 794.

" rufa . . Wilson, 'Amer. Orn.,' 1812, 89, pl. 89.

This rare visitant from North America is not included in Yarrell's 'History of British Birds,' although Pennant, Edwards, and Montagu all speak of it as having been taken in England.

On the authority of the two last-named authors, I have given it a place in this Catalogue.

Edwards describes and figures it* under the title of "Lark from Pennsylvania," and says: "I have found it in the neighbourhood of London." Montagu calls it the Red Lark, Alauda rubra † (as also do Pennant and Latham), and after fully describing the bird, he adds, "the above description was taken from a specimen which was killed in Middlesex, and now in my possession."

As this species, from its close resemblance to other members of the genus, has probably been often overlooked, I have given the above synonyms to establish its identity and to furnish references for those who may have the opportunity of obtaining specimens which they have, perhaps, hitherto looked upon as only a variety of one of our commoner Pipits.

^{*} Edward's 'Gleanings,' ii. 185, pl. 297.

[†] Montagu's 'Ornithological Dictionary, 1805-13, art. Redlark.

Mr. H. E. Dresser, a naturalist well acquainted with American birds, in a recent letter to me upon the subject, says: "I have two skins of this bird, and can lend you one for inspection. It is the only Pipit found in America, the nearest approach to one being the Missouri Skylark, an almost unknown bird. It is not unlike our Titlark, and, by a casual observer, would easily be mistaken for it. Its habits are also like those of our Titlark."

It appears also to approach the Motacillidæ more closely than any other of the Pipits, a peculiarity in this species (as observed by Edwards) being that "when the wing is closely gathered up, the third quill from the body reaches to its tip, which is a constant characteristic of the Water Wagtail genus." The state of plumage which has obtained for it the specific names of rubra and rufa, is no doubt that which is assumed in the breeding season.

Since the above lines were written, I have met with a note by Mr. Swainson,* in which he says: "The little Pennsylvanian lark of Edwards is probably a variety of ours, in which 'the outer feathers on each side of the tail are white, and the two next to them have white tips. The under side, from bill to tail, is of a light reddish brown, with dusky spots.' In one bird these spots are confined to the breast and flanks. His figure is poor. That of Wilson is

t 'Fauna Boreali Americana,' part ii., Birds.

well drawn, but so inaccurately coloured that, but for the description, we should have supposed it represented another species."

Family ALAUDIDÆ.

SKY LARK, Alauda arrensis. Common resident, and one of the earliest birds to commence singing in the spring. I have found the eggs as early as April 4th.

One day in May, a Sky Lark's nest was found on Primrose Hill, containing four eggs. The previous day being Sunday, and the hill as usual crowded with people, it is curious that the nest should have escaped detection, and that the hen bird should have continued to visit the nest and lay.

Larks only pair for the breeding season. When that is ended, they begin to flock, and by the end of autumn may be seen congregated in great numbers.

Wood Lark, Anthus arborea. Resident throughout the year, but nowhere common in the county.

Mr. Thompson, in his 'Birds of Ireland,' says that the Wood Lark is seldom found upon the clay; it prefers a warmer soil. It is noticeable that the soil in Middlesex is chiefly clay, and that the Wood Lark in this county is rare. At one time this bird might usually be found in the neighbourhood of Barn Hill, a woody height overlooking the parishes of Kingsbury, Willesden, and Harrow. But London

birdcatchers have much contributed to exterminate the species.

I have heard many people express a difficulty in distinguishing this bird from the Sky Lark, owing to their similarity in colour. When separately viewed, perhaps, this is excusable; but a further acquaintance with the rarer bird, and a close comparison of the two, will show that they differ in many respects. This may, perhaps, be best shown as follows:—

SKY LARK.

Entire length, 7 in. 3 lines. Bill, stout.

No line over the eye.

Ear-coverts light-brown, with dark brown tips. Crest-feathers short. Spots on breast, on a brown-

ish white ground, look confused and indistinct.

Abdomen, dirty white.

Tail, 2 in. 9 lines; feathers long and lanceolate, giving the tail a forked appearance when half closed; outer web of outside tailfeather white.

WOOD LARK.

Entire length, 6 in. 3 lines. Bill, same length but more slender.

Yellowish white line over the eye, extending to the occiput.

Ear-coverts dark brown, with black tips.

Crest-feathers long.

Spots on breast on a lighter ground, and more distinct, resembling the Pipits.

Abdomen, purer white.

Tail 2 in. 2 lines; feathers short and ovate, giving tail square appearance when half closed; outer web of outside tail-feather brownish black, with very narrow white margin.

SKY LARK.

Tarsus, stout, 1 inch, dark brown; toes 1 inch, dark brown; claws black; hind claw long, but variable.

WOOD LARK.

Tarsus, slender, 10 lines, light brown; toes, 10 lines light brown; hind claw somewhat shorter.

SHORE LARK, Alauda alpestris. A rare visitant to this country, being an inhabitant of the northern parts of Europe, Asia, and America. Has once occurred in this county, an example having been taken alive by a birdcatcher on Hackney Marshes in March, 1865. It was kept alive for some months, and became tolerably tame, feeding well in confinement. Its call-note was said to resemble that of the Sky Lark, although a correspondent in 'The Ibis' (January, 1862), alluding to three live specimens of this bird which had been taken at Brighton, says: "The cry is like that of a Snow Bunting, or that of the chick of the domestic fowl." Some interesting particulars relating to the habits of the Shore Lark in the breeding season, gleaned from the works of Audubon and Sir John Richardson, will be found in Yarrell's 'British Birds,' vol. i., pp. 467, 470.

Family Emberizide.

LAPLAND BUNTING, Emberiza Laponica. In September, 1828, an immature male of this species was caught in Copenhagen Fields; and two years later,

a female was taken in Battersea Fields, near the Red House. Both these birds are now in the collection of Mr. Bond.*

Snow Bunting, Emberiza nivalis. A rare winter visitant from the north. A male Snow Bunting was shot near Edgeware in the winter of 1840. In October, 1862, I purchased from a birdcatcher a pair which he had taken near Kingsbury Reservoir, in company with Bramblings. And an adult male was shot at Kingsbury on the 8th February, 1865, by Mr. Charles Wharton, as recorded by him in 'The Zoologist' for April, 1865. This last-named was feeding in company with some Larks and Meadow Pipits among the dead weeds collected on the edge of the Reservoir. The call-note of the Snow Bunting is something like that of the Linnet.

COMMON BUNTING, Emberiza miliaria. Provincial, Corn Bunting and Bunting Lark. Resident throughout the year; but not being so generally distributed in the county as the Yellow Bunting, it is less entitled to be called "common." The name Corn Bunting is more appropriate. It generally renders itself conspicuous by perching on the topmost twig of an oak or small hedgerow tree, whence it utters its peculiar monotonous cry.

Its flight somewhat resembles that of the Lark, and its resemblance in colour to that bird, together

^{*} Vide 'Zoological Journal, vol. v., pp. 103, 104.

with its habit of feeding in similar situations, often in company with Larks, has probably obtained for it the second provincial name above given.

Although I have stated that this species is resident throughout the year, it is nevertheless, to a certain extent, migratory, for there is a perceptible increase to the numbers in summer, and as perceptible a decrease in winter.

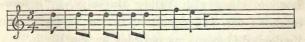
The eggs vary much in size and colour, and the nest, from its situation among tangled herbage, is not an easy one to find.

Blackheaded Bunting, Emberiza scheeniclus. A common resident, usually to be found by reedy ponds, and along the brook sides, where it feeds on the small beetles and aquatic insects to be obtained in such situations. It has a great partiality for water, and I have seen a Blackheaded Bunting, when in pursuit of food, walk into the water like a true wader, until the water reached above the tarsus. The males, to a certain extent, lose their black heads in winter and reassume them in March. Specimens shot in midwinter show that this change is effected, not by a complete moult, as is the case with other birds, but by a gradual change of colour in the feathers.

Some feathers from the head of a Blackheaded Bunting in February were half black, half brown; and I have never seen a male bird of this species with the head of a uniform brown in winter. Yellow Bunting, or Yellowhammer, Emberiza citrinella. This is our commonest species of Bunting, and is resident throughout the year. Many birds, of late years, have suffered a considerable decrease in their numbers, from an interference with their nesting-places, and owing to the prevailing habit of "plashing," or laying the hedgerows, and an increased cultivation of waste lands, they have gradually been driven further and further from our homesteads.

Happily the sprightly Yellowhammer is not one of these. He makes his nest in a hedge-bank, or at the foot of a low-growing bush,—a preference being given to furze,—and while other and less sociable birds seek their living in the open fields, he confidingly visits our rick yards and poultry yards to pick up the scattered grain. In the summer he makes us a return for what he thus takes, by carrying off great numbers of destructive caterpillars.

His song, scarcely worthy of the name, must be familiar to all, from the monotonous and frequent repetition with which it is uttered during the summer months. Reduced to writing, it is,—



CIRL BUNTING, Emberiza cirlus. Peculiarly a southern species, and in this county only an occasional visitant, seldom coming so far north. It has

been observed and shot at Peckham, and more than once near Harrow. Two specimens have been killed on Hampstead Heath; one by Mr. Dugmore, junior, in April, 1855; the other by Mr. R. Power, in the spring of 1860. I have seen a bird of this species that was shot near Kingsbury Reservoir in the autumn of 1859, and two others in the collection of Mr. Mitford, of Hampstead, which were obtained in that neighbourhood. A nest, with three eggs, of the Cirl Bunting, was taken near Wembley Park in May, 1861, and one of the eggs with the nest, is now in my collection.

ORTOLAN BUNTING, Emberiza hortulana. Some years ago there was a birdcatcher in the vicinity of Kilburn to whom Mr. Bond used to pay occasional visits, on the chance of obtaining any rarities that had been caught in his nets. One morning he found him with three newly-caught Ortolans. The man having mistaken them for hen Yellowhammers, had wrung their necks, and, in so doing, had completely taken off the heads of two of them. The third is now in Mr. Bond's collection.

"In 1837 another male Ortolan was caught near London, along with Yellow Buntings, in a birdcatcher's net, and deposited in the aviary at the Zoological Gardens, as recorded by Mr. Blyth."*

^{*} Yarrell's 'British Birds,' vol. i., p. 529; and 'Zoological Journal,' vol. iii. p. 498.

In May, 1863, while staying at Newcastle-upon-Tyne, I took the opportunity of visiting the museum there, and, amongst other rarities, I noticed an Ortolan Bunting, labelled as follows: "Greenheaded Bunting, Emberiza Tunstalli, Lath. and Mont. Emberiza Chlorocephala, Gmel. From the Allan Museum. This was the specimen from which the bird was first described as a species. It was caught near London." This same specimen is figured in Brown's 'Illustrations of Zoology.'

Family FRINGILLIDE.

CHAFFINCH, Fringilla cœlebs. Common resident, occasionally subject to variety. Although I have frequently observed this species at all times of year, I have never been able to note the separation of the sexes in winter, of which Gilbert White speaks.

On the 29th April, 1861, I took a nest of the Chaffinch, containing three eggs of a pale blue colour, without spots, the blue being of about the same tint as in the Wheatear's egg. The nest, placed in a thorn-bush, was much the same as usual, except that, instead of the usual dark-coloured horsehair for lining, in this case it was white, and there was more white wool used in the nest than is generally seen.

On the 12th May, 1862, I had a similar nest of the Chaffinch brought me, containing three eggs of the same pale blue colour, but with a few very minute specks at the larger end.

Repeated observation of a similarity in the colour of eggs to the substance upon which they are laid induces the following speculation. A bird being unable to find any other materials than those of a particular colour—query, whether it has the power of laying eggs which approximate in colour to the substance upon which they are laid, and thus afford less chance of discovery—or whether the bird, previous to laying, is instinctively cognizant of the colour of its eggs, and is in consequence led to select such materials in the construction of its nest as may most nearly resemble them in colour?

Brambling, or Mountain Finch, Fringilla montifringilla. Appears towards the end of autumn in small flocks. Its flight and general appearance at a distance is not unlike that of the Chaffinch, but it may be always distinguished from that species by the white colour of the upper tail-coverts, which at all seasons of the year is conspicuous. A favourite locality for Bramblings is Caen Wood, Hampstead, where they resort to feed upon the fallen beechmast. A few small flocks may generally be found in the autumn along the banks of Kingsbury Reservoir. They appear to be attracted by the seeds of the bar marigold, Bidens tripartita, or, more likely, those of Polygonum hydropiper, which is very common there, and is much liked by small birds. Such numbers of

these resort to the banks of this reservoir in autumn. that I have frequently seen half-a-dozen London birdcatchers busily employed there with their nets all day long in the month of October. The birds generally caught are Larks, Greenfinches, Chaffinches, Goldfinches, Linnets, and Lesser Redpoles, and, occasionally, Twites, Bramblings, and Tree Sparrows. I have frequently questioned some of these veteran birdcatchers as to the species captured by them at different times, and seldom without obtaining some interesting information from them. All agreed in saying that the Lesser Redpole is becoming very scarce, and that they do not take as many in a season now as they used formerly to take in a week. A Mealy Redpole has not been caught for many years. The Twite has always been more or less uncommon, and one of the most difficult birds to take is the Brambling; for this bird is so very shy, that it will cross and recross the nets without alighting. If it flies low enough, therefore, it is generally caught on the wing by pulling the nets as it flies across. The Brambling has been seen here in February, and I have a handsome male that was caught at Edgeware as late as April 18th. I have kept two pairs of Bramblings in an aviary since October, 1864, in company with Linnets, Goldfinches, Twites, Lesser Redpoles, &c., but they have as yet shown no disposition to breed, although provided with materials for a nest, and set a good

example by other birds, which not only layed but hatched their eggs.

TREE SPARROW, Fringilla montana. Like the last, an uncertain visitant, occasionally appearing in small flocks in autumn, and remaining till the spring. I have one, an adult male, in my collection, that was caught at Kingsbury by a birdcatcher in October, 1862, together with several of the common species with which it was feeding; and Mr. W. H. Power has three others which he killed at the same place in November, 1864. In the autumn of 1857 this species was so plentiful in that neighbourhood that a dozen might have been killed at a shot. It has occasionally been observed in small flocks during winter in the neighbourhood of Harrow, and at Elstree. Although to a casual observer there may appear to be a close resemblance between this species and the next, it may be distinguished by its chocolate-coloured head, more slender bill, and the triangular patch of black on each cheek.

House Sparrow, Fringilla domestica. The commonest of all common birds; but, though so much persecuted and despised, a clean and well-fed country Sparrow is by no means a bad-looking fellow, and besides being an amusing bird to observe, and displaying a good deal of cunning withal, it sets us a good example by its cheerful and contented disposition under adverse circumstances.

Sparrows, too, have a great diversity of habits. I

have seen them dart into the air like a Flycatcher to seize a passing insect, and climb a tree, inspecting every crevice, like a Creeper. They are very pugnacious, and I have often been amused in watching the contests that take place when a pair of these birds endeavour to turn out a pair of Martins from their nest. On two or three occasions, when I had shot one of the old Sparrows, I found that the survivor soon found another mate, and returned to renew the contest for possession.

Varieties not unfrequently occcur. In the winter of 1860-1, a pure white Sparrow was frequently seen in the neighbourhood of a rick-yard at Kingsbury, and I find, on referring to my note-book for the year 1863, that on September 19th, and during several previous days, a white Sparrow had been observed in Kenton Lane, between Kingsbury and Kenton. A pair of white Sparrows were shot within a few days of each other in the grounds of Sudbury Hill House, near Harrow, in the autumn of 1860; and a cream-coloured variety was shot at Willesden Green Farm in September, 1863. In August, 1864, a yellow or straw-coloured Sparrow was several times seen by a friend at Sudbury; and one day in November, 1865, while driving to London, I saw on the road, near Kilburn, a Sparrow which had the quill-feathers in each wing white.

Greenfinch, Fringilla chloris. A common resident, flocking with Sparrows, Chaffinches, and

Yellowhammers in winter. The Greenfinch is an amusing bird in confinement, and is easily tamed. A pair in my aviary, which were captured in the autumn, built a nest the following spring, and laid; but unfortunately, before the eggs could be hatched, they were accidentally broken.

HAWFINCH, Fringilla coccothraustes. There are many birds, which in some years are numerous, and in others comparatively scarce, owing probably, amongst other causes, to the plenitude or scarcity of their food, insects or seeds, as the case may be. The Hawfinch is one of these. Formerly this bird was looked upon as an occasional visitant rather than as a resident, and when, perchance, a nest was discovered, the fact was generally recorded as of unusual occurrence. Within the last few years, however, this species has been perceptibly increasing, and I have received notices of its appearance in many parts of this county. In the neighbourhood of Kingsbury I have observed for many seasons that the Hawfinch is most numerous during the month of February, when there appears to be a partial migration. In February, 1862, several were killed in this parish, one of which I have at present in my collection; and in February, 1864, Hawfinches were unusually numerous, not only here at Kingsbury, but also at Stanmore, Edgeware, Hendon, Harrow Weald, and Hampstead. At the lastnamed place they breed annually, in the woods

belonging to Lord Mansfield. In 1863 I obtained a nest containing five eggs, together with the old male bird, in Bishop's Wood; and during the previous summer, a boy took three nests with eggs in Caen Wood. Mr. Spencer tells me he has seen as many as fourteen or fifteen at one time in these woods, feeding on the beech-mast. Mr. Power says the Hawfinch is common about the park at Ealing throughout the year. He has several times obtained birds in full summer plumage, and has seen the young of this species shot in the neighbourhood. This bird has been taken as near London as Notting Hill, and Mr. Dutton, of Hammersmith, writes me word that it has been obtained in the neighbourhood of Chiswick, and has nested there in the Horticultural Gardens.

The Hon. F. C. Bridgeman, writing from Harrow, says: "The neighbourhood of Harrow seems to be rather a favourite place of resort for these birds, though they are not common in most places, and they seem to be rather on the increase than otherwise. On the 7th May, 1863, I saw a nest of the Hawfinch situated at the top of a tall apple tree in the Grove (Harrow), containing five eggs. It was composed of small sticks and twigs slightly lined with hay and one or two feathers."

Mr. Belfrage says the Hawfinch has been found breeding at Muswell Hill; and I learn from Mr. J. W. Ford, of Enfield, that the bird has nested in that neighbourhood also, but is there considered rare.

Goldfinch, Fringilla carduelis. At one time common, but now seldom seen; owing, no doubt, to the increased cultivation of waste lands, and the disappearance of gorse and thistles, which seem to have a great attraction for this species. A few may be seen in autumn and in the early spring, but they do not remain to breed here as formerly.

Siskin, Fringilla spinus. This handsome little Finch is an uncertain visitant, appearing occasionally towards the end of autumn, in company with Linnets and Lesser Redpoles. Mr. Shirley Hibberd, in an article entitled 'The Birds of London,'* says: "Now and then during winter I see that rare but lovely little oddity, the Siskin. During the past few months (Christmas, 1864-5), several have appeared, and, as of yore, always careless, merry, full of antipodean feats, and singing a song which is the most comical ever heard out of an avicular larynx."

This species was formerly plentiful during most winters among the alders in the brook near the Decoy at Hendon, and has been found, though rarely, at Kingsbury, Elstree, Stanmore, and Harrow Weald. Mr. Spencer once saw a flock of twenty or thirty Siskins, near Caen Wood, Hampstead, feeding on the alders, and I learn from him that, in 1853, a

^{* &#}x27;Intellectual Observer,' No. XXXIX., p. 174.

pair built there to his knowledge. This species, according to Meyer,* has twice been found nesting as near London as Wimbledon Common. In the neighbourhood of Ealing, Hanwell, and West Drayton, the Siskin is rather more common in winter. During the autumn of 1865 we were visited by an unusual number of Siskins, and I saw several which had been taken near Hendon by a birdcatcher, in company with Lesser Redpoles.

The food of this handsome little bird consists of the seeds of grasses and thistles, together with small insects, and it appears to be very fond of the seeds of the alder.

LINNET, Fringilla cannabina, vel linota. Resident throughout the year, but, like the Goldfinch, not so common now as heretofore. Both these species appear to prefer uncultivated lands and wastes, and such unfrequented spots as are now, alas! becoming scarce. In autumn I observe the Linnet in small flocks upon the stubble and cleared bean-fields, and in much greater numbers among the weeds on the banks of the Reservoir at Kingsbury, where they appear to find plenty of food in seeds of various kinds. At night they roost upon the ground, among the thick grass and dry weeds. I have frequently disturbed large flocks of them very early in the morning and late at night. I have

^{* &#}x27;Illustrations of British Birds and their Eggs.'

taken the eggs on Stanmore Common, Harrow Weald Common, and Hampstead Heath.

MEALY REDPOLE, Fringilla canescens. Mr. Yarrell says: * "The occurrence of the Mealy Redpole in the vicinity of London is rare, even to those men who, obtaining their livelihood by birdcatching, trap hundreds of dozens of birds in the course of the year. The Lesser Redpole, on the contrary, is (sometimes) very common." I am enabled, however, to add this species to my list on the authority of Mr. Bond, who obtained some specimens at Kingsbury several years ago. I learn also from the same gentleman that in the autumn of 1861 he saw several in that neighbourhood, and some of them were afterwards taken by a birdcatcher. In October, 1863, three Mealy Redpoles were caught near Kilburn, together with some Linnets. This species is known to the London birdcatchers by the name of Stony Redpole.

The Hon. F. C. Bridgeman, in a notice lately published of the 'Birds of Harrow,' says, that the Mealy Redpole is occasionally seen and caught near Harrow.

I have very recently seen a pair of Mealy Redpoles which were obtained near Elstree. The person in whose possession they were informed me that this bird may be obtained there every year, but that the

^{* &#}x27;History of British Birds.'

Lesser Redpole is very scarce there. This appears somewhat curious; for in the neighbourhood where I reside the reverse of this is the case; the Lesser Redpole is caught every autumn by the London birdcatchers, while the Mealy Redpole is very rarely obtained. It is possible that this may be owing to a difference in their food. At all events, it is noticeable that in the neighbourhood of Elstree, where the Mealy Redpole is found, there is a good deal of alder growing, of the seeds of which it is very fond, while in the vicinity of Kingsbury, where this bird is scarce, the alder is also scarce, and the Lesser Redpole, comparatively speaking, common.

Lesser Redpole, Fringilla linaria. Our smallest British Linnet. Generally appears towards the end of autumn in small flocks, and may then be found among the weeds along the banks of Kingsbury Reservoir, on Hampstead Heath, Wormwood Scrubs, Harrow Weald Common, and Stanmore Common.

I am assured by Mr. Spencer that in May, 1857, while taking a walk in the neighbourhood of Cricklewood, he discovered an old male Redpole feeding its young. The fact of this species breeding so far south is interesting, and is, moreover, of such rare occurrence as naturally to raise a doubt in the minds of ornithologists, were it not that in this instance the fact is well authenticated. Mr. Spencer not only obtained a near view of the male bird, but had leisure to examine the nest and young.

Twite, Fringilla montium. A rare visitant, appearing in autumn. Specimens have been obtained at Kingsbury, Harrow, and Kilburn. On the 18th October, 1863, I saw a solitary Twite on Harrow Weald Common, and in October of the following year several were taken alive by some birdcatchers near Kingsbury Reservoir, from whom I purchased two pairs for my aviary. The Twite may be readily distinguished from its congeners by its long forked tail and yellow bill.

BULLFINCH, Pyrrhula vulgaris. Formerly very common, but since it has become the custom to lay the hedges, this bird, which delights so much in a high tangled hedge, has become scarce. It used to breed here regularly at one time, but now it is more frequently observed in winter and early spring, leaving us for some more favourable locality when the breeding season arrives.

In a summer-house belonging to Lord Mansfield at Hampstead, a Bullfinch made its nest among the honeysuckle and eglantine, and although the summer-house was constantly used, the bird was not deterred from hatching five eggs.

This species is occasionally subject to variety. "A Pied Bullfinch was caught at Harrow during the winter of 1862. It was a hen bird, with patches of white about the crown of the head and both wings."

PINE GROSBEAK, Pyrrhula enucleator. Yarrell

mentions a female bird of this species in his own possession which was shot some years ago at Harrow-on-the-Hill. This bird has since passed into the collection of Mr. Bond.

CROSSBILL, Loxia curvirostra. A rare and uncertain visitant. Great flights appeared in the neighbourhood of London in 1756-7; and it appears to have been plentiful in various parts of England from the winter of 1835 to that of 1839. In the latter year several were shot at Stanmore. In 1855, a year noted by Mr. Yarrell as one in which Crossbills were numerous, seven of these birds were obtained near Hampstead by a birdcatcher. He shot them out of a small fir-plantation, where they appeared to be busy extracting the seeds from the fir-cones. Mr. Spencer has obtained fourteen of these birds in Hampstead Woods, and a pair from this locality are in my own collection. In 1860 five or six Crossbills were caught near Bushey, by a birdcatcher with a call-bird.

Mr. Belfrage informs me that, when residing at Muswell Hill, some years ago, a young Crossbill was picked up from one of his garden-walks, and had apparently fallen from a nest. It was taken into the house and fed for some time, but was ultimately allowed to escape. The person who found it, observing that one mandible was twisted over the other in an odd way, and not knowing the bird's peculiarity, endeavoured to straighten it!

In September, 1863, a female Crossbill was caught alive at Harrow, by Mr. A. Fuller.

Parrot Crossbill, Loxia pityopsittacus. A bird of this species was shot at Harrow in January, 1850, as recorded by Mr. Yarrell in his 'History of British Birds' (vol. ii. p. 24). The following note from Mr. Edward Newman, in 'The Zoologist' for 1850, I believe refers to the same specimen: "I have just seen a fine male specimen of the Parrot Crossbill, killed yesterday at Harrow-on-the-Hill." January 22, 1850.

Family STURNIDÆ.

REDWINGED STARLING, Sturnus prædatorius. This bird is a native of North America, but occasionally stragglers have found their way across the Atlantic, and have been noticed so many times in England that the species is now included in the British list. Mr. Bond has in his collection a specimen of this bird, which was shot in the autumn of 1844, in a reed-bed at Shepherd's Bush. The locality was then described as "a swampy situation, about three miles west of London, on the Uxbridge Road, where an extensive tract of land, from which brick-earth has been dug out, is overgrown with reeds." This bird, which was a male, is described by Mr. Yarrell in his 'History of British Birds.'

Wilson, the American ornithologist, quoting Edwards, refers to another specimen "shot in the

neighbourhood of London many years ago; on being opened, its stomach was found to be filled with grub-worms, caterpillars and beetles."

COMMON STARLING, Sturnus vulgaris. Generally distributed over the county, where it is resident throughout the year. After the nesting season the broods unite and form large flocks, when they keep together until the following spring. As winter approaches there is a perceptible increase in the number of Starlings, which leads us to suppose that they are to a certain extent migratory, and that many move southwards before the cold weather sets in. An interesting trait in Starlings is their beautiful mode of flight in the evening before retiring to roost, and the variety and intricacy of the evolutions which they execute at that time is singularly curious. Where the locality is favourable, they evince a preference for reed-beds, but frequently roost in shrubberies among the evergreens.

I do not remember to have seen anywhere noticed the partiality which Starlings have for water. I have not only seen them running along the edge of a stream or pool, with the entire leg submerged, but have also observed them bathing in great enjoyment, throwing the water over their backs like ducks, and occasionally dipping their heads. In such situations they feed upon some small species of Coleoptera; the stomachs of several which I examined were filled with these, looking like a mass

of small black beads. At other times their food consists of grain, worms, larvæ, and some of the smaller species of Helix, while they render good service to the sheep and cattle by perching on their backs and ridding them of the insects with which they are infested.

In March, 1863, a white Starling was several times seen between Kingsbury and Kenton, and several attempts were made to shoot it, but without success.

Rosecoloured Pastor, Pastor roseus.* This rare visitant from the East, though several times obtained in the adjoining counties of Essex, Hertfordshire, and Buckinghamshire, so far as I am aware, has only once occurred in Middlesex. A specimen was killed many years ago at Norwood. From this bird Edwards drew his figure, and first noticed the species as British. Referring to the coloured plate in his 'Natural History of Birds,' that author says: "You may see this bird very perfect, curiously stuffed, and set on a perch at Salter's Coffee House, in Chelsea, where I had liberty to draw it. Though this bird is not a native of England, yet it was shot at Norwood, near London; for it often happens that birds not natives

^{*} No doubt called Pastor, i. e. Shepherd, from its habit of following sheep and cattle to seize the insects which they disturb.

are, through storms or other accidental causes unknown to us, brought over hither."

Family CORVIDÆ.

RAVEN, Corvus corax. As may be supposed, the Raven is a rare bird in Middlesex. Mr. Jesse, in his 'Gleanings,' mentions a Raven which was taken from a nest on the top of an elm tree in Hyde Park, and I am assured by Mr. J. W. Ford, of Enfield, that twenty years ago this bird used to breed regularly in his neighbourhood, in a tree which is still called "The Raven's Tree."

Early one morning in May, 1850, one of the park-keepers observed two Ravens fighting desperately in the Regent's Park. One of them was killed by the other, and was picked up by the keeper, who disposed of it to a London dealer. A Raven in the collection of Mr. Bond was also obtained in the Regent's Park.

Carrion Crow, Corvus corone. Generally distributed throughout the county, although nowhere numerous. It is not gregarious, like the Rook, but keeps in pairs, and may always be distinguished from the latter bird by its not having the bare space at the base of the bill, which is characteristic of the Rook. It generally selects as a site for its nest a tall tree in a hedgerow, but I have taken the eggs in the woods at Hampstead and Highgate, and have

noted the species as breeding regularly at Enfield, Hendon, Edgewarebury, Kingsbury, Pinner, and Greenford. Owing to its destructive habits, the Carrion Crow has but few friends, and it is singular how it has contrived to exist in such numbers, in spite of the persecution it everywhere meets with. Its extreme wariness must be the cause of this. Amongst the long list of crimes attributed to this bird, not the least heinous are those of carrying off game-eggs and killing weak and sickly lambs. But, while having regard to these offences, we should not overlook the fact that the Crow cannot obtain lamb and eggs all the year round, and the examination of several birds shows that grubs, snails and beetles form a considerable portion of their food.

"Even the blackest of them all, the Crow, Renders good service as your man-at-arms, Crushing the beetle in his coat of mail, And crying havoc on the slug and snail."*

I have not unfrequently noticed the Crows pacing along the muddy shores of the Reservoirs at low water in search of the mussels which are then exposed, and of which they appear very fond. When a shell proves unusually hard and impregnable, they will rise into the air with it, and drop it from a height to break it, following it quickly in the descent

^{*} Longfellow, 'Birds of Killingworth.'

to swallow the contents. This manœuvre I have several times witnessed.

Hooded, or Grey Crow, Corvus cornix. An occasional winter visitant from the north, appearing about the end of October, and leaving in April. The Hooded Crows, "on their arrival in this country, frequent marshes near the sea, and the banks and shores of tidal rivers, inhabiting both sides of the Thames as high up as within a few miles of London." They are exceedingly wary birds, and when inland keep to the open country, so that it is a difficult matter to get within shot of them. When driving or riding, however, I have sometimes been permitted to approach within forty yards of a Grey Crow before it took flight.

Like the Carrion Crow, this bird is omnivorous, and nothing seems to come amiss to it. Its favourite habitat is the sea-shore, where it preys on small crabs, limpets, and mussels, and now and then a disabled sandpiper, or a stranded carcase.

When inland, its food consists of earth-worms, grubs, and large beetles, with (not unfrequently, I suspect) game eggs and young birds. It is very partial, also, to freshwater mussels, and, like the Carrion Crow, visits the river banks at low water to pick up those which are then exposed.

The foregoing remarks, it should be observed, have not been made from a study of the Grey Crow

in this county, where it is a rare bird, but are the result of observations made at various times in other parts of England and Ireland.

The Hooded Crow, more frequently to be seen towards the mouth of the river, is seldom observed in the interior of the country, and during the last fifteen years I am not aware that more than half-adozen examples have been killed inland. These few, at long intervals, were obtained in the winter or early spring at Cricklewood, Hendon, Kingsbury, and Bushey. On one occasion in April, while walking in the Regent's Park, a Hooded Crow passed over my head within shot. It was flying very leisurely, on the look-out for food, apparently, and was heading in the direction north-east.

An old keeper with whom I am acquainted, and who knows this bird well from the number he has seen and trapped further north, informed me that many years ago, before the ground between Kensal Green and Kilburn was built upon, a pair of these birds frequented a large field there belonging to a Mr. Harper; and from the fact of his having seen a pair at the same place during several successive springs, he suspected that they were the same birds, and nested in the neighbourhood.

ROOK, Corvus frugilegus. Perhaps no birds afford us better opportunities of observing their habits than the Rooks. Resident with us throughout the year, and very generally distributed over the county,* they place themselves, as it were, under our protection, by building in sight of our windows, and are constantly in view. They are amongst the earliest birds to nest; I have observed them building on February 26th, and have taken the eggs on March 22nd.

"The partiality which Rooks evince for building their nests on any trees sufficiently lofty that are occasionally to be found in various parts of crowded cities, must have been observed not only in London but elsewhere.† In the spring of 1838, a pair of Rooks began to form a nest on the crown which surmounted the vane of St. Olave's Church, in Hart Street, Crutched Friars. Many persons will remember the nest built on a single, and not very lofty tree, near the corner of Wood Street, Cheapside, in the season of 1836, and two nests were built and occupied in the year 1845. Some years since, a pair built their nest between the wings of the

^{*} Some idea of the number of Rooks may be formed when it is stated that within the space of five miles by three, the author has reckoned eleven rookeries, each containing on an average twenty nests (many of them nearly twice that number). If we allow a pair of old birds to each nest, and only four young ones, which will be below the mark, we have in one year 1320 birds in the area above mentioned.

[†] Goldsmith gives an interesting account of the Rooks observed by him in the Temple Gardens.

dragon of Bow Church, and remained there till the steeple required repairs. In the gardens of two noblemen in Curzon Street, Mayfair, a considerable number of Rooks have built for many years, and these, probably, received an addition at the destruction of the Rookery in the gardens of Carlton House,"

A colony of Rooks are still in possession of some tall thin trees in a little back garden in Gower Street, close to the University; and another colony is established in a large tree in the Marylebone Road, opposite Devonshire Place.

"At an old mansion not far from London, surrounded by a number of very fine elms, a singular mark of the sagacity of Rooks was recently observed. Many of these trees had become very old, and it was, therefore, determined to fell a few of them every year, and plant young ones in their place. The oldest of the trees were accordingly condemned to be felled, and a portion of the bark taken off to indicate those which were to come down. These trees were soon forsaken by the Rooks, and it was subsequently observed that, immediately after any of the other elms, were marked in a similar manner, the Rooks at once forsook the trees, as if fully aware that the removal of the bark was a notice to them to quit."

During the nesting season the male bird is very attentive to the female, bringing her food of all sorts,

which he thrusts into her bill even when she accompanies him in search of it; this I have repeatedly witnessed. A very dry spring is fatal to young Rooks, for the parents are in consequence unable to provide the usual supply of food, and have to travel long distances, and work very hard, to support their families. This was verified so literally in the spring of 1864, that in this and some adjoining parishes the owners of Rookeries abstained from the annual shooting in May, in consequence of the scarcity of birds.

So much has been written on the usefulness or otherwise of the Rook, while the abundance of the species so easily admits of an investigation of the question by every one interested in it, that little need be said here upon the subject. Although there can be no doubt that grain, acorns, potatoes, turnips, and fruit, with occasionally eggs and young birds, are all in turn devoured by the Rooks, we should not be too hasty in condemning them for this, but should take into consideration the fact that, during the year, they destroy innumerable quantities of slugs, snails, worms, beetles, and grubs. And when we reflect upon the ravages committed by a single species (the wire-worm) which is greedily devoured by Rooks, we can hardly fail to arrive at the conclusion that the amount of evil committed on the one hand is counterbalanced by the good rendered on the other. It is possible to be too lenient and

indulgent, but it appears to us that Nature, in the distribution of species, maintains an even balance, which should not be interfered with. We declare war against birds which prey upon insects, and we discover our mistake when our crops are nearly destroyed. We assist in exterminating Hawks and Owls, and small birds and mice unduly increase. Should not our motto rather be, "Live, and let live?"

Jackdaw, Corvus monedula. Thinly distributed in the county, where it is resident throughout the year. It is a sociable bird, and may generally be seen flocking with Rooks and Starlings, in search of the same sort of food. I have noticed Jackdaws breeding annually in the ivy-covered church-tower at Stanmore and in the church spires of Northolt, Harrow, and Hampstead. I have also obtained the eggs from some hollow trees on the Rosslyn Park Estate, Hampstead, and from some old pollards in the neighbourhood of Harrow Weald.

It is not an uncommon thing to see Jackdaws in London, and I know more than one house in the chimneys of which Jackdaws build every year.

A curious variety of this bird, in the collection of a friend, was killed some years ago at Hammersmith. The scapulars, and part of the back, are of a beautiful bronze colour.

MAGPIE, Corvus pica. A resident species, thinly distributed over the county. In the neighbourhood

of London the Magpie is a scarce bird, but in the more wooded and retired districts of Mill Hill, Edgewarebury, Brockley Hill, Bushey, Ruislip, and Pinner, it may be observed more frequently. In the autumn it is not an uncommon thing to see five or six Magpies in company; for the young remain sometime with their parents after leaving the nest. They roost together at night, and during the day disperse in search of food. Mr. Yarrell has counted twenty-eight Magpies together in Kensington Gardens, and many instances are on record of still larger flocks having been seen at evening.* I once found a nest of this species containing the unusual number of eight eggs, all marked exactly alike, and apparently laid by the same bird. As a rule, five, or at most six, is the full complement.

Jay, Corvus glandarius. Resident throughout the year, but nowhere numerous. I have noted this species as occurring at Enfield, Mill Hill, Edgewarebury, Stanmore, Elstree, Northolt, Harrow, Wembley, and Kingsbury. In the autumn, Jays, like Magpies, may be observed in little parties of seven or eight, the young remaining with their parents for some time after they have left the nest.

They are noisy and quarrelsome birds, and seem always at war, even with their own species. A friend once killed, at the Well Springs, Kingsbury,

^{*} See 'Zoologist,' pp. 7817, 7846, 7931.

a female Sparrowhawk and a Jay at one shot, and a second Jay with the other barrel. They were all fighting on the ground, when he came upon them suddenly, and three or four more Jays that were in the *melée* escaped.

Jays are very fond of fruit, and a correspondent assures me that some of these birds used to visit his garden at Muswell Hill regularly in the spring to rob a damson-tree, and that they always took care to come early in the morning.

Family PICIDÆ.

GREEN WOODPECKER, Picus viridis. Although this bird is generally throughout England styled the Common Woodpecker, in the county of Middlesex the term is misapplied, for as a species it is not so common as the Lesser Spotted Woodpecker. It is nowhere plentiful, even in those woods which are strictly preserved, and where, consequently, it has a better chance of increasing.

It has been observed at Trent Park, Enfield, in the woods at Hampstead, in Canon's Park, Edgeware, at Mill Hill, Stanmore, Brockley Hill, Harrow, and Kingsbury, and in Wembley Park. I have seen a young bird in the spotted plumage which was shot in Colin Deep Lane, Hendon, in the autumn of 1859. Mr. Belfrage informs me that the Green Woodpecker used to breed regularly in the grounds of the late Mr. Black, of Muswell Hill, formerly known as The Grove, and now the Alexandra Park; and that he has observed it between Muswell Hill and Highgate, and in the Churchyard at Fryern Barnet.

The food of the Woodpecker consists exclusively of insects, and, judging from my own observations, and from the stomachs of several which I have examined, a preference is given to ants and their larvæ. One day in August I had an opportunity of watching a Green Woodpecker very closely, while at work on an ant-hill. In a small field by the side of a wood, where there were numerous ant-hills, I suddenly surprised a pair of these birds. One of them, seeing me approach, flew into the wood, while the other continued feeding. Quietly adjusting my glass to the proper focus, I was enabled to watch every movement of the handsome bird. Breaking open the top of the ant-hill with his bill, and scattering with it the mould in all directions, he darted out a wonderfully long tongue, and drew in with it numbers of ants. This was repeated as long as I watched him, until two labourers, inopportunely coming by, frightened him back to the wood. I could not detect him making use of his feet to scrape away the earth; this was always removed with the bill.

An instance of the wonderful and rapid way in which the Woodpecker can cut out a hole in a tree has lately come under my notice. A young collector, who was anxious to obtain some eggs of this

species, watched a pair of birds almost incessantly from the time they commenced excavating till the first egg was laid. At five o'clock one Friday morning, he saw the hen bird alight upon an oak, at about ten feet from the ground, and pick off a piece of bark about the size of a shilling, and fly away with it. This manœuvre was repeated several times. Both birds then laboured at the tree to make a hole, and by seven o'clock on the following Sunday morning they had cut through two inches of wood, and made a hole eight inches deep, in which at the hour last-named a single egg was found. This tends to prove that the Woodpecker, in selecting a tree in which to deposit its eggs, does not always make use of one which is unsound.

GREAT SPOTTED WOODPECKER, Picus major. Formerly this species was not uncommon, particularly in the neighbourhood of Barn Hill, and round Uxendon and Forty Farms, in the parishes of Kingsbury and Harrow. Now it is one of our rarest birds.

Yarrell mentions the fact of this species having bred in Kensington Gardens. It is occasionally seen in the woods at Hampstead, and I have observed it at Wembley Park.

In April, 1860, Mr. Spencer saw five of these birds in Caen Wood, Hampstead, which he believes were four males and one female; the former were engaged in a fierce conflict, apparently for the possession of the latter, and he watched them for some little time before making his presence known. He then shot two, which proved to be male and female.

In the spring of 1862 a nest of this species, containing four young birds, was found in an oak in the lane leading from Edgeware Toll-bar to the Hale; and in October of the same year, a Great Spotted Woodpecker was observed upon an old willow near the brook at Forty Farm in this parish. I have more recently noticed this species in Wembley Park.

MIDDLE SPOTTED WOODPECKER, Picus medius,* Temm. I have inserted this species in my Catalogue on the authority of Mr. Spencer. Having spent more than thirty years among birds, and having had many opportunities of studying the

^{*} The Rev. L. Jenyns, in his 'Manual of British Vertebrates,' says: "The Middle Spotted Woodpecker of Montagu and other English authors is only the young of this species (P. major). The Picus medius of Temminck is distinct, but not hitherto found in this country."

Mr. St. John, however, in his 'Natural History of the Highlands,' says (p. 76): "Amongst the rare feathered visitors to these woods I forgot to mention the Spotted Woodpecker, *Picus medius*, which bird I killed in Invernesshire. I was attracted to the spot where he was clinging to the topmost shoot of a larch-tree, by hearing his strange, harsh ery."

habits and change of plumage of our Woodpeckers, his opinion, if not to be received as conclusive, is, at all events, worthy of consideration. He believes that there exists a third British species of Spotted Woodpecker, Picus medius of Temminck, intermediate in size between P. major and P. minor, often confounded with the former, and of more rare occurrence than either. In June, 1846, he shot a pair of birds at Caen Wood, Hampstead, which he believes to be the Middle Spotted Woodpecker, P. medius. It is somewhat smaller than P. major, and considerably larger than P. minor. The red on the head extends to the top of the crown, which is not the case with P. major. There is rather more white, also, on the scapulars, and the red of the under tailcoverts is not so brilliant. On obtaining this pair of birds Mr. Spencer skinned them, and sent the bodies to Mr. John Askew, who took them to Mr. Yarrell, and he decided that they were the bodies of old birds. This would seem a sufficient answer to the argument that they were the young of P. major. When Mr. Spencer, however, produced the skins, Mr. Yarrell suggested that the young of P. major did not attain the adult plumage until after the second or third year, and that, consequently, the birds in question might be old birds, and yet the young of P. major. It has been ascertained, however, beyond doubt, that the young of this species assume the adult plumage at the first moult, and

that they are completely moulted by the end of October. The birds in question were shot in June. The young of *P. major*, obtained in July, were in deep moult.

LESSER SPOTTED WOODPECKER, Picus minor. In this county of more frequent occurrence than the Greater Spotted Woodpecker, or even the Green Woodpecker. I have a pair in my collection which were shot in Bishop's Wood, Hampstead; and I have seen four other specimens which were obtained there in 1861.

A pair of these birds was shot at Turnham Green in April, 1854, as recorded in 'The Zoologist' for that year (p. 4329); and in the spring of 1859 Mr. Spencer obtained a pair at Caen Wood, Hampstead. As recently as April, 1864, a pair of these handsome little birds was observed in a garden at Hampstead, and on the 17th of that month the female (since presented to me) was shot there. With regard to this pair, a friend, writing to me from Hampstead, says: "On April 17th I was in the Priory all day. About one o'clock, as I was leaving to go home, I noticed a beautiful male Lesser Spotted Woodpecker upon a tree near me. After watching him for some time, I went home for my gun, but came back just in time to see his departure. I could then hear one tapping for a long time in the next garden; but, although I lay down on the grass and waited patiently, three hours elapsed before any bird of this species appeared. One then alighted upon the same tree where I had first seen the male bird. Upon shooting it I found it was the female. I waited till dark for the male, but saw nothing of him. From a person at the Priory I learned that these birds had bred there last year, and reared a brood. Two days later, on April 19th, I again saw the male bird on his favourite tree. The note is very like that of the Wryneck, but lower and more musical. There are several of them at Frognal (Hampstead) now. They come continually to a particular tree."

I have observed this species in the neighbourhood of Brockley Hill and Elstree, and specimens have been obtained at Harrow. It is not an uncommon bird about Brentford, Kew, Hanwell, and Ealing, especially in spring and autumn; for although resident throughout the year in England, I have reason to believe that this species is partially migratory. A nest of the Lesser Spotted Woodpecker which I found one day in May, had two entrances, from opposite sides of the tree; the holes were as nearly as possible in a line, and led to a larger cavity from which the hen bird might thus escape on one side if assailed on the other.

GREAT BLACK WOODPECKER, Picus martius. I am aware that many naturalists attempt to throw discredit upon the reported occurrence of the Great Black Woodpecker in Britain, but I have never yet

heard any argument to convince me of the impossibility of its appearance here. Looking at the form and anatomy of the bird, I see no reason why it should not cross the sea as easily as the Wryneck and all the short-winged Warblers which visit us in summer.

Standing upon an eminence, I have seen the Green Woodpecker in full flight cross an extensive valley in a very short space of time. The line of flight was undulating, it is true, like that of a Wagtail, but at the same time rapid. I have also seen the Great Spotted Woodpecker cross an acre or two of park in the same way; and from the power these birds displayed, I have no doubt their flight could have been easily sustained for a considerable distance. There seems to me, then, nothing wonderful in finding a Great Black Woodpecker in England. But since it is decidedly not indigenous, nor yet a regular visitant, all records of its occurrence here, to be of value, should be thoroughly well authenticated.

In mentioning the only two instances of which I am aware of the appearance of the Great Black Woodpecker in Middlesex, I am, unfortunately, unable to speak from personal observation, and can only refer, in the first case, to what I have gleaned from the work of a reliable authority, Colonel Montagu, and in the second case to what has been related to me by an eye-witness.

Col. Montagu, in the supplement to his 'Ornithological Dictionary,' states that a Great Black Woodpecker was shot, in the winter of 1805, on the trunk of an old willow tree in Battersea Fields. It is not very likely that the author could have mistaken the bird, or intended to refer to the Great Black and White Woodpecker (Picus major), seeing that he has given the latter species a separate consideration in the same volume. It is, moreover, observable that, besides being an accurate observer himself, Col. Montagu was usually careful to sift and prove the correctness of reports furnished to him whenever they related to the occurrence or capture of rare species.

With regard to the other instance to which I have referred, I am assured of the facts by no other than the person who saw the bird, and whose word I have never had reason to doubt.

Mr. Spencer, the well-known taxidermist of Great Portland Street, having a brother who was keeper to Lord Mansfield at Hampstead, had many opportunities of visiting and exploring the large woods called Caen Wood, Mutton Wood, Wild Wood, and Bishop's Wood, and of observing, shooting, and examining many of our rarer birds whose shy habits conceal them from the general observer. Early one morning in May, 1845, while walking through the thickest part of Caen Wood, Mr. Spencer was suddenly startled to see a Black Woodpecker dart

between the trees and alight upon an oak at some distance. It was extremely shy, and he was scarcely ever able to approach within a hundred yards of it. On the following morning he again visited the spot, on the chance of getting a shot at the bird, and again saw it; but it was too wary to allow of a sufficiently near approach. On the third day he was unavoidably prevented from visiting the wood, but on the morning of the fourth day he saw the bird again for the third and last time.

My informant is still living, and able to vouch for the truth of the above statement.

WRYNECK, Yunx torquilla. A regular summer visitant, generally appearing about the second week of April, a few days before the Cuckoo. It is a most beautiful and interesting bird to observe, and in its food and habits somewhat reminds us of the Woodpeckers. Like them, it breeds in holes of trees, and lives upon similar food, which consists chiefly of ants and their larvæ. The note of the Wryneck more nearly resembles that of the Kestrel than any other bird with which I am acquainted, and, if the sound could be expressed in words, it would, perhaps, be most correctly rendered, "Oh, dear, dear, dear, dear, dear, dear, dear, dear, dear, dear."

The nest is not an easy one to find, situated as it is in a hole of a tree, sometimes at a considerable height from the ground. The eggs are pure white.

Family CERTHIADE.

COMMON CREEPER, Certhia familiaris. Resident throughout the year, although not very abundant.

I have always thought the Creeper an unusually silent bird, and more particularly so in the winter, when I have never heard it utter any note. Its summer note is very low and monotonous. I have frequently approached within a few paces of a Creeper as it commenced ascending a tree, beginning at the height of about two feet from the ground; and although this bird has the stiff-pointed tail-feathers which are conspicuous in the Woodpeckers, I never observed that it stiffened them and made use of them in any way as a prop while climbing. On the contrary, whenever I have been close enough to see the tail distinctly, I have noticed that it dragged behind like that of a mouse. This bird, like the last-named, builds in holes, and lays five or six small eggs, white spotted with light red. Its eggs may generally be distinguished from those of the Tits by being more pointed at the smaller end, and in having their spots chiefly in a cluster at the large end.

WREN, Troglodytes vulgaris. Common everywhere. Its song, which is wonderfully loud for so small a bird, is frequently uttered on the wing while it flies from one hedgerow to another; and besides its ordinary song, it has a curious note of fear, which

it utters at intervals, and which somewhat resembles the winding-up of a clock.

A curious freak in the nesting of this species has lately come under my notice. A pair of Wrens built their nest on an old stump, and hatched their young. Finding themselves undisturbed, they resorted to the same place the following year, where they found their old nest. Instead of repairing it, however, and using it again, they built another on the top of it, and had thus a "storied" house. The "ground-floor," however, was only visited occasionally, for the little family was brought up in the "first-floor" room.

HOOPOE, Upupa epops. A rare summer visitant from North Africa. The earliest notice which I have been able to find of its appearance in this county, occurs in Edwards' 'Natural History of Birds, 1743. That author gives a coloured plate and description of a specimen which had been shot at Norwood, and was presented to him by Dr. Reeves, President of the College of Physicians. In an old quarto volume, dated 1794, entitled 'Portraits of Rare and Curious Birds, with their descriptions, from the Menagerie at Osterley Park, the author, W. Hayes, referring to a coloured plate of the Hoopoe, says: "This very beautiful bird had been seen several times in this menagerie; every scheme that could be thought of was put in practice to take it alive, but without effect; and as it was

observed that its visits were less frequent, and that it became more cautious, it was at last shot by the menagerie-keeper, and by the late Mr. Child's particular order this drawing was made for his collection."

In the summer of 1830, a Hoopoe was shot near Caen Wood, Hampstead. One was killed by Mr. Sullivan on the 28th September, 1832, in his own grounds at Fulham, as recorded by Mr. Gould; and in 1850 another was obtained at Golder's Green. The last of which I have heard was shot at Neasdon in April, 1865, by Mr. S. Marshall, of that place, who has had the bird preserved.

NUTHATCH, Sitta europea. This is so thoroughly a wood bird, that in this county it is local rather than rare. I have never seen it at Kingsbury, although many years ago Mr. Bond obtained specimens in this parish, and others at Brockley Hill. I have observed it, however, at The Hale, Edgeware, Mill Hill, and Elstree, and it has been noticed in the grounds of Lord Tenterden at Hendon; in Caen Wood, Hampstead; in Mill Field Lane, Highgate; and in the neighbourhood of Harrow, where it is not uncommon in autumn, where any large trees abound.

In January, 1862, I saw a pair of Nuthatches upon a large oak at Bentley Priory, Stanmore, my attention having been first drawn to them by their loud note, which struck me as being not unlike that

of the Great Tit, although much louder. Like the last-named bird, its note varies at different seasons ofthe year; that which is uttered in the breeding-season being very different to that which is heard at other times. I believe that Nuthatches pair for life, and remain in pairs throughout the year, not flocking in winter like other birds; for I have never observed the young following their parents in the autumn, as is the case with some species; from which I infer that, as soon as they are out of the nest, the old birds leave them to shift for themselves.

The nest is a difficult one to find, secreted as it always is in the hole of a tree. On the 10th May, 1863, I obtained ten beautifully-marked eggs of this species from an old tree at Harrow Weald.

A few years ago this bird was comparatively common in the neighbourhood of Ealing, especially in autumn, when it might frequently have been heard and occasionally seen running up and down the elm-trees, hammering at the bark, and uttering at intervals its not unpleasing note. Of late years it has become much more rare. Mr. Power observed a particular bird of this species at Ealing, which was in the habit of carrying off the acorns from an evergreen oak, but what it did with them he was never able to ascertain. I have seen a Nuthatch constantly on a certain gate-post that had a fissure in the top, in which it used to fix acorns and beech-

mast, and then hammer at them and extract the kernels. I think it not unlikely, therefore, that the bird observed by Mr. Power was carrying the acorns to a similar crevice, the more easily to get at the contents. A writer in 'The Field Naturalists' Magazine' states that he has noticed this bird in Kensington Gardens; and Mr. Yarrell, in his 'History of British Birds,' observes that it is common there.

Mr. Bond says that the Nuthatch, particularly during May, oftentimes sits upon the dead bough of a tree, and from thence darts into the air to seize the passing insects like a Flycatcher. It is much more expert in climbing than the Woodpeckers. I have never seen one of the latter birds descend a tree head first, but the Nuthatch will climb in every direction.

Family CUCULIDÆ.

Cuckoo, Cuculus canorus. A regular summer visitant, generally appearing about the 23rd April, and leaving us in Aegust. Yarrell asserts that Cuckoos do not pair. On several occasions I have seen two Cuckoos in company, one chasing the other, and always supposed that they were male and female; but an observant friend writing to me upon the subject, says: "I believe Yarrell to be right in saying the Cuckoo does not pair. I have

seen as many as three male Cuckoos following a female."

Mr. W. H. Power writes me word that he once saw as many as ten Cuckoos on the wing at once, and on another occasion disturbed even a greater number from a plantation where they were congregating in June. He thinks it not unusual to find Cuckoos in small flocks. The fact of this bird singing at night I apprehend is now too well known to require any comment. I have frequently heard a Cuckoo as late as 11 o'clock, P. M.

Mr. Timbs says: * "The Cuckoo begins to sing early in the season, with the interval of a minor third; the bird then proceeds to a major third, next to a fourth, then a fifth, after which his voice breaks without attaining a minor sixth. The Cuckoo may be said to have done much for musical science, because from this bird has been derived the minor scale, the origin of which has puzzled so many; the Cuckoo's couplet being the minor third sung downwards."

My friend Mr. Bond has kindly furnished me with the following list of nests in which he has known a Cuckoo's egg to have been found; and with regard to those to which an asterisk is prefixed, I am able to corroborate him from my own observations.

^{* &#}x27;Things Not Generally Known.'

Redbacked Shrike. Spotted Flycatcher.

- * Hedge Sparrow.
- * Robin Redbreast.
- * Redstart.
- * Nightingale. Blackcap.
- * Garden Warbler.
- * Sedge Warbler.
- * Reed Warbler.

Willow Wren.

- * Pied Wagtail.
- * Yellow Wagtail. Grey Wagtail.
- * Tree Pipit.
- * Meadow Pipit.
- * Sky Lark.
- * Yellowhammer.
- * Greenfinch. Wren.

I have but two more species to add to this list, namely, the Blackheaded Bunting and Wheatear. In June, 1860, a friend of mine found a nest of the latter bird containing three eggs of the Wheatear and one of the Cuckoo. The nest was placed under a clod, and in such a position as strongly to favour the opinion of some naturalists that the Cuckoo first lays her eggs and then deposits them with her bill in the nest.

Occasionally an adult Cuckoo is obtained in the reddish-brown plumage peculiar to the young bird, but this happens very rarely. I know of two instances in which old birds have been shot in this state of plumage, one having been previously observed for three summers, and the other for five or six: they were both females, and I believe an adult male of this colour has never been obtained.

The adult brown Cuckoo is thought by some to be a distinct species, and has been figured and described under the name of Cuculus hepaticus; but I think there can be little doubt that it is only a variety.

Family MEROPIDÆ.

BEE-EATER, Merops apiaster. I have seen a stuffed specimen, said to have been killed many years ago between Kingsbury and Hampstead; but owing to the length of time that has elapsed since its capture, I have been unable to obtain any particulars respecting it.

Family HALCYONIDE.

KINGFISHER, Alcedo ispida. Resident throughout the year, although many leave us at the approach of winter. A few pairs breed on the banks of the Brent and Silk stream, and also along the Thames and Colne. Kingfishers always appear most numerous in autumn, and naturally so, for the young are then flyers and may be found at all our brooks. I hardly know a prettier sight, or one more gratifying to the naturalist, than that of a Kingfisher feeding. Many a time have I lain at full length, by the water-side, and screened by a thick bush, watched one of these birds dart into the stream from a favourite stump, and, seizing a passing fish, return with it to its perch. Invariably holding its prey behind the gills, it would, on regaining the stump, knock the fish several times against the wood, until stunned or

dead, and then swallow it whole, head first. I have been astonished to see how many fish so small a bird could swallow consecutively; I once saw a Kingfisher take five good-sized minnows, one after the other. That this bird is capable of being tamed may be seen by any one who will take the trouble to visit the fish-house in the Zoological Gardens, where there are at present several live Kingfishers. One of these is so tame that it will readily perch upon the keeper's right hand, and seize a fish from his left. Although a shortwinged bird, the Kingfisher has great powers of flight. I have more than once seen one fly out across a harbour until the eye could follow it no longer. Mr. Henry Hussey, on Christmas Day, 1863, saw one flying over the Serpentine in Kensington Gardens, a singular locality for such a bird.

In an interesting communication from Mr. J. H. Belfrage, of Muswell Hill, referring to the Kingfisher, he says: "A curious instance of the instinct displayed by one of these birds came under my own observation. We had occasion to empty a small pond in our garden, for the purpose of having it cleaned out. When that process had been gone through, there still remained about three inches of water, and into this shallow pool we turned about four dozen very small Prussian carp. The following day a Kingfisher appeared, and continued to visit the pond daily, until all, or nearly all, the little

carp had disappeared. The bird was frequently seen there, perched upon the railings of the pond, or flying away from it, scared by our approach; but when the pond was filled by the rain it disappeared, and was not seen again. There were then only one or two fish left, and I never remember to have seen a Kingfisher in the neighbourhood either before or since." By what curious instinct, then, was this bird led to an isolated pond far from its usual haunts, and at a distance from any stream, where it became aware not only of the sudden appearance of fish, but also of the sufficient shallowness of the pool to enable it to take them?

Family HIRUNDINIDE.

Swallow, Hirundo rustica. A regular summer visitant, arriving in April and leaving in October. I once saw a solitary bird here as late as the 9th November. Swallows frequently have two, if not three, broods in a year. They roost upon the willows and shrubs that grow along the course of our brooks, and I have often been surprised at the great number I have disturbed when walking along a brook late in the evening. It is not unlikely that this propensity to roost among willows and near water has given rise to the popular delusion that Swallows retire under water in winter.

I used to think at one time that Swallows were destructive in the neighbourhood of bee-hives, having frequently seen a Swallow take a bee on the wing. But a writer in 'The Field Naturalist's Magazine,' who formerly shared the same opinion, says that he shot several Swallows after they had passed and repassed his hives several times, and upon opening them was surprised to find that, although the stomachs were literally crammed with drones, there was not a vestige of a working bee. By what curious instinct is the bird thus led to make a distinction so much in our fayour?

Varieties of the Swallow occasionally are met with. I have seen a pure white specimen which was shot some years ago at The Hyde.

I have several times seen a bird which I take to be the Barn Swallow of America (*H. rufa*), and which, I believe, is not uncommon in England. It differs chiefly from *H. rustica* in having the under parts, from chin to vent, light chestnut instead of white. Mr. W. H. Power says that he has more than once shot Swallows with the under part of a light chestnut, but as these were generally obtained in the spring he took them to be merely fine-coloured males of *H. rustica*.

Martin, Hirundo urbica. A common summer visitant, arriving, like the Swallow, in April, but generally later than that bird, and leaving in October. The rapidity with which these birds build

is astonishing. By July 24th a pair of Martins had completed a nest under our eaves, and hatched, for the second time, two young. On that day, through the thoughtlessness of a servant, the nest was knocked down, when it was found to contain an addled egg and two young birds, which were killed by the fall. The following day the old birds commenced to rebuild, and by the 29th, five days later, a new nest was finished, and subsequently a new brood was hatched.

SAND MARTIN, Hirundo riparia. Another of our visitants, and generally the first of the genus Hirundo to arrive. In some seasons they are numerous, but although they may be seen almost every day during summer at our reservoirs, they do not breed there, the banks being too shallow and sloping to admit of excavation.

This species breeds in some chalk-pits at Pinner, and at Hampstead, on the property of Lord Mansfield, where an old sand-bank is completely riddled with their holes. In June, 1863, some eggs were taken by a friend from some holes in a pit-bank on Hampstead Heath. The Sand Martin may also be found breeding in many places along the banks of the Thames. Mr. Gould, in his beautiful folio work on British Birds, now in the course of publication, says: "A nest taken from the bank of the Thames on the 4th of July, 1854, was composed of a layer of grasses, above which was a second layer of the Swan's

breast-feathers, so placed as to curl over the eggs, forcibly reminding one of the calyx of a tulip or white water-lily. Although the hole was damp, the platform of grasses and feathers formed a warm and dry receptacle for the eggs, which were a pearly white, and six in number."

Mr. Gould is of opinion that the Sand Martin has occasionally two broods in the year.

One day in August, 1863, I saw an immense flight of these birds on the ground near Kingsbury Reservoir. I was on the opposite side of the water when I first found them, with my glass, and being in a boat, rowed gently towards them. They allowed me to approach within fifty yards, and I computed at the time that there must have been about six hundred birds congregated there. It was very curious that all those that I could obtain a clear view of had their heads turned in the same direction, which was S.S.W. They never moved while on the ground, but rose in a cloud as I continued to approach, and settled again at a greater distance from me. I have no doubt that they were congregating to migrate. I saw a similarly large flock at the same place the following year, on September 5th, and Mr. Belfrage has noticed a similar occurrence with regard to Swallows on the banks of the Thames at Hampton.

PURPLE MARTIN, Hirundo purpurea. With the exception of one that was shot near Kingstown, in the county of Dublin, there have only been two

British examples of this bird recorded, and these are said to have been observed at Kingsbury Reservoir in September, 1842. The capture of these is mentioned in Yarrell's 'British Birds' (vol. ii., p. 267), and from one of them the figure which adorns that work is taken. The following are Mr. Yarrell's words: "During the first week of September, 1842, two other examples of the same species were shot by Mr. John Calvert, of Paddington, at the Kingsbury Reservoir. One of these specimens was lent me by F. Bond, Esq.; it was a young bird of the year, and the outside tail-feathers were not fully grown up. From this bird the figure here inserted was taken. Since then Mr. John Calvert very kindly brought me his bird to examine, and this proved to be an old male, rather larger than the young bird, and of very brilliant plumage. These two birds, though shot during the same week, were not both killed on the same day; two or three days intervened, and the brood might, therefore, have been raised in this country." Although I have no doubt that Mr. Yarrell received this statement and inserted it in his work in perfect good faith, on making inquiries I have since received such unsatisfactory information respecting these birds, that, were it not for Mr. Yarrell's mention of them. I should not have noticed the species in this Catalogue.

SWIFT, Cypselus apus. A regular summer visitant, usually the last of the Hirundinidæ to arrive, and

the first to leave us. Upon reaching this country, towards the end of April or beginning of May, the noisy Swift soon makes known its arrival by its wild scream, "swee-ree-e," as it dashes overhead, and so rapid are its movements on the wing, that were not our attention attracted by its cry it would oftentimes, like an arrow, pass us unobserved. An ingenious naturalist has computed that the Swift is able to fly at the rate of ninety miles an hour.

The birds which in summer are daily seen wheeling over our reservoirs and about the river must travel a considerable distance to breed, for there are but few favourable sites for nesting in the abovementioned neighbourhoods which they frequent in search of food. Many years ago some Swift's eggs were taken from under the eaves of an old cottage on Roe Green, in the parish of Kingsbury. In June, 1862, I obtained some eggs from Northolt Church, where I believe these birds breed annually. Some nests have also been found in the churchsteeple at Harrow, and in an old barn in that neighbourhood. A curious and unusual site for a Swift's nest was under the low eaves of a noisy railway-station. In the spring of 1865 two pairs of Swifts were building under the eaves of the station at Spring Grove, Isleworth.

ALPINE SWIFT, Cypselus alpinus. One day in August, 1841, a white-bellied Swift was seen sporting with a number of the common species over the

Reservoir at Kingsbury. The following day a bird of this species was shot near Reading, and Mr. Bond obtained it for his collection. It is conjectured that this was the same bird seen at our reservoir.

Family CAPRIMULGIDÆ.

NIGHTJAR, Caprimulgus europæus. This beautiful summer visitant may be said to be local rather than rare, evincing a partiality for ferny commons and tracts of low underwood surrounded by cover. It is a difficult bird to find, except in the evening, when it comes abroad to feed, for by day it rests either on the ground, where it sits very close, until almost trodden upon, or on a bough of some rugged tree, where, on account of its mottled plumage, and its curious habit of sitting lengthwise instead of crosswise upon the branch, and crouching close, it frequently escapes detection. Its flight is very silent, and its evolutions on the wing, when in pursuit of moths and chafers (its usual food) are very graceful. The provincial name of "Moth Hawk" is an appropriate one; but its soubriquet of "Goat-sucker" conveys a very erroneous impression. The country people say that they have seen this bird assail the udders of their flocks, to suck their milk, and hence give it the name of Goatsucker; but a little patient observation, and an examination of a few specimens, would show them that the food of this harmless bird is not milk, but

flies and moths, which cattle frequently disturb from the grass, and which the Nightjar darts down to seize as they fly round the legs of the sheep or cow.

A remarkable feature in the Nightjar is the pectinated claw on the middle toe of each foot, the use of which has been much disputed by naturalists. By some it is said to be employed to grasp the insects which are taken on the wing,* while others maintain that the bird makes use of it "to comb out the hairs set along the upper edge of the mouth on each side, or to clear the delicate edges and angles of the mouth from the sharp hooks on the legs of insects." †

In the parish in which I reside the Nightjar is a very uncommon bird: during the last ten years, I have only noted the occurrence of three specimens, in each case in autumn. In the summer of 1852 a pair were obtained, with two eggs, in Caen Wood, Hampstead. The nest is very simple, placed on the ground under shelter of an overhanging bush or tuft of heather, and the eggs are oval, white, beautifully marbled over with pale slate-colour and light ash-brown. I have seen a handsome pair of Nightjars which were shot in Scratch Wood, Edgeware-

^{*} White's 'Selborne,' Letter XXXVII. to Mr. Pennant, and Atkinson's 'Compendium of Ornithology,' p. 108, note.

[†] Yarrell's 'British Birds,' vol. ii., p. 284.

bury. In the neighbourhood of Elstree this species is rather more plentiful, and Mr. Power informs me that around Ealing, also, the Nightjar is not uncommon.

Mr. J. H. Belfrage once saw a young bird of this species in the woods which skirt the back of Forty Green. It was crouching among some dry sticks when he disturbed it, and flew to a neighbouring tree, where it so effectually concealed itself that he was unable to discover it again. The mottled colour of its plumage, closely resembling the tree upon which it sat, increased the difficulty in seeing it. The same gentleman has also noticed the Nightjar at Laleham, where he has seen three or four on the wing at once, hawking over the river at dusk.

The earliest date at which I have seen this handsome summer visitant here is the 8th May. On that
day last year I watched one through my glass for a
long time, as he sat upon the highest spray of a
Scotch fir in a plantation and uttered his peculiar
churring note. Although this "churr-r-r-r" is its
usual note, I have heard the Nightjar make a different noise on the wing, which sounds like "wh-ipwh-ip," but I have not yet satisfied myself whether
this sound proceeds from the bird's throat or whether
it is caused by striking the wings above the back as
it flies.

During September, when shooting among low underwood and felled timber, I have sometimes disturbed a Nightjar, and on such occasions, when flying away startled, its flight so much resembles that of a Hawk that I have twice seen a keeper shoot one, exclaiming, "There goes a Hawk!"

Some keepers kill this bird systematically, and will not be persuaded that it is perfectly harmless and really useful. One man actually took a pride in showing me six of these beautiful birds hanging upon an oak, in company with some Sparrowhawks, Jays, Magpies, and Stoats. It was useless for me to point to the bill and assert that it was not formed for tearing flesh like that of a Hawk. The answer received was, "You may depend upon it, Sir, they're reg'lar varmint, like all the rest of 'em, and I always kills 'em whenever I gets a sight on 'em."

ORDER RASORES—Family COLUMBIDÆ.

RING Dove, Columba palumbus. A few pairs breed with us every year, but this species is most numerous in the winter and early spring, when large flocks pass over and occasionally drop down upon the cleared bean-fields and stubbles. "The Ring Dove, by not feeding on insects, renders no service to man while visiting his fields. On the contrary, it is known to injure him considerably in his crop of rising clover. As soon as this plant begins, under

the influence of the vernal sun, to expand its leaves, the Ring Dove attacks the heart-shoot with fatal severity; and much address is required on the part of the farmer to scare the birds from their favourite food."* During the autumn and winter months the Ring Dove feeds voraciously on turnip-tops and varies its diet with peas, beans, acorns, and beechmast, and the berries of the hawthorn and holly.

The few nests of the Ring Dove which I have found in this county were almost all placed in ivycovered trees; but elsewhere I have remarked a preference for fir-trees and thorns.

This bird may always be distinguished from the Stock Dove at a distance by its superior size and conspicuous white collar. The two species are not unfrequently found flocking together.

A writer in 'The Intellectual Observer' for April, 1865, says: "Of what race or descent, of what origin or history, are the Guildhall pigeons? I know not; but if any naturalist inquires after city birds, they claim first mention, and might well have a place in the civic emblazonment of arms. It is rarely any one has the audacity to trap or lure a city pigeon. They are as sacred as Storks in Holland, and the birds of good omen that built in the temples and residences of classic Greece." The ornithologist in London

^{*} Waterton's 'Essays in Nat. History,' 1st Series, p. 148.

will find colonies of these pigeons at the Royal Exchange, at the terminus of the South-Eastern Railway at London Bridge, and at the British Museum.

STOCK DOVE, Columba anas. Mr. Blyth says that this bird is rare in the South of England; but Mr. Yarrell, I think more correctly, observes that Columbus anas is, in truth, a southern species. It was called Stock Dove, not because it was supposed by some to be the original stock of our domestic pigeons, but from its habit of nesting in stocks or pollards.*

The specific name of ænas is derived from "owos," and was given to it on account of the vinous claret colour of the neck-feathers.

I have occasionally observed small flocks in this county in the autumn and winter, but have seldom seen more than ten or a dozen individuals in each. This bird was formerly not uncommon in the Hampstead woods, and breeds so near London as

^{*} In all works on Ornithology to which I have referred, the Stock Dove is said to breed only in such situations as these, and in deserted rabbit-burrows; but in the summer of 1865 I discovered several pairs of this species nesting in cliffs facing the sea, after the fashion of the Rock Dove. Some notes on this new habitat will be found in the 'Zoologist' for 1865, p. 9670, and in 'The Field' of April 14, 1866.

Richmond. Mr. Jesse, in his 'Gleanings,' observes that some pairs of Stock Doves build every year in holes of old oak pollards in Richmond Park, and that the keepers there always take the young, which they say are excellent eating. It is more than probable that some few pairs of the Stock Dove remain to breed in this county also; for I have now and then seen a pair of birds here very late in the spring, and on one occasion Mr. Power shot one of a pair as late as the 13th May. The following year he killed three on July 13th, and one of them proved to be a bird of the year.

On the 27th April, 1863, I saw a pair of Pigeons about some pollard trees at Kingsbury, and, by crawling some distance on hands and knees, I obtained a sufficiently near view of the birds to satisfy myself that they were Stock Doves. I failed, however, to discover any nest in the neighbourhood, although, as I subsequently saw the birds again near the same spot, I have little doubt but that they were breeding.

Early in April, 1863, while walking along the brook called Silk Stream, a Stock Dove flew out of a clump of fir-trees, passing close enough to enable me to distinguish the species. The following week, on April 11th, I again walked to the same spot; it was late in the evening, and small flocks of Fieldfares were coming in successively to roost in the firs. Nothing, however, specially attracted my

attention until I repassed the spot on my return an hour later. I then saw at the foot of a fir-tree, and on the edge of the stream, a dead Stock Dove. The body was still warm, but the head had disappeared, and feathers were lying scattered in all directions, while the footprints of a rat were plainly visible on the soft mud around the bird. This set me thinking. Had the Stock Dove returned to roost in the firs and been attacked by the Fieldfares, who perhaps considered these trees there private property, not to be invaded by a stranger? or what had been the cause of death? The footprints of a rat were visible on the mud, and the bird had evidently been nibbled at. The much-vexed question occurred to me—Is the water-rat carnivorous? It had become dark, or I might have solved this latter question by patiently waiting and watching; but I could only speculate while I carried home the pigeon for a roast. During the summer months the common brown rat (Mus decumanus) is frequently to be found in the country, and often occupying water-rat holes. But supposing the rat in question was of this species, how did he obtain the bird?

The food of the Stock Dove is very similar to that of its congener the Ring Dove, but a fact very much in its favour is that, instead of confining its attention so much to turnips and clover, it feeds a good deal upon the seeds of some troublesome weeds. The crops of some specimens, examined as

soon as they were killed, contained a quantity of seeds of the wild mustard or charlock.

TURTLE DOVE, Columba turtur. A summer visitant from the South, arriving towards the end of April and leaving in September. During the latter month these birds may be seen in small flocks upon the stubbles, gleaning the scattered grain. They are very timid and difficult to approach, but, by sending some one round to the other side of the field to drive them, you may obtain a good shot as they pass over your head. They are very fair eating, but not equal in flavour to the Ring Dove.

I fancy Turtle Doves have two broods in the year, for I have found the eggs in May and July. The nest is generally placed in an ivy-covered tree, upon a branch close to the trunk.

I have known an instance of our British Turtle Dove pairing with an African Collared Turtle Dove, and a very pretty cross was the result, but whether the brood thus produced are fertile I have not yet ascertained.

Family PHASIANIDÆ.

PHEASANT, Phasianus colchicus. A few stragglers occasionally found in thick hedgerows and beanfields, but nowhere plentiful in the county, even where strictly preserved.

Mr. Murdoch, in his 'Observations on Game and the Game Laws,' justly remarks that "Pheasants have been, in truth, a profitable stock on the ground. They have been subsisting on weeds* and insects injurious to cultivation, and upon other substances not useful to man, and in return they furnish him with an article of wholesome and delicate food." This opinion is strengthened by the remarks of Mr. St. John, who says † that most, if not all, graminivorous birds amply repay the farmer for their food by the quantity of weeds they destroy during a great part of the year.

Pheasants are fond of acorns, beans, beech-mast, haws, and blackberries. Buckwheat appears to be specially attractive to them, and many small landowners, by sowing a little of this, profit by their proximity to game-preserves, and bag an occasional brace or two of birds. On examining the crop of a pied Pheasant, shot in October, 1864, I was surprised to find in it a common slow-worm (Anguis fragilis) which measured eight inches in length. It was not quite perfect, having lost the tip of the tail, otherwise, if whole, it would probably have measured nine inches.

Family Tetraonida.

PALLAS' SANDGROUSE, Syrrhaptes paradoxus.

^{*} Tuberous roots of the Silver weed (Potentilla anserina) recognized.

^{† &#}x27;Tour in Sutherlandshire,' vol. ii., p. 218.

During the summer of 1863 a good deal of interest was excited by the appearance in this country of great numbers of this Sandgrouse. These rare wanderers from the steppes of Tartary appeared first on the eastern coast, and gradually dispersed themselves over the whole face of the country.

Mr. Henry Stevenson, in an interesting paper in 'The Zoologist' for September, 1863, records the capture of no less than sixty-three specimens in Norfolk and Suffolk alone, and expresses an opinion that the birds which there appeared so simultaneously were members of one large flock, which had become scattered by frequent alarms.

I am enabled to include this species in the present Catalogue from the fact that, in the month of July, 1863, two of these birds were killed, at a double shot, by Mr. John Read, near South Mimms. They were both males, and in perfect plumage, except that in one specimen one of the elongated tail-feathers had been shot away. They were excessively plump, and their crops were filled with the seeds of red clover and common plantain. In the gizzards were the same two kinds of seeds in a semi-comminuted state, and mixed with an abundance of small semi-transparent gravel stones, scarcely larger than the seeds.

The capture of these two birds is recorded by Mr. Newman, in 'The Zoologist' (p. 8685), in which periodical will be found various particulars respecting the food and habits of this interesting species.*

Partridge, Perdix cinerea. The best Partridge ground lies in the north portion of the county, where the birds are usually very fine and healthy, but, owing to the greater part of the land in Middlesex being grass-land, and roots and stubble comparatively scarce, Partridges are nowhere very plentiful.

In the 27th year of his reign, Henry VIII. issued a proclamation in order to preserve the Partridges, Pheasants, and Herons "from his palace at Westminster to St. Giles-in-the-Fields, and from thence to Islington, Hampstead, Highgate, and Hornsey Park." Any person, of whatever rank, who should presume to kill or in anywise molest these birds, was to be thrown into prison, and visited by such other punishments as should seem meet to his highness the king.

How oddly this proclamation would now read to the present inhabitants of Westminster and St. Giles, where a Partridge or Pheasant is no longer to be found, except on the poulterer's stalls.

Partridges pair very early, and the hen bird is generally sitting by the middle of April. I am not aware that more than one brood is reared in a season, but on one occasion a nest of young Par-

^{*} See pp. 8682, 8708, 8721, 8726, 8769, 8826, 8849.

tridges, just hatched, was found between Kingsbury and Harrow as late as the 12th August.

REDLEGGED PARTRIDGE, Perdix rubra. Until very recently, I was not aware that this handsome species had ever been seen in Middlesex, and I am still inclined to think that its occurrence here is quite accidental.

In October, 1865, a gentleman of my acquaintance killed two Redlegged Partridges out of a covey near Brockley Hill, and a farmer at Elstree assured me that a brood had been reared upon his farm the same year, and that he had shot several of them on the 4th September.

By a glance at the map it will be seen that the two localities above-mentioned are at no great distance from the borders of Hertfordshire, in some parts of which county the Redlegged Partridge is not uncommon.

Quail, Perdix coturnix. Of rare occurrence. In the spring of 1842, a nest of thirteen eggs was taken in a field between Kingsbury and Harrow, about half-a-mile from Harrow Church, and another nest, containing eight eggs, was taken also near Harrow, in May, 1848, and was purchased by Mr. Bond for his collection. The bird has once been killed at Boreham Wood, and, about six years ago, towards the end of June, a solitary specimen of the Quail was shot in a field near Bishop's Wood, Hampstead, by Mr. Ward, of

that place. That the Quail is a friend to the farmer, and a bird everywhere to be encouraged, the reader will be inclined to admit on perusing the following extract: "On examination of the food contained in about thirty Quails, shot at various times and places during winter and early spring, seven-eighths of it was found to consist of the seeds of weeds, such as the different species of plantain (Plantago), persicaria (Polygonum, P. minus, &c.), dock (Rumex), wild vetch (Vicia), chickweed (Stellaria, &c.). The crop of one bird being filled with the seeds of Stellaria media, I reckoned a certain number of them; and judging of the rest accordingly, found that there could not be less in it than 3,500."*

ORDER GRALLATORES.—Family CHARADRIDÆ.

Great Ployer, Stone Curlew, or Thick-knee, Œdicnemus crepitans. According to the observations of the Hon. and Rev. W. Herbert, the Stone Curlew is found only on chalk, or on ploughed land where there is a chalk subsoil. He says: "It never strayed to the sand or gravel, and consequently was not upon the heaths, but in the chalky turnip-fields."

^{*} Thompson's 'Natural History of Ireland,' vol. ii. p. 76.

Whether this may be taken as an invariable rule or not, I must leave it to others to determine; but it is a remarkable fact that in this county, where there is but little chalk, the Stone Curlew is a very scarce bird. I know of one instance only in which it has occurred in Middlesex. This was a male bird, which was shot towards the end of April, 1848, in a fallow field near Bushey Heath, and was taken for preservation to Mr. Spencer, of Great Portland Street, from whom I received a notice of the fact.

GOLDEN PLOYER, Charadrius pluvialis. Visits us in flocks towards the end of autumn, and is, perhaps, most numerous about the end of November. At this time I am pretty sure of finding a flock upon some fallows between Kingsbury and Stanmore. On the 23rd November, 1861, I computed that there were nearly two hundred birds in a flock which I saw there. I have frequently noticed this species feeding in company with Fieldfares and Starlings, but independently of its size the Golden Plover may always be distinguished when on the ground at a distance, by its peculiar motion; running with short quick steps, and stopping abruptly; now and then dipping down the head to seize a worm, and elevating the tail considerably; while ever and anon its clear plaintive whistle falls pleasantly upon the When walking over the Cheviots in the breeding season, the whistle of the Golden Plover seemed unceasing, and proceeded from the birds while on the ground; but in the winter I have never remarked these birds to call much except when disturbed and on the wing.

Their plaintive note, when heard upon a wild moor or mountain-side, has something indescribably pleasurable about it; and, like Burns, I never hear the loud, solitary whistle of the Curlew, or the wild mixing cadence of a troop of Plover, without feeling an elevation of soul, like the enthusiasm of devotion or poetry. Although a wary and suspicious bird, there are times when the Golden Plover will suffer a near approach before taking flight. In the breeding season I have several times crept within forty yards of a Golden Plover on the ground, and during rain they appear so loth to rise, that by moving very slowly the sportsman may generally get well within shot before they take the alarm.

I have remarked the same thing, however, with regard to other birds, e.g., the Dunlin and Ring Plover. I shall never forget the disappointment I experienced when, on one occasion, during a heavy shower, having approached by boat within thirty yards of a flock of Golden Plover, I calculated upon bagging at least a dozen, and when the flock rose from the mud flat on which I found them, both barrels missed fire!

The period at which the Golden Plover assumes the summer plumage seems to vary considerably. I have seen birds killed on the same day, some in

almost perfect summer dress, and others with only a few scattered black feathers on the breast. Mr. W. Jeffery, of Ratham, Sussex, drew my attention to the fact that the Grey Plover (Vanellus melanogaster) is occasionally found with yellow spots on the back and wings, like a Golden Plover, and showed me a specimen in which this peculiarity was very marked. Owing, perhaps, to this circumstance, and to the fact that in winter the golden spots of C. pluvialis become very faint, the two species are not unfrequently confounded. But if any one will once take the trouble to compare the two birds together, he will never again mistake them. The Golden Plover is the smaller bird, has shorter and more slender legs and bill, and has no hind-toe like the Grey Plover; while the long feathers under the wings in the Golden Plover are white, and in the Grey Plover black.

If not a positive benefactor, the Golden Plover may at all events be considered a harmless visitor. Its food appears to be chiefly small beetles and earth-worms, mixed with a good deal of gravel or grit.

DOTTEREL, Charadrius morinellus. The Hon. and Rev. W. Herbert, to whom I have referred under the head of Great Plover, observes that the Dotterel is peculiar to dry chalk districts, and feeds chiefly on small green beetles, which are probably peculiar to such localities. The absence of chalk, therefore,

may, perhaps, account for the scarcity of the species in this county. A small flock, or "trip,"* as it is called, of these birds, appeared in April, 1858, on Burnt Oak Farm, in the parish of Kingsbury. One of them was shot, and is now in the collection of Mr. Bond.

RINGED PLOVER, Charadrius hiaticula. A regular visitant in spring and autumn. Small flocks appear early in May, and remain about the reservoirs for some days. They then leave us, and, after an absence of about seven weeks, reappear in flocks of from half-a-dozen to twenty or more, when young birds as well as old are seen. Some young birds, shot towards the end of July accorded well with the description given in Yarrell's 'British Birds,' having the beak almost entirely black; no black band over the white on the forehead; the lore, ear-coverts, and collar round the lower part of the neck only dusky; and the legs and toes pale yellow. With regard to the food that they find here, I have examined the stomachs of a good many, and found them to contain

^{*} The various terms applied to different species of winged game when in flocks, are as follows:—A brood of Grouse; a covey of Partridges; a bevy of Quail; a nid of Pheasants; a flight of Woodcocks; a wisp of Snipe; a team of Wild Ducks; a spring of Teal; a skein of Geese (when flying; a gaggle of Geese (when at rest); a wing of Plover; a trip of Dotterel; a sege of Herons; a herd of Swans; a dropping of Shelldrake; a covert of Coots.

either the remains of small beetles and worms, or a mass of semi-digested vegetable matter,—sometimes both,—and invariably some small particles of coarse sand or gravel.*

Yarrell says that Ringed Plovers pair and go to nest early in the season, and he mentions the fact of Mr. Salmon having found eggs by the 30th March. I may observe that only old birds are to be found here in May, being then apparently on the way to their breeding-grounds; and we do not see the young until the end of July or beginning of August. I have found these birds breeding on the coasts of Sussex and Lancashire. In Sussex, on the 9th May, a very small proportion of the nests found contained eggs, and in Lancashire eggs were quite fresh, and evidently just laid, on May 31st. From the 14th to the 18th May, inclusive, I have looked for the eggs of this bird at a breeding station on the Northumberland coast, but, although I saw several old birds, I failed to discover either eggs or young. I suspect that the more northward the breedingground, the later the period of incubation.

With regard to Mr. Yarrell's statement of Mr. Salmon having found these eggs on March 30th, there must, I think, be some mistake about the

^{*} In specimens shot at different times on the coast, I have found, in addition to worms and insects, sandhoppers and fragments of shell.

date, or else it is the exception and not the rule, to find this bird breeding so early. Otherwise I must have met with young birds at the times and places above mentioned.

The statement of the Rev. L. Jenyns* that "this species pairs in May," is more in accordance with my own experience.†

There is something very wild and plaintive in the cry of the Ring Plover, when heard by the sea-shore, or across a waste of sand or shingle, which situations are its usual haunts. Its ordinary note is,—



In the breeding season it differs somewhat; the first note is doubled, and it is then,—



Whether we have two species of Ringed Plover confounded under one name (C. hiaticula) is, I think, a question which deserves the attention of naturalists. I have remarked not only a great difference in

^{* &#}x27;Manual of British Vertebrate Animals.'

[†] Mr. Thompson, in his 'Birds of Ireland,' has given dates of the nesting of this species, as observed in various localities, and the earliest date given is "May 6th"—the locality, "coast of Wexford."

point of size between individuals obtained at different places (and even, occasionally, at the same place), but also that some birds have the base of both mandibles yellow, while others have the base of the under mandible only of that colour; and again, that some have the outer tail-feather on each side pure white, which Mr. Yarrell says is a distinguishing character of the Ringed Plover, while others show a dusky spot on the inner web of that feather.

LITTLE RINGED PLOVER, Charadrius minor. In noticing the occurrence of this rare British bird in Middlesex, I am happy to be able to speak from personal observation.

On the 30th August, 1864, while strolling round the reservoir at Kingsbury with my gun, on the look out for Ringed Plovers, Dunlin, and other waders that usually visit us at this time of year, I observed a small bird feeding on the shore within a few yards of a Green Sandpiper. The latter was very wild, and rose out of shot, but the former remained feeding, and allowed me to approach within fifty yards. I at first mistook it for a young Ringed Plover, Charadrius hiaticula, never dreaming of Charadrius minor. As soon as it rose my finger was on the trigger, but hearing the bird's note, which was not at all like that of the Ringed Plover, but rather like that of the Common Sandpiper, I was induced to wait and mark the bird

down, in order to observe it more carefully. As it flew away I remarked no white line across the wings, and this strengthened my belief that it was not the Common Ringed Plover. Watching it until it again alighted, about a hundred yards distant, I crawled along on hands and knees, and obtained a good view of the bird as it ran along the edge of the water, occasionally stopping to pick up food. In its flight and note it appeared rather to resemble the Sandpipers, but its actions when on the ground were much like those of the Ringed Plover. It did not associate, however, with the last-named species, although there was a little flock of them also at the water. After watching it for some time, I put it up again and shot it. On picking it up there could be no doubt of the species—a veritable Little Ringed Plover, although evidently a young bird.

More slender in form than the Common Ringed Plover, the legs are lighter in colour, and the bill almost black. I say "almost black," because in the living bird the base of the under mandible is decidedly tinged with yellow, which fades, however, and becomes black after the bird has been dead a few hours. Many authors say "the bill is wholly black," but they probably described from specimens which had been some time preserved, and consequently had lost colour; and on this account, no doubt, they have also overlooked a peculiarity which at once attracted my attention. The eye, which is full and

dark, almost black, is surrounded by a circle of a beautiful bright yellow, and looks as if it were set in gold, but this colour entirely disappears soon after death. At the time it reminded me a good deal of the eye of the Great Plover (Œdicnemus) on a small scale.

I had then an opportunity, for the first time, of satisfying myself that the Little Ringed Plover differs also considerably from the Common Ringed Plover in the following respects:

The shaft of the *first* quill-feather only, in the wing, is white; and the white spots, which are always present on the webs of the wing-feathers in the common species, and which give the appearance of a white bar across the wing in flight, are in the Little Ringed Plover absent, and in lieu thereof the tips only of the wing-feathers are margined with dull white. In the last-named species, also, there is a dusky spot on the inner web of the outer tail-feather on each side, which feather in the Common Ringed Plover is always pure white. The number of tail-feathers, however, is the same.

Before skinning my specimen I took it to Mr. Gould, together with a Common Ring Plover, which I had killed the same day, and which was useful for comparison. Mr. Gould then carefully ascertained the exact measurements and weight of each, which were as follows:—

	Common Ringed Plover.	Little Ringed Plover.		
Weight	. 21 oz. 24 grs.	. 14 oz. 65 grs.		
Total length .	. $7\frac{1}{2}$ inches .	. 61 inches.		
Tail	$2\frac{7}{8}$,, .	$2\frac{5}{8}$,,		
Extent of wings .	. 15 ,, .	. 13 ,,		
Length of wing from				
carpal joint to end	of			
first quill-feather	$5\frac{1}{8}$,, .	$4\frac{1}{2}$,,		
Tarsus	. 1 inch (full)	. 1 inch		

I subsequently dissected the birds, and found the Common Ring Plover to be an adult female in the autumn dress, and the Little Ring Plover an immature male of the year. The difference, therefore, between their respective weights was probably greater than it would have been had both birds been adult. The measurements, I think, would scarcely vary; at all events they would not vary in the same proportion as the weight. If one may draw conclusions from a single specimen, the food of the two species is very similar, for the stomach of C. hiaticula contained the remains of worms and beetles, and numerous small pebbles, while that of C. minor was filled with small beetles and a single caddis-worm, but contained no sand or pebbles of any sort.

I carefully preserved the sternum of each, and found a considerable difference in the measurement of the corresponding parts, thus:—

Common Plo		Little Ringed Plover.		
Total length of keel . 1 inch	6 lines .	1 inch 4 lines.		
Length of keel from				
base of corracoids . 1 ,,	5 ,,	1 " 3 "		
Greatest depth of keel . 7½ lin	es	5½ lines.		
Length of corracoid . 71/2 ,,		6 ,,		
Length of clavicle . 10 ,,		8 "		
Length of scapular . 1 inch	1 line .	11 "		
Greatest width of furcal				
bone 4 lines	3	3 ,,		

The only note which I have heard uttered by the Little Ringed Plover is,—



Since writing the above, I have been informed by Mr. Mitford, of Hampstead, that he shot a little Ringed Plover at the same piece of water on the 20th August, of the same year. This specimen, which was also immature, he intended to have preserved, but being called from home before he had time to skin it, it was unfortunately cooked and eaten.

He remarked a curious fact with regard to it, which was that, a few minutes after it had been shot, it was as stiff as if it had been dead for some hours, from which he inferred that the bird had only just arrived from passage, as he had remarked the

same thing with regard to other birds killed soon after their arrival at the time of their migration to this country.

LAPWING OF PEEWIT, Vanellus cristatus. This species is resident with us throughout the year, but receives an increase to its numbers in spring and autumn, when large flocks are frequently seen on the fallows and wastes. At one time these birds used to breed regularly in a large rushy field near Kingsbury Reservoir, but, finding their nests continually plundered, they deserted the place and moved to a less frequented spot about two miles distant. In a rough field, near Elstree Reservoir, I have known more than twenty nests found in a day. Mr. Belfrage has remarked that Peewits breed at Chertsey, and I have found the eggs at Kenton and at Wembley. I have tried to rear the young, which run as soon as hatched, but have never succeeded in keeping them alive for more than a few days.

The ordinary note of the Peewit is-



In the breeding season, as we approach the nest, it is—



uttered quicker and more frequently, as the bird tumbles in the air in the most grotesque way, while it endeavours to allure us away from the eggs. Sometimes the note is—



and this is generally uttered when the birds are on the ground and pairing. It is, perhaps, the most efficient note to use as a call.

In some places the Lapwing is known by the name of Green Plover, and it is this bird which furnishes us with the delicacy known as "plover's eggs."

It is easily known at a distance by its black and white appearance, rounded wings, and slow, laboured flight.

Sanderling, Calidris arenaria. This handsome little bird may, with propriety, be considered as the connecting link between the Plovers and Sandpipers. Like the former it has no hind toe, and any one who has examined a recently-killed specimen cannot fail to have remarked the high Plover-shaped head which this bird possesses, while its bill, in length and substance, appears intermediate between those of the two above-mentioned genera.

It is more maritime in its habits than many of its congeners, frequenting the sands and mud-flats by the sea, and seldom flying far inland. The plumage, which varies quite as much as that of the Dunlin, differs according to the season.

Many persons confound this bird with the Dunlin, calling both Stints, but it may be easily known at all times of the year from that bird by its superior size, shorter and stouter bill, longer and stouter tarsus, and particularly by the absence of a hind toe. The Sanderling, moreover, never at any season has the black breast-feathers which mark the summer plumage of the Dunlin.

I am not aware of more than three instances of its occurrence in this county. In a note in 'The Zoologist,' dated 17th June, 1844, Mr. Bond has recorded the fact that one was shot at Kingsbury Reservoir, and I have seen two others which were obtained at the same piece of water about ten years later. These two were in the autumn plumage. No collector, so far as I am aware, has yet obtained authentic eggs of the Sanderling, and where this bird breeds seems to be still a mystery. Throughout the autumn and winter months they may be seen in flocks on some parts of the coast, but as soon as the warm spring days return, they suddenly depart, no one knows whither. I once shot three Sanderlings on the Lancashire coast as late as the 30th May, but this must be an unusual date at which to find them here, or they must be late breeders. On looking to the contents of the stomach, I found the food to consist of small

univalves, sandhoppers, and marine insects, mingled with minute particles of gravel.

TURNSTONE, Strepsilas interpres. It is very rare to find this species so far inland, so thoroughly marine is it in its habits, and I am not aware, moreover, that it is considered common on any part of our coast. It retires to the far North for the breeding season, and appears to be most plentiful here in the autumn and early spring.* Although its habits confine it chiefly to the sea-shore, individuals nevertheless occasionally mingle with a flock of Ring Plovers or Dunlin, and thus stray some little distance inland in company with these birds.

This usually happens about the time that the various flocks of waders are migrating in spring and autumn.

On the 24th August, 1865, I most unexpectedly met with a Turnstone so far inland as the Reservoir at Kingsbury, which must be thirty miles from the nearest sea-point. I was walking round this sheet of water with my gun, and had just fired both barrels at a couple of Ring Plovers, killing one and missing the other; and while standing perfectly still, endeavouring to mark down the fugitive, a bird came flying up the water, uttering a loud note, which at

^{*} The latest stay that I have remarked for this species is the 18th May, on which date I once shot two out of a flock on the Northumbrian coast.

once attracted my attention, and not observing me, I suppose, alighted within gunshot upon the shingle. I instantly recognized it as a Turnstone, and quickly endeavoured to load one barrel with as little delay as possible, knowing that the bird could only be a passing visitant, and would make no stay here were it unmolested. The first motion of my arm, however, alarmed it, and, again uttering its peculiar loud twitter, it got up and passed close enough for me to see that it was a young bird. It then rose high in the air, and flew down the water, when I lost sight of it, and never again saw it.

On mentioning this circumstance the following day to the keeper, he informed me that he had noticed this bird at the water for two days previously, but it had eluded his attempts to shoot it. He described the species accurately, and added that many years ago he had killed two, late in autumn, at the same Reservoir.

OYSTERCATCHER, Hæmatopus ostralegus. Provincial, Sea-pie. From the contrast of its colours, black and white body, orange bill, red eye, and pink legs and feet, the Oystercatcher is one of the most attractive of our waders, and I hardly know a prettier sight than a flock of these birds, as viewed through a glass, feeding upon a rocky shore at low water. The changing attitudes in the flock, now compact, now scattered, with an occasional quarrel for a mussel or small crab, furnish a study alike for

the naturalist and artist; while ever and anon a noisy individual utters its ringing call-note—



or, if disturbed and on the wing, its loud, clear whistle—



The Oystercatcher is essentially a seashore bird, and is rarely found at any distance inland. In a list of water birds occurring at Kingsbury Reservoir, published in 'The Zoologist' for 1843, I find the Oystercatcher included; and in July, 1859, Mr. Bond shot a male of this species at the same piece of water. I have recently examined a specimen in winter plumage, killed at Elstree Reservoir, early in April, 1866.

Mr. Yarrell says: "I have known this bird killed as high up the Thames as Oatlands (near Shepperton), which is at least fifty miles from the mouth of the river."

In its usual haunts the Oystercatcher is extremely wary, and keeps out in the open and most exposed part of the coast, generally in small flocks of about ten or a dozen. On this account it is very difficult to approach, except under cover or in a boat. Many

a time have I crawled on hands and knees for halfa-mile along the sands to try and get a shot, without success, and no one who has not tried it knows the luxury of standing upright after this tiring work. Unless the ground present some cover in the shape of a sea wall or a few scattered boulders of rock, the surest way to obtain a shot is with a boat. Instead of rowing alongshore, however, it is better to put out to some distance, and then bear down directly on the flock. In this way they allow a nearer approach, and as they almost invariably follow the coast-line, or cross the water when flying, a good right or left shot may be obtained. If you are well concealed, you may arrest the flight of a single bird, and attract it within shot by imitating the call-note above given, but this artifice seldom succeeds with a flock unless it consists of only a few birds. The loud whistle secondly noted above is more frequently heard in the breeding season, and is uttered frequently, as if in alarm when the eggs or young are approached. At this season the Oystercatcher becomes more fearless. On two or three occasions when I had found the nest, one of the parent birds continued to fly round me within shot. This I suspected to be the female, but the plumage of both sexes is so similar that they can only be distinguished by dissection.

Many authors state that the Oystercatcher always lays four eggs. Out of a score of nests which I have

taken (during the last week of May and first week of June) not one of them contained four eggs. The full complement appeared to be three, for in several instances I found three eggs so much incubated that it was impossible to blow them.

I have noticed a peculiarity which this bird appears to have, in common with some few other of the waders. When alighting at the edge of the water, the flocks always pitch with their heads to the wind, and no doubt the reason for this is, that were they to alight with the wind at their backs, they might be carried over the edge into the water.

In concluding my notes on this species, it may be observed that the term 'Oystercatcher' is a misnomer; for, although the bird has a long powerful bill with which it can detach limpets from the rock, and break open mussels and small crabs, an oyster entirely baffles all its attempts.

Family ARDEIDÆ.

Heron, Ardea cinerea. The Heron is a common resident, and appears most numerous in autumn, at which season many may be seen in the course of a walk, fishing at our reservoirs and brooks. The majority of these are young birds. One day in September I counted seven within a short distance of each other.

There is a heronry at Osterley Park, in this

county, the seat of Earl Jersey,* and another at Wanstead Park, in the adjoining county of Essex, the property of Lord Cowley; and it is no doubt to these colonies that the stragglers which we see belong.

I have elsewhere observed that the Regent's Canal Company draw off the water from the reservoirs of Kingsbury and Elstree, in order to supply the lochs on the canal, and when the water has been much reduced by this means, as well as by evaporation and want of rain, the Herons are in their glory. They are then enabled to wade out to some distance, and regale themselves among the roach and eels with which the reservoirs abound. One day in November, 1864, a full-grown young Heron was found at Kingsbury firmly held by a fishing line, the hook fixed in its throat, and the line twisted round its legs; it had swallowed a bait set for pike.

A favourite haunt of the Heron is the Well Springs at Kingsbury, before mentioned. Besides the brook there is a quiet sheltered pond, and it is not an uncommon thing to find two or three Herons fishing there in the evening.

Their feeding-time is usually at daybreak and dusk. In the middle of the day I have seen three or four in company standing out in the middle of a

^{*} There was formerly also a heronry at Oatlands Park, near Shepperton, but this no longer exists.

field, apparently resting themselves and digesting their morning meal.

At this time they are very difficult to approach, as they keep at a distance from all cover which can conceal an enemy. At daybreak, however, I have more than once come suddenly upon a Heron while busily employed under the steep bank of a brook, and have thus been able to knock him down with snipe-shot before he could get out of range. It was ludicrous to observe the surprise of the bird when he first became aware of my presence, and, with a hoarse croak, clumsily endeavoured to get away. Under similar circumstances, a friend once got within ten yards of a Heron, which was either so surprised or frightened at his appearance that, instead of attempting to fly, it crouched down in the water, and he was compelled to throw a stone at it before it would rise. I once witnessed the same thing with regard to a Snipe.

The Heron is one of the earliest birds to breed, and generally lays in March. It is one of the few waders which resort to trees for the purpose of nidification. I climbed to a nest in one of the heronries above mentioned, on the 5th April, and brought down four eggs, which were considerably incubated. The nest was situated upon the top of an elm, composed of large twigs, principally elm and willow, and lined with smaller twigs, fibre, and dry grass.

The bright bluish green eggs, equal in size to those of a Wild Duck, contrasted prettily with the dark material upon which they were laid. Two of the eggs were more incubated than the others, from which we may infer that the bird commences to sit before the full complement is laid. Several other nests on the same day contained young of various ages, so that no precise date for laying can be given.

If, in the early part of the spring, the weather be mild and open, the Herons commence building much sooner than otherwise.

Purple Heron, Ardea purpurea. Mr. Selby has recorded the capture of a Purple Heron, "near London," but gives no particulars nor date.

Squacco Heron, Ardea ralloides. A specimen of this bird was shot at Kingsbury Reservoir in 1840, and a second example has since been obtained at the same place, but I am uncertain of the exact date.

BITTERN, Ardea stellaris. Owing to the increased drainage of marsh and waste lands, this handsome species is everywhere becoming scarce. It was formerly in much request for the table, being considered a delicacy, and in bills of fare of some of the ancient city feasts the Bittern, as well as the Heron, appears as game. The nature of the soil in Middlesex cannot be considered favourable to this species, for it is a marsh-loving bird; consequently instances of its occurrence in this county are rare. A specimen

was obtained at Kingsbury Reservoir in 1843, as recorded in 'The Zoologist' for that year, and Mr. James Dutton, of Hammersmith, sent me word that a fine Bittern was shot at Jessop's Ait, Chiswick, on the 7th January, 1854. About the same time another was killed near Kew Bridge, by the toll-keeper there. A fourth example occurred at Redhill, in the parish of Hendon, during the winter of 1856. This bird was shot at the brook running through the field which adjoins "The Bald-faced Stag," and either that winter or the following a Bittern was killed at Stanmore by Mr. F. King.

LITTLE BITTERN, Ardea minuta. Rare. Colonel Montagu mentions one which was shot near London in the month of May, 1782, and was placed in the Leverian Museum.

The Rev. L. Jenyns, in his 'Manual of British Vertebrates,' records the occurrence of a specimen at Uxbridge Moor, and adds that this bird has been killed, in more than one instance, near London.

A male Little Bittern, in good plumage, shot at Elstree Reservoir in 1840, is in the collection of Mr. Bond, and another, also a male, was more recently obtained at Kingsbury Reservoir. The capture of the last-named specimen is recorded in 'The Zoologist' for 1843. On the 18th September, 1847, a Little Bittern was killed on the River Lea, near Enfield, by a bargeman, and sent to Mr. Bond. It was a young bird of the year, and from its

appearance had probably been bred in the neighbourhood, as there were some remains of the nestling down and it was not fully fledged.

NIGHT HERON, Ardea nycticorax. According to Pennant, the first specimen of the Night Heron killed in England was shot near London in May, 1782, since which time, probably, many others have been obtained in this county without any record preserved. In a list of water birds occurring at Kingsbury Reservoir, which was published in 'The Zoologist' for 1843, the Night Heron is included.

As its name implies, this bird is nocturnal in its habits, secreting itself by day among reeds and rushes, and takes wing on the approach of evening, with harsh, disagreeable notes, to visit its feeding grounds.

Spoonbill, Platalea leucorodia. So far as I am aware, that rare visitant, the Spoonbill, has only once been observed in the county. On the 23rd October, 1865, a pair of Spoonbills were seen at Kingsbury Reservoir, and, on being disturbed and shot at, flew to some little distance and alighted in a field near a flock of geese. It is conjectured that one of the birds was wounded, and, dropping down to rest, was joined by the other, for had not this been the case both birds would probably have gone away at the first alarm. However this may be, they were pursued by two gunners, who, finding them very shy, and not to be approached directly, employed

a third person to go round and drive them, whilst they concealed themselves in a favourable position under a bank where some overhanging bushes formed a good screen. This plan had the desired effect; for the birds on being again disturbed came right over them, and were both killed. I heard of the occurrence the following day, and, ascertaining that the birds had been sent to London for preservation, I traced them to the birdstuffer with whom they had been left, and fortunately arrived in time to see them before they were skinned. I then carefully noted down the description and measurements of each, and the same evening saw them skinned, and ascertained the sexes by dissection.

They proved, on examination, to be male and female birds of the year. The bill was of a brownish flesh-colour, darker towards the tip (the reverse of what is seen in old birds), and in both specimens was very soft and weak, that of the male bird being the darker of the two.

The chin and lore of both were completely bare; the former of a yellow and the latter of a greyish colour.

A remarkable feature was the tongue, so wonderfully small in comparison with the length of bill: in the two specimens under examination, the tongue was not more than an eighth part of the entire length of bill. There was no appearance of any crest in either bird, nor could any trace of buffcolour be observed on the breast. The true colour of the eve could not with certainty be determined, since the birds had been dead for some time before I saw them; but it appeared that the irides were hazel and pupils black. The upper portions of the plumage were of a dirty white colour, darker on the back and scapulars, the under parts of a purer white. All the quill-feathers with black shafts, presenting a curious and very pretty appearance when expanded. The first four quill-feathers white, with dark brown tips, as follows:-First, with dark brown stripe on outer web; second, first half of outer web brown, then white; third and fourth outer webs nearly all white. The first quill shortest; the second longest in the wing. The tail square and white; the legs black. The feet semi-palmated, and with the under surface remarkably concave.

The respective measurements of each were as follows:—

				Male.			Female.		
				ft.	in.			ft.	in.
Total length .				2	$7\frac{1}{2}$			2	64
Length of	bill			0	7			0	65
,,	wing fro	m car	pus	1	$2\frac{1}{4}$			1	2
,,	tibia	1.13	A. 0.	0	$7\frac{1}{2}$			0	71
,,	tarsus			0	$5\frac{1}{2}$			0	$5\frac{1}{2}$
,,,	tail			0	5			0	5
Extent of	wings			4	4			4	3

Both birds were in pretty good condition; the male being the plumper and heavier bird of the two.

With a view of ascertaining what food they had recently obtained, I carefully examined the stomach of each. That of the female was almost empty, with the exception of a few small fish-bones (from their size, probably roach), a small mass of vegetable fibre, together with the fruit of a Sparganium and a single carpal of a Potamogeton, probably P. pectinatus. That of the male was distended with a larger quantity of small bones and remains of fish. The bones had the appearance of being ground up small, being all very much of one size, although the inner coating of the stomach was by no means rough or hard, and there were no traces of gravel or quartz, nor, indeed, of any substance which would produce or aid such a result.

I was informed by two or three persons who saw these Spoonbills on the wing, that they flew like Herons, but faster, and with the head and neck stretched out like a Duck instead of being thrown back, Heron-like, between the shoulders. They were not heard to utter any note. I examined the birds carefully with a view to ascertain whether they had escaped from confinement, but as the wings were quite perfect, the tail-feathers not in the least worn, and the whole plumage, although immature, yet in good order, I have no doubt that the birds were really wild. Moving southwards at the approach of winter, and tempted, no doubt, to make a resting-place of the expansive reservoir above-named (which

would be perceived by a bird in flight at a considerable distance), they had unfortunately alighted, and, as it would seem, had barely time to snatch a hasty meal before they met a cruel and unexpected death.

Family SCOLOPACIDÆ.

Curlew, Numerius arquata. Although not a regular visitant like some of the Sandpipers and Plovers, the Curlew is occasionally observed during the periods of migration in spring and autumn. It is generally heard before it is seen, and has a loud wild note, which may be rendered thus:—



Besides this note, which sounds like "cour-lieu," it has another harsher call, "wha-up;" * and in the spring I have heard a note like "whee-ou, whee-ou."

Curlews differ much in size, and I have often been surprised at the great variation which exists in the length of the bill in different individuals. A friend has suggested that this difference is one of sex; and I have made a note of his suggestion, in order to test it by the dissection of any specimens

^{*} In some parts of the country the Curlew is known by the name of "Whaup."

I may obtain. I incline to think, however, that age is more probably the cause of the variation.

Whimbrel, Numerius phæopus. Provincial, Titterel. A rare visitant. Mr. Spencer tells me that he has once observed this species at Kingsbury Reservoir; his brother killed one there in the spring of 1850, and I have seen an indifferent specimen which was shot at the same piece of water in the autumn of 1859. So recently as the 10th May, 1866, a solitary Whimbrel was shot at Kingsbury by Mr. Charles Wharton, of Willesden. It was a male bird, and the measurements, as given by Mr. Wharton, in 'The Zoologist' for June, 1866, were as follows:—Length, from tip of bill to end of tail, 17¼ inches; length of bill, 3¼ inches; extent of wing, 28½ inches.

It is not an uncommon bird on the Sussex coast in spring and autumn, where it is sometimes seen in large flocks. At the approach of the breeding season it retires North. It is a wary and difficult bird to shoot, and is best approached in a boat. It has a loud clear note, which sounds very musical when heard over the water.



Spotted or Dusky Redshank, Totanus fuscus. Of rare occurrence. A fine bird of this species, in full

breeding plumage, was killed at Kingsbury Reservoir, in June, 1841, and was for some time in the possession of a gentleman at Eton. I understand that it is now in the collection at Eton School. A second example, in winter plumage, was shot at Stone Bridge, on the Brent, in 1849; and in August, 1859, a third was killed at the reservoir above named.

REDSHANK, Totanus calidris. An uncertain visitant, appearing occasionally at the periodical migrations in spring and autumn. Mr. Jesse forwarded to Mr. Yarrell a bird of this species, which had been killed at Hampton in autumn. Mr. Bond has shot a few specimens at different times at Kingsbury Reservoir, and Mr. Mitford saw one there as recently as the 25th April, 1865. I have three examples in my own collection, obtained at the same piece of water; one an adult male in summer plumage, shot in May, 1863; and two, male and female birds of the year, killed on the 17th August following. The two latter birds have not the rich markings peculiar to the adult bird in summer plumage, their breasts being almost spotless; the bill, head, and back lighter in colour, and the legs of a paler orange tint. On examination I found the stomachs of these birds filled with a mass of vegetable fibre which I was unable to recognize, together with numerous small particles of gravel.

GREEN SANDPIPER, Totanus ochropus. There are

many birds which, though never found breeding in England, visit us either occasionally by accident, or regularly at certain periods of the year. Owing to the increased and increasing number of field-naturalists throughout the country, the habits of most of these, during their stay with us, are now, probably, pretty well known. There are, nevertheless, a few about which we have still something to learn, and amongst these few, I believe, may be classed the Green Sandpiper.

In the various works on British birds which I have perused, the information afforded on the habits of this species is very scant. Most authors agree in considering it a scarce and uncertain visitant to this country, and indeed assert that its habits are yet imperfectly understood.

Having had good opportunities of studying the habits of this bird in Middlesex, the following notes, it is hoped, will be the more acceptable to ornithologists, since they are the result, not of plagiarism, but of actual observation.

Notwithstanding its reputed rarity, I have long considered the Green Sandpiper as a regular visitant to this country in spring and autumn. It appears first in April, and generally arrives about the 25th of that month, and may then be found, singly or in pairs, along the brook sides, where it frequents the little bays of mud and sand that are often formed where the stream winds. At this time of year the

Green Sandpiper seldom stays more than a month, generally departing again in the third week of May, as, I believe, to breed further north.* The period occupied in journeying from this country to Lapland or Sweden and back, and in rearing a brood of young, appears not to exceed six or seven weeks; for I have seen this species in Middlesex on the 25th May and the 17th July. After the bird has returned to us again in July, it appears in no hurry to depart for some time. The duties of incubation are over, the old birds are accompanied by their young, and nothing but the cold of winter would seem to drive these united families from our shores.

From July to November inclusively, I have observed Green Sandpipers at the brooks and ponds, and not unfrequently in wide ditches where a little water is collected. Occasionally, though rarely, I have known a Green Sandpiper killed in December and January.†

^{*} On dissecting a female Green Sandpiper, shot on the last day of April, I found rudimentary eggs in the ovary, which strengthened the impression that this bird, like many other of the Sandpipers, makes a resting-place of our waters on its way to and from its breeding grounds.

[†] The Rev. L. Jenyns, in his 'British Vertebrate Animals,' referring to this bird, calls it "an occasional visitant in this country, principally during the autumnal and winter months, but scarcely to be called common."

These birds, in autumn, keep in little family parties of five or six, until their numbers have been thinned by the sportsman, who discovers that, like many other Sandpipers, they are a good substitute for Snipe, both as regards sport and food. As the autumn advances, they leave the open sheets of water, such as reservoirs and large ponds, where they may be first seen on their return, and betake themselves to the more sheltered brooks, where they run along the edge of the water under the shelving bank, and seldom appear in the more exposed and deeper portions of the stream.

By crawling on hands and knees I have sometimes been enabled to watch a Green Sandpiper unobservedly, and when on the ground it looks very small compared with its appearance when flying.

It is more sluggish in its movements than the Common Sandpiper, and, when in search of food, it works one piece of ground thoroughly before trying another. Now the Common Sandpiper gets over the ground at a great rate, picking up a bit here and a bit there, but probably leaving a good deal behind, and in this respect reminding us of the too-eager sportsman in the Partridge season who does not half work his ground, and leaves many birds behind him.

The Green Sandpiper, however, is not so much a surface feeder, but bores a good deal for its food, and I have often seen a small tract of mud

completely covered with holes made by this bird. On examining specimens killed in the months of April, May, July, August, September, October, and November, I found the food to consist of insects; chiefly small beetles, spiders, very small red worms, and woodlice, the first-named in the greatest proportion. Occasionally the stomach contained a small mass of vegetable fibre which I could not recognize; but I never found any common earthworms, and remarked that the Green Sandpiper does not appear to require so much grit to aid its digestion as many others of the genus. It is exceedingly wary, and rises on the least alarm, never suffering a near approach, like some Sandpipers, after it has once caught sight of you. When on the wing, the white upper tail-coverts afford a conspicuous mark of distinction, and offer a pretty contrast with the dark back and wings of the bird. The note is very musical. Some Sandpipers utter a cry on rising; but this species generally rises silently, and flies some little distance before piping, and on this account, unless the sportsman is on the lookout, it often escapes a shot. As winter approaches, the Green Sandpipers gradually disappear, and after the last week of October it is rarely that one is seen until the following April. As I have before stated, however, I have obtained a bird of this species during the first week of November, and I have heard, on reliable authority, of the occurrence of a few in December and January. It is somewhat singular that this bird, though remaining with us during so many months in the year, should never have been discovered breeding here. Mr. Wheelwright, the only Englishman, I believe, with the exception of the late Mr. Wolley, who has taken the eggs of the Green Sandpiper, says that a peculiarity in its breeding habits is, that instead of nesting on the ground like other waders, it makes use of the deserted nest of some other bird, and frequently lays its eggs at a considerable height from the ground.

This fact not being generally known may, perhaps, account for the eggs never having been taken in England. The search may always have been made in a wrong direction.

Wood Sandpiper, Totanus glareola. I am inclined to think that the Wood Sandpiper is not so rare a bird as is generally supposed; so few persons are acquainted with its specific distinction, that it is probably often mistaken for the Green Sandpiper, and on that account it may be well to point out here in what respects it differs from that bird.

It is rather smaller in size, has proportionately a shorter bill and longer tarsus; the legs are lighter in colour, and it has not the white markings under the wings which are conspicuous in the Green Sandpiper. A marked difference, also, exists in the tailfeathers. In the Green Sandpiper the tail is, for the greater part, white; the outside feather on each

side with one small dark spot on the outer web near the end; the next feather with two dark spots; the third and fourth with two rather broad dark bands; the fifth and sixth with three or four dark bands; but all the marks are on the distal half of the tail-feathers, leaving the basal half pure white.

In the Wood Sandpiper, the tail-feathers are barred with narrow transverse white bars on a ground colour of greenish black. The axillary plume in the Green Sandpiper is greyish black, with narrow angular white bars: in the Wood Sandpiper it is white, faintly marked with transverse dusky bars.

There is another point, also, in which these birds differ, and which appears to have been hitherto overlooked. In the Wood Sandpiper the shaft of the first quill-feather is white, the remaining shafts dusky; whereas in the Green Sandpiper the shafts of all the quill feathers are dusky.

Mr. Bond has obtained five specimens of the Wood Sandpiper at Kingsbury Reservoir. I saw one at the same place on the 4th August, 1863, just after it had been killed. The person who shot it told me that he had wounded another which was in company with it, but not having broken a wing it managed to escape. He was ignorant of the species, and called them Greenshanks, but said that he had several times shot such birds before at the same piece of water.

I have seen two birds of this species in the collection of Mr. Minasi, which were shot by that gentleman at Kingsbury Reservoir. He remarked that they looked smaller and lighter in colour than the Green Sandpiper when flying, and he at first mistook them for the young of that species. Both birds were in summer plumage.

Common Sandpiper, Totanus hypoleucos. Provincial, Summer Snipe. This bird does not belie its name, being the commonest species of Sandpiper that visits us, generally arriving about the first week in May, and after leaving us for June and July—to breed, as I believe, further North—it returns again at the end of July or beginning of August, and remains until the middle of September. Both old and young birds are then to be found. This bird and the Green Sandpiper always remain here later than any other species, and, unlike the Ringed Plover, Dunlin, and some others, they do not stay so much at the broad water of the reservoirs, but may be found singly, or in pairs, along the course of our brooks.

The stomachs of several specimens which I have examined contained either a mass of semi-digested beetles and aquatic insects, or vegetable matter only; and, as in the case of the Ringed Plover, there were always several minute pebbles or particles of coarse sand. The note, which is loud for so small a bird, sounds like "weet-weet-weet."

Spotted Sandpiper, Totanus macularius. A native of North America, and of rare occurrence in England, where not more than half-a-dozen specimens have as yet been met with. A bird of this species, formerly in the possession of Mr. Milton, and sold with his collection at Messrs. Stevens' in April, 1852, was stated to have been obtained at Kingsbury Reservoir. It was purchased at the sale by Mr. Bond, who traced it to the person who had received it in the flesh and stuffed it, and fully satisfied himself of the truth of the statement.

Greenshank, Totanus glottis. A rare and uncertain visitant in spring and autumn. A specimen, in the collection of Mr. Bond, was obtained in this parish in 1839. Two Greenshanks were shot at Kingsbury Reservoir on 2nd September, 1844, both of them birds of the year. In August, 1862, I saw one at this Reservoir for three successive days; it was exceedingly shy, and although I tried to approach it both by land and in a punt, I could never get within shot. On 1st August, 1863, seven Greenshanks appeared at the Reservoir. Two days later four of them had disappeared, and of the remaining three one was afterwards shot; the others escaped.

One day in August, 1864, I flushed a Greenshank from a small pond on Hungry Downs, between Kingsbury and Stanmore. It uttered a peculiar whistle on rising, which first attracted my attention. I marked it down in the corner of a field, where I

knew there was another pond, and upon walking there again disturbed the bird, and obtained a good view of it. There had been a heavy fall of rain in the morning, and the footprints and borings of the bird were plainly visible on the mud around the pond.

The Greenshank is a very wary bird, and difficult to approach except under cover; but I have sometimes put one up within shot from a salt-marsh, where the herbage was pretty tall and thick. On one occasion, under shelter of a sea-wall, I was enabled to get pretty close to three Greenshanks that were feeding on a mud-flat. A peculiarity which I remarked in their manner of feeding was, that they placed the bill upon the surface, the under mandible almost parallel with the mud, and as they advanced, scooped from side to side, after the fashion of the Avocet, leaving a curious zigzag line impressed upon the mud. The food consists of small mollusks and beetles.

Avocet, Recurvirostra avocetta. Its graceful form and beauty of colour, black and white, with long blue legs, render this bird one of the most attractive of our waders. Fifty years ago it was not uncommonly met with in our fens as a summer visitant, and specimens might occasionally be seen hanging up for sale in the London markets.

The extensive drainage of marsh land, and cultivation of wastes where it used to breed, together with a great increase in the number of gunners,

will probably account for its present extreme rarity as a British bird.

By chance, perhaps through adverse winds, an Avocet makes its appearance at the period of migration in spring or autumn; but if not shot from its attractive colour, it makes but a temporary stay, and, impelled by curious instinct, speeds away to a more secluded region, where it may rear its brood in safety. A curious habit, which has obtained for it the name of Scooping Avocet, has been alluded to under the head of "Greenshank."

So far as I am aware, the Avocet has but once been observed in Middlesex. A solitary bird, in fine plumage, was shot at Kingsbury Reservoir in May, 1854, by a gentleman unknown in the neighbourhood, who carried the bird, for preservation, to London, where it was seen by an acquaintance, who lately informed me of the fact.

BLACKTAILED GODWIT, Limosa melanura. Owing, probably, to the extraordinary difference between the summer and winter plumage of the Godwits, which change from a bright chesnut beneath in summer to a pale stone-colour in winter, a good deal of confusion has been created by some authors, who state that there are several species of Godwit in England.

There are but two species, the Blacktailed and the Bartailed, both of which undergo the same seasonal change of plumage. At a distance the former may always be known from the latter by its superior length of leg. In the Blacktailed Godwit the tarsus measures three inches, and the bare part of the tibia one inch and three-quarters; whereas, in the Bartailed Godwit, the tarsus measures but two inches, and the bare part of the tibia only three-quarters of an inch. In addition to this, a closer inspection will show a marked difference in the tail-feathers, a difference sufficiently indicated by the names which have been given to each. An examination of some specimens in April and May showed the food to consist chiefly of small univalve shell-fish.

The Blacktailed Godwit is the rarer of the two species in England, although, curiously enough, its eggs are far oftener met with than those of its congener. It has occasionally been found breeding in our fens, which has never been the case with *L. rufa*.

Mr. Yarrell, in his 'History of British Birds,' referring to the occurrence of this species in England, notices three examples which appeared at Kingsbury Reservoir in spring; and the occurrence of this rare wader in the county is also recorded in 'The Zoologist' for 1843.

Bartailed Godwit, Limosa rufu. Examples of this, the Common Godwit, have occasionally been found at our reservoirs and on marshy ground, but it is a scarce and uncertain visitant.

An experienced wild-fowler informs us that the Godwits come with an east wind, and are more plentiful in mild winters than in severe ones. At this time of year they may be found upon the coast in flocks, and in their winter dress greatly resemble Whimbrel, from which birds, however, they may be distinguished at a distance by their note, which sounds like "lou-ey, lou-ey."

The Bartailed Godwit has twice been observed in this county in the spring; on both occasions at that famous resort of waders, Kingsbury Reservoir. In May, 1851, an adult bird was shot there, in full summer plumage, and on the 29th April, 1863, four others were seen at the same sheet of water.

Ruff, Machetes pugnax. Female, Reeve. An uncertain visitant, appearing occasionally during the vernal and autumnal migrations in May and August. On the 25th August, 1864, Mr. W. H. Power saw three of these birds at Kingsbury Reservoir, and shot one of them, which proved to be an old male. On the 21st May, 1866, during a high wind from the east, five Ruffs passed over the head of a friend * who was walking round this sheet of water, and he shot one of them, a Reeve, in very beautiful plumage. Previously to the above dates several Ruffs had been killed in the county, and since the formation of the reservoir at Kingsbury, in 1838, about a dozen examples of this bird have been killed there. The curious frill which is peculiar to the male bird, and from which he derives his name,

^{*} Mr. W. Swindell.

is only assumed during the breeding season. After that time the Ruff and Reeve are so much alike that they can only be distinguished with certainty by dissection. The colour of the legs varies a good deal in different individuals; being in some orange, in others grey, and in others again yellowish brown. I have only once been fortunate enough to see this bird in a wild state, on which occasion I met with a Reeve when Snipe-shooting in October. It was remarkably tame, and as I did not fire when it first rose, being anxious to observe its habits, it dropped again within twenty yards of the spot from whence it rose, and commenced feeding. It uttered no cry, and flew slowly, with a lazy beat of wing. After watching it for some time, on its again rising I killed it. An examination of the stomach showed the food to consist of numerous small mollusca, worms, and beetles.

Woodcock, Scolopax rusticola. Formerly not uncommon in winter, but now scarce. This, probably, is owing to the increased cultivation of waste lands, and the careful way in which the hedges are now trimmed, and ditches cleared; the Woodcocks no longer being able to find the thick cover in which they used once to delight. In the more wooded neighbourhoods of Edgewarebury and Stanmore, where game is strictly preserved, Woodcocks are more frequently seen, though by no means plentiful; and seldom a season passes in which I do not hear of one or two having been shot at Harrow Weald,

Kingsbury, and Willesden. Wembley Park used to be a famous place for Cocks.

The male and female Woodcock closely resemble each other, but may be distinguished by the following marks, as pointed out by the Rev. Mr. Bree:*—
"The front, or outer edge, of the first quill-feather of the cock bird is marked alternately with dark and light spots, of a somewhat triangular shape, while in the hen the corresponding feather is without spots, and, in lieu of these, presents a uniform light-coloured stripe, extending the whole length of the feather."

Sabine's Snipe, Scolopax Sabini. It is much disputed whether Sabine's Snipe is a distinct species, or only a variety of the Common Snipe. In support of the latter view, it is asserted that it is not only a rare bird in Britain, but that no locality is known where it is common; nor have the eggs ever been discovered. On the other hand, if we consider how very much varieties differ inter se, it appears singular that of the comparatively few varieties of the Common Snipe which have been noticed, the majority of them should agree in being of the same dark colour and similarly marked. I have seen five specimens of the so-called Scolopax Sabini: one in the collection of my friend Mr. Knox, of Trotton, Sussex, which was shot on Appledram Common,

^{* &#}x27;Magazine of Natural History,' vol. iii., p. 147.

near Chichester; one in the British Museum, from Queen's County, Ireland; and three Irish specimens in the Dublin University Museum; and I am inclined to believe that S. gallinago and S. Sabini are distinct species, for the following reasons:—Firstly, in S. Sabini, there is a total absence of white in the plumage, and none of the buff-coloured markings on the head and back which appear in S. gallinago; secondly, the number of tail-feathers in S. Sabini is twelve, whereas S. gallinago has fourteen; thirdly, the tarsus in S. Sabini is stouter and about an eighth of an inch shorter than in S. gallinago: fourthly, in S. Sabini the eye is placed much higher in the head, as in S. rusticola; and lastly, if S. Sabini were only a variety of S. gallinago, however dark in colour the feathers might be, they would at all events be of the same shape. But it will be observed that in S. gallinago the feathers of the back are lanceolate in form, while in S. Sabini they are more ovate; in this respect more nearly resembling S. rusticola.

A specimen of Sabine's Snipe is recorded in Morris's 'Game Birds and Wild Fowl' as having been obtained near London. In the winter of 1860-61, two friends were shooting along the Brent, when a Snipe rose, at which they both fired, and the bird fell. On picking it up, they remarked that it was an extraordinarily dark-coloured Snipe, but as it was much shattered it was not thought worth preserving. Some of the feathers, however, were afterwards shown

to a well-known taxidermist, and he expressed an opinion that, judging from the shape and colour of the feathers, the bird killed was Sabine's Snipe.

Great or Solitary Snipe, Scolopax major. This bird affects drier situations than the Common Snipe, and is generally met with in autumn, when the few which visit us at that time, on their migration southwards, are generally found to be young birds. As its name implies, it is much larger than the Common Snipe, and of a stouter build. It flies more slowly and steadily than that bird, and may be recognized by its peculiar habit of spreading the tail, which has a very rufous appearance, like a fan, and by its having the under parts spotted instead of white. It differs also in some other respects, which are apparent on a closer inspection; as, for instance, in having the eye placed very high in the head, like the Woodcock, and in having sixteen tail-feathers instead of fourteen.

Seldom a year elapses without specimens of the Great Snipe being obtained in some of the eastern counties, but in Middlesex it is a rare bird. A specimen, in the collection of Mr. Bond, was killed in Hendon Fields in November, 1851, and five years subsequently another was shot, late in autumn, on the Brent, by William Sawyer, the keeper at Kingsbury Reservoir. I have seen a third, which was killed on Bushy Heath.

COMMON SNIPE, Scolopax gallinago. A few of these birds annually make their appearance here in

August, possibly driven from the moors by the grouse-shooters; but the large "wisps" of Snipe do not come until October, from which month, until the end of March, the bird is tolerably common, and may be found at the brooks, ponds, and wide ditches, as well as upon any marshy ground. During a sharp frost they get to the sides of running streams and to the little dykes that intersect large water-meadows.

The food consists chiefly of small mollusca, insects, and earth-worms, and I have sometimes found a mass of vegetable matter in the stomach.

Occasionally, where the situation is favourable, Snipe remain throughout the summer. They are early breeders, and I have taken the eggs in Sussex, considerably incubated on the 29th April, although, in Lancashire, on the 3rd May, I found some eggs perfectly fresh. Probably the same observation made with regard to the Ringed Plover applies here, viz., that the further north the breeding-place, the later the period of incubation.

The situation of the nest is not always similar; I have seen it sometimes within a few yards of a pool of water, a slight depression in the ground, with no other lining than some dry blades of the grass which grew around it and were trodden down; sometimes at a considerable distance from water, the hollow made by a horse's hoof thickly lined with dry grass. On one occasion I found a nest which was buried in the top of a tall tussock, with

waving rushes completely overhanging and almost concealing it. The eggs, always four in number, vary a good deal in the markings, but the ordinary type is a pale olive-brown ground-colour with dark purplish-brown blotches chiefly at the larger end.

The peculiar noise called "drumming," which the Snipe is sometimes heard to make, has been the subject of much discussion among sportsmen and naturalists. Some assert that the sound proceeds from the bird's larynx, while others maintain that it is produced with the wings. From personal observation I have no doubt that the latter is the more correct view. and I came to this conclusion from remarking that the "drumming," or, more properly, the "buzzing" sound was only produced when the bird was on the wing, and descending through the air in a diagonal line, at which time a shivering of the wings was very perceptible. On one occasion, having disturbed a pair of Snipe from their nest, they continued to fly round me in circles, making this peculiar noise for nearly half-an-hour. Sometimes, when they passed pretty close to me, falling diagonally through the air, I could perceive that the bill was closed, while the wings shivered. As both these birds were heard to "drum," it is presumed that the sound is not peculiar to the male bird, as some have supposed.

Early one morning I surprised a Snipe standing in the middle of a very shallow brook, and apparently, at the same moment, he became aware of my presence. Instead, however, of taking wing, he crouched down in the middle of the water, immersing the bill, and keeping the head and back as flat as possible. In that position the bird remained for more than a minute, and at a distance might well have been mistaken for a stone; but having come out on purpose to try and shoot a few Snipe, I did not feel inclined to let him escape, and so threw a pebble at him, when he rose and was killed.

Snipe are occasionally found so near London as Hampstead Heath, which is somewhat curious, considering that that neighbourhood is now so thickly populated. I remember to have seen in 'The Field' newspaper, a few years since, a notice to the effect that a live Snipe was found one winter's day in the Strand. It was fluttering along the pavement, and, oddly enough, was picked up by a gamekeeper, who, like itself, was a stranger in London, and who, as may be supposed, was considerably surprised at meeting with this country acquaintance there.

Jack Snipe, Scolopax gallinula. The first flights, so far as I have been enabled to observe, arrive here during the first week of October. I once shot three Jack Snipe as early as the 2nd of that month, but they generally arrive about the 7th. This bird appears to have such an attachment to particular localities, that at any time in the month of October I can walk to a certain spot, feeling confident of finding a Jack Snipe. At one pond in particular,

which is bordered by flags, and appears to furnish some specially attractive food, I have frequently put up two or three of these birds at once, although, by the way, Mr. Yarrell says the Jack Snipe is even more solitary in its habits than the Common Snipe. So far as my limited experience goes, I have always been led to think the contrary; for I have often found several Jack Snipe within a few yards of each other. On one occasion I flushed six from about half-anacre of marsh. As a rule, they will be very close, even after a gun has been fired, and will almost suffer themselves to be trodden on before rising.

One day a Jack Snipe got up, which I shot at and missed, but killed with the second barrel. Without moving, I reloaded, and, cocking my gun, made a single step in advance, when another Jack Snipe rose within three yards of me. This was curious; for notwithstanding the noise made by firing twice, and then reloading, the bird never stirred until I moved my feet. I have since thought that perhaps the vibration of the ground, or the movement of the herbage, caused by walking was felt by the bird, and alarmed it more than the noise. The Jack Snipe really appears to be so deaf that the French name for it, "Bécassine sourde," is not an inappropriate one. It is very light, weighing only about two ounces. I once watched two of these birds running over the weeds in a pond, apparently in pursuit of insects. On my approach they retreated hurriedly to some rushes at the side of the pond, and I had some little difficulty to make them rise.

I once kept a Jack Snipe in confinement for some days, and, as the bird is a very difficult one to observe when on the ground in its wild state, a transcript of some notes made on its movements in my aviary may be interesting.

"October 8th.—Found some Jack Snipe to-day, and shot three. One of them, curiously enough, was struck in the carpal joint of each wing, which caused the bird to fall. It being otherwise apparently uninjured, I carried it home alive in my pocket, and turned it into the aviary, first shaking down some straw temporarily, for cover, and putting in a supply of worms and water.

"October 9th.—Jack Snipe alive and well. Cut several large sods with plenty of rushes growing on them, and put them in the aviary instead of the straw. Procured an old tea-tray and filled it with water, strewing some gravel and sand at the bottom, thus making a capital pool. Scattered some worms among the rushes and in the water, and left the bird in quiet.

"October 10th.—Jack Snipe alive and active, but still very shy, and will not feed while I am near. Looked in later in the day, and found him still squatting in the rushes. Gave him some boiled liver, chopped fine, which Mr. Hancock says is a fine thing for all waders in confinement, as it more nearly approximates to their insect food than anything else.

"October 11th.—Until to-day Jack Snipe has been very shy, hiding in the rushes on the least alarm. This morning, while watching through a window in the aviary, I saw him come out and feed. I had previously fancied, and, indeed, read somewhere, that the Jack Snipe moved with the body nearly horizontal like a Land Rail, but I am now able to state, from my own observation, that the bird walks in a very erect position, with a firm and stately tread, nodding his head at every step. On seizing a worm he passes it through his bill, pinching it all over from end to end, and then swallows it whole. Although he will pick up a worm from the surface, he prefers boring for one and drawing it from a sod. He stands in the pool which I have made for him, and picks up small particles of gravel strewn on the bottom, but does not appear to drink much. When at rest, the head reclines upon the back, between the shoulders, giving the bird the appearance of having no neck; the bill rests on the ground in front, the breast touches the ground, and the tarsus and tibia touch and are parallel. On the least alarm the bird rises so suddenly as to cause an involuntary start on the part of the observer.

"October 12th.—At 6 A. M., this morning, Jack Snipe was alive, and apparently doing well. Before coming into breakfast at nine o'clock I again visited the aviary, when, much to my disappointment, I found him dead among the rushes."

Brown Snipe, Scolopax grisea. A specimen of this rare Snipe, in the collection of Mr. Bond, was killed some years ago on the banks of the Thames, near Battersea; and a second, in my own collection, was shot on the Brent, near Stone Bridge, in October, 1862.

The summer plumage of this bird has procured for it the name of Redbreasted Snipe. Both the specimens above mentioned are in autumn plumage, with only a faint tinge of buff upon the breast. It is a native of North America, and, in some parts of that continent, is very plentiful It is very rarely met with in England. By some naturalists it is considered as the connecting link between the Snipe and Sandpipers, and in its relative proportions and general colour it is intermediate between these two families.

CURLEW SANDPIPER, Tringa subarquata. Two examples of the Curlew Sandpiper, both birds of the year, were obtained at Kingsbury Reservoir on the 2nd September, 1844. A third, killed some years later at the same place, is in the collection of Mr. Bond. Mr. W. H. Power informed me that his brother shot a Curlew Sandpiper at this Reservoir on the 17th September, 1864, which was in company with a flock of Ringed Plovers; and that on the 2nd September following they each killed a Curlew Sandpiper, out of a flock of Ring Plovers, at the same

place. These birds were in autumn plumage, with just a faint trace of buff-colour on the breast. I have seen a bird of this species, in autumn plumage, in the collection of Mr. Minasi, which that gentleman shot at the same piece of water.

As far as I have been able to observe, the Curlew Sandpiper is more fearless than many other of the waders, and will suffer a near approach before taking wing. I once shot a Curlew Sandpiper which allowed me to approach within a few yards, although a flock of birds with which it had been feeding had taken wing some time previously. It appears very sociable in its habits, and may generally be seen with a flock of Ringed Plovers or Dunlins. From the former it is easily distinguished when on the wing, and, when flying among a flock of the latter, it may be recognized by its upper tail-coverts, which are white. The note is something like that of the Dunlin, but louder. It is very rapid in flight, but, if not fired at, will, like the Jack Snipe, alight again at no great distance.

Knot, Tringa canutus. In a note upon the arrival of summer birds at Kingsbury, dated 17th June, 1844, and published in 'The Zoologist' for that year, the occurrence of the Knot at Kingsbury Reservoir is mentioned; but this is the only notice of the appearance of this species in the county that I have been able to obtain.

The Knot, like the Godwits and the Curlew

Sandpiper, has such a very different appearance in summer and winter, that in these two states of plumage it might well be considered as belonging to two distinct species. During the summer months the general colour of the Knot, from chin to vent, is a bright chesnut, while the back is prettily mottled with brown, grey, and buff. After the autumnal moult the colour of the under parts gradually gets lighter and lighter, until, in mid-winter, it is pure white, at which time the upper part of the head and back is almost of a uniform grey. A precisely similar change is observed in the Blacktailed and Bartailed Godwits, and in the Curlew Sandpiper, although these birds never become so purely white beneath as the Knot.

Upon examining the contents of the stomach of two Knots killed in May, I found in one of them three shells of the common periwinkle, and in the other about one hundred and fifty small univalve shells belonging to the genera Rissoa and Turbo.

LITTLE STINT, Tringa minuta. Occasionally found at our reservoirs during the periodical migrations in spring and autumn, but more commonly at the latter season, when the little flocks which arrive here consist chiefly of young birds.

Towards the end of August, 1862, five Little Stints, two old and three young, were shot at the Reservoir at Kingsbury, and one of them, an adult female, I obtained for my collection.

Early in May, 1863, Mr. Bond saw a pair at the same place; and on October 9th of the same year, of a second pair which visited us, I was fortunate enough to secure the male. Mr. W. H. Power and his brother killed four Little Stints at Kingsbury Reservoir in the autumn of 1864.

On the 10th June, 1865, an unusual date to find this species, four Little Stints appeared at the same piece of water, and one of them was shot by Mr. H. Greenwood, of Hampstead. This specimen I had subsequently an opportunity of examining, and it proved to be an adult bird in summer plumage. The different appearance which it presented in comparison with examples obtained in the same locality in spring and autumn was very striking. The upper portion of the plumage had a rich reddish brown tinge, like the same parts in the Dunlin when in summer dress. The spots on the throat and upper part of the breast were also of a rufous tint, like the same parts exhibited by the Sanderling in summer.

TEMMINCK'S STINT, Tringa Temminckii. This graceful little bird, our least British Sandpiper, is frequently confounded with the Little Stint, T. minuta, and so escapes notice; but, on a careful comparison, it will be found to differ from that species in several particulars. Temminck's Stint may be regarded as a miniature Common Sandpiper, exhibiting a more uniform colour throughout, and having

light-coloured legs; while the Little Stint, like a miniature Dunlin, displays a more mottled and varied plumage, and has black legs. Nor need the parallel, I think, be confined to the plumage only, for, as far as my experience goes, Temminck's Stint, like the Common Sandpiper, affects the soft mud around inland pools and marshes, while the Little Stint, like the Dunlin, prefers the sand and shingle of the seashore. The most essential differences between these two species may, perhaps, be best shown as follows:—

TEMMINCK'S STINT.

Colour, more uniform.

Tarsus, light brown, short and slender.

Wings, first quill-feather with white shaft; all the other quill-feathers with dusky shafts.

Tertial-feathers reach to very near the end of the primaries.

Tail, three outer feathers on each side almost white; *
the first outside white, with a faint dusky spot on outer web; the second white, with a narrow dusky streak on outer web; the third white, with broad dusky streak on outer web.

LITTLE STINT.

Colour, more varied.

Tarsus, black, longer and stouter.

Wings, all the quill-feathers with white shafts.

Tertial-feathers do not reach within a quarter of an inch of end of primaries.

Tail, three outer feathers on each side all pale grey; no white.

^{*} In India this bird is called the Whitetailed Stint.

Although Temminck's Stint assumes a more mottled plumage in summer, and the Little Stint a more uniform colour in winter, the difference in the wing and tail-feathers, as pointed out above, will be at all times, I think, a sufficient guide in determining the species.

Temminck's Stint is occasionally, although rarely, found here during the migration in spring and autumn. The earliest notice which I have met with of the occurrence of this species in Middlesex, is contained in the last volume of Yarrell's 'British Birds.' At p. 75, vol. iii., that author says: "Mr. Bond sent me word that he met with a pair of old birds in the spring of 1839, on the margin of Kingsbury Reservoir, in Middlesex, and several young ones in the autumn of the same year, obtaining one of the old ones and five young ones." In May, 1859. Mr. Spencer received a specimen that had been killed by his brother at this Reservoir. Mr. Bond shot a young bird of this species at the same piece of water on 31st August, 1861, which he has since presented to the British Museum.

Several small Stints, said to be Temminck's, appeared at the Reservoir on the 4th August, 1863, and one of them was shot; but as I unfortunately did not see it, I am unable to say for certain whether it was T. Temminckii or T. minuta.

Dunlin, Tringa variabilis. A regular passing visitant in spring and autumn, and the first, of

the genus *Tringa*, to arrive. I have a pair in my collection in summer plumage, killed at Kingsbury as early as April 7th. It frequents large sheets of water, such as the Reservoirs of Kingsbury, Ruislip, and Elstree, and is seldom found along the streams, as is the case with the Common and Green Sandpipers.

On the return of this species in August after the breeding season the plumage is very different to that assumed in April. It becomes much duller; the rich reddish brown of the upper parts changes to a dull grey, and the black feathers on the breast disappear entirely, leaving all the under parts pure white.*

The period at which the Dunlin arrives at its full summer plumage probably depends upon the age of the bird. I saw two on the 11th June, one of which had a rich reddish brown back and completely black breast, the other a grey back and scarcely any trace of black on the under parts. The latter was, no doubt, the younger bird, and probably a bird of the previous year.

The Dunlin has more rarely been found here in winter.

^{*} In the autumn of 1865 I saw an entirely white Dunlin, which had been recently shot at Aldborough, on the Suffolk coast. The quill-feathers were much worn, and the bird had the appearance of great age.

Four of these birds were seen at Kingsbury Reservoir by a local keeper, who is well acquainted with the species, on the 4th January, 1864. They were near the edge of the water, and crowding so close together that he believed he could have killed all four at a shot, and would have made the experiment had he not been crawling to Ducks. Most of our Sandpipers may be distinguished, when on the wing, by their note. That of the Dunlin is—



It is usually more tame and fearless than many of the Sandpipers, and will occasionally suffer a near approach before taking wing.

The beautiful flight of the Dunlin, when in large flocks, must have been observed by all who, from time to time, pay a visit to the seaside. The appearance which they present when moving in a large body through the air has been faithfully described by Mr. Thompson in his 'Natural History of Ireland.' "When immense flocks divide, fly right and left, and shoot into single strings, they strike upon the eye while the sun shines upon them, and the dark banks of the bay serve as background, like silver lines, occasionally of great length. A flock flying for a great distance just above the margin of the flowing tide, has strongly resembled, from their

white plumage being displayed, a single wave sweeping rapidly onwards. When the back or breast is turned towards the spectator every bird is individualized, or distinctly marked; but when they sweep so as to show only the line of the back, they are almost invisible."

Family Rallidæ.

LAND RAIL OF CORN CRAKE, Gallinula crex. A common summer visitant, generally appearing about the first week in May, and in some seasons particularly numerous. As the farms in this county are nearly all grass-farms, and we have very little clover or seed crops to afford a shelter for these birds after the hay is cut, they generally leave us about the end of July; and although I have found Rails abundant in September in Sussex and Hampshire, it is rarely that they are to be found here in that month. I cannot help thinking that a few must stay with us the whole winter, for specimens are sometimes seen in the London markets at Christmas; and I once saw a Land Rail just after it had been shot, early in January. This bird, however, may have been wounded, and thus disabled from joining the flight at the time of its migration.

Spotted Crake, Gallinula porzana. Owing to the manner in which this bird hides amongst thick cover, and to its unwillingness to take wing, it is not often seen, and is, therefore, considered rare. Mr. Yarrell accurately remarks that this species is more aquatic in its habits than the last-named, frequenting the sides of streams and ponds wherever a good supply of rushes or flags is to be found wherein to hide. It is a very shy bird, and seldom seen on the wing; for being by nature of slender and compressed form, like all the Rails, it makes its way through thick rushes or flags with the greatest ease, and, unless hard pressed, is always very loth to rise.

Notwithstanding this, however, sportsmen, with the aid of a good dog, occasionally flush and kill a specimen, and I am able to record the capture of no less than twelve in this county. Others, probably, have occurred of which I have not heard. Mr. Blyth saw a Spotted Crake in the London market in the month of January, 1834; and one, in the collection of Mr. Bond, was obtained some years later at Kingsbury, as recorded in 'The Zoologist' for 1843. Two specimens were shot at Jessop's Ait, Chiswick, in the autumn of 1862, by a market-gardener named Anstice; and in the following year one was shot near Stone Bridge, on the Brent, on the 16th October, which proved to be a bird of the year; and another, now in the collection of Mr. Dutton, of Hammersmith, was killed at Jessop's Ait, above-mentioned, on the 12th November. This last bird, which I have seen, is a female. Mr. Dutton informs me

that he has seen two others, in a birdstuffer's shop, which were also obtained at Chiswick in the autumn of 1863.

I have seen two specimens of the Spotted Crake in the collection of Mr. Minasi, which were shot by Mr. W. K. Heseltine, at Laleham, in 1857; and another, in the same collection, which was caught some years previously at Hyde Bridge, on the Brent, by a retriever belonging to Mr. Minasi.

With regard to the last example of which I have heard as having occurred in this county, my friend, Mr. W. H. Power, writes me word as follows:—

"I shot one of these birds at West Drayton, as it was crossing the river Colne, which here divides the counties of Middlesex and Buckinghamshire. My dog started it from an osier-bed full of tall reeds, and I killed it under the impression that it was a young Moorhen. This was on the 2nd August, 1860."

LITTLE CRAKE, Gallinula pusilla. Montagu truly observes that the habits of the smaller species of Gallinules are their principal security:—"They are not only equally capable of diving and concealing their bodies under water, with only the bill above the surface to secure respiration, but run with celerity and hide themselves amongst the rushes and flags of swampy places, and are with great difficulty roused, even with the assistance of dogs,

depending more on concealment in thick cover than upon their wings to avoid danger. From these circumstances it is that they are so rarely obtained."

Yarrell mentions a specimen of the Little Crake, belonging to Mr. Foljambe, which was purchased in the shop of a London poulterer in May, 1812. About the same time Mr. Plasted, of Chelsea, obtained another, which was shot on the banks of the Thames near that place. This latter bird corresponded with the figure and description of Montagu's Olivaceous Gallinule, and was believed to be an adult male.

Moorhen, Gallinula chloropus. Common resident. Found all along our brooks and at quiet pond sides.

I hardly know a prettier object in a country walk than a Moorhen in its proper haunt. Look at that bird running along the bank, startled at our approach as we follow the winding brook. Now he stops to listen, and, with stately tread, lifts his dainty green legs, and peers about with bright hazel eye. Now he has caught sight of us, and, quick as thought, has run to the edge and dropped like a stone into the water. Now we have lost him! no: there he is again, ten yards further on, and making for that clump of rushes on the opposite side. How he nods his head at every stroke, and flirts up his little white tail, uttering at intervals a sharp "keck-

keck!" How pretty those white feathers under the wing look, and how the bright red bill contrasts with the dark colour of the head! Now he has gained the rushes, and feels safe, and there he will hide till we are gone.

If surprised in a small pool where there is little cover, the Moorhen, instead of taking wing, dives, and, coming towards the surface in the vicinity of some water-plant, remains entirely submerged, with the exception of the bill, which it just protrudes above the surface to enable it to breathe.

From what I have observed, I believe that a Moorhen cannot remain in this position without some assistance from a reed, water-lily, or other plant. In other words, it brings itself to anchor by means of its long toes with which it grasps the stalk of a plant, and thus keeps its body below the surface while its bill only is above. Sometimes, in shallow water, the feet touch the ground, and the toes are then inserted in the mud or gravel.

On one occasion, while walking along the Brent, I surprised a Moorhen in a shallow. The bird must have seen me before I observed it; for I first became aware of its presence by noticing the bright red forehead on the surface of the water. As the brook at that particular spot was too shallow to admit of the bird's diving, and as there was no friendly cover near at hand, it continued submerged for several minutes, until I threw in a stone, when, with one

motion, it rose from the water into the air and flew. While it remained in the water I was not more than three yards from it, and was easily able to see that it touched the bottom of the shallow.

On another occasion I suddenly disturbed a Moorhen in a small isolated pond with plenty of cover at a short distance from the brink, but none near enough to reach quickly without flying. An elm tree had fallen half-way across the pond, and at several feet from the bank it overhung the water for some distance without touching it. The Moorhen first dived and re-appeared two or three times, and then, as if inspired with a sudden thought, dived again and came up under the fallen tree, but showing only the head and keeping the rest of the body entirely submerged. All my efforts to drive it from thence were unavailing, and it then occurred to me that, by crawling out along the tree, I might possibly be able to seize the bird unawares. Accordingly, handing my coat to a friend who stood on the bank to tell me when I should be directly over the spot, I crawled on hands and knees along the tree, until, at my friend's signal, I knew that I was immediately above the Moorhen. I then quietly put my hand in the water, about two feet behind it, and groped gently along until I could feel the legs. There were several small branches growing laterally from the tree, and many of these were under water. I soon discovered that the Moorhen's feet passed round and under one of these, and that by this means the body was kept submerged. I had little time then for reflection, fearing lest the bird might escape; so, seizing the legs, I drew it out of the water and brought it safe to land.

It is, perhaps, scarcely fair to draw conclusions from two or three instances; but, as I have never observed a Moorhen submerge its body and keep its head or bill above water, except in the vicinity of water-plant, reeds, or branches, I think I am not far wrong in concluding that the bird is unable to exercise this peculiar habit without the assistance which is thus afforded.

There seems to be some difference of opinion as to whether the male and female Moorhen both have the red forehead and the red garter; but I have now little doubt upon this point, having satisfied myself, both by observation of the birds alive and by dissection after death.

I have often seen the female bird on the nest, with crimson forehead; and in several cases where I have known a single pair of Moorhens, and no more, to frequent a small pond, I have remarked that both birds had the conspicuous red patch.

Again, after a Moorhen hunt in the autumn, when some three or four brace had been bagged, there were often found to be as many males as females, and all had the red forehead unless they were young birds. My own observations, therefore,

induce the following conclusions. When fully adult, both sexes have the red forehead as well as the red garter (though, possibly, the male may have the brighter colour), but when immature neither sex is so marked. In young birds the forehead and legs are olive-coloured, and remain so until the following spring, when the red colour appears as in the parent birds; but the period at which this change takes place no doubt depends upon the age of the birds, those which are hatched first in the preceding year being the first to show the red in the succeeding spring.

Water Rail, Rallus aquaticus. From its skulking habits seldom seen. It runs with great rapidity, and is a difficult bird to flush without the help of a good dog. On one occasion I chased a Water Rail for about thirty yards along a wide ditch, and, although close behind, and making frequent though ineffectual attempts to cover it with my cap, it would not take wing, and succeeded in reaching a thick patch of cover, where I lost it. On visiting the spot early next morning with a setter, it was nowhere to be found.

I have not yet satisfied myself whether this bird is resident in the county throughout the year or not. I have searched diligently, and made various inquiries, but have only been able to ascertain one instance in which the Water Rail has been seen here in summer and a nest found. This was at a

small pond near Kingsbury, where a dog belonging to my friend Mr. Bond caught several young birds one summer. With this exception, the few specimens which I have seen in this county were all obtained between September and March. I am inclined, therefore, to consider that this bird with us is only a winter visitant.

Mr. Spencer shot a Water Rail, in January, at Silk Stream, in Hendon parish; and I have seen two others that were killed in December, 1861. A fourth occurred near Elstree Reservoir towards the end of October, 1863; and Mr. W. H. Power has twice shot this bird in the neighbourhood of Hanwell and West Drayton, where he states that it was formerly not uncommon. He has only observed it between the 25th October and the middle of March, and, owing to its retiring habits, and the thick cover which it frequents in summer, it is difficult to ascertain whether it remained to breed. I have seen three specimens in the collection of Mr. Minasi, all of which were killed by himself and his brother (the late Consul for the Two Sicilies) on the banks of the Brent; and Mr. J. W. Ford, of Enfield, informs me that this bird has occasionally been killed in his neighbourhood.

As recently as the 26th September, 1865, one was shot on the Brent, in Willesden parish, by Mr. W. H. Greenwood, of Hampstead.

Family LOBIPEDIDÆ.

COOT, Fulica atra. The Coot is only found resident throughout the year on such pools of water as are strictly preserved.* Except during winter, it is a rarer bird than the Moorhen, but at that season, especially if the weather be severe, it visits us in some numbers, in "coverts" of from ten to twenty and upwards. The greatest number of Coots reckoned in one "covert" inland, was fortyone; but when the fresh-water pools and rivers, which this bird much prefers to the sea, are frozen up, they visit the coast, and may there be counted by hundreds. A Coot may always be known from a Moorhen on the water by its attitude; the former swims with head and tail very low, the head poked forward; the latter, vice versa, with head erect and tail jerked up almost at right angles to the back. The Moorhen's white tail, or, rather, under-tail coverts, also serve to distinguish it, the same parts in the Coot being black.

In some respects Coots differ a good deal from other water-birds in their habits. They feed by day and roost at night, grazing like geese on the tender leaves and shoots of young grass, and varying their

^{*} A Coot, with perfect wings, has twice been observed upon the Serpentine in Hyde Park.

food with fresh-water molluscs, small fish, and aquatic insects. Again, most wild fowl, when wounded, endeavour to escape by swimming or diving; but a wounded Coot makes for the land, and its running powers are so great, that, especially over a mud flat, the sportsman will find great difficulty in bagging it, before it gains cover, without the aid of a good dog.

Coots pair in April, making a large nest of flags or rushes by the water-side, and laying from five to seven eggs of a stone-colour speckled with black. The note of the Coot somewhat resembles that of the Moorhen, but is more guttural. It has been likened, not inaptly, to the sound "krew," sharply pronounced.

Although the two birds, in many points, have some resemblance, the difference of structure, particularly in the bare patch on the forehead, from whence the name "Bald Coot," and the peculiar formation of foot, has caused Fulica atra to be placed in a distinct family, Lobipedidæ, that is the lobe-footed kind. To this family, also, belongs the bird next to be considered.

GREY PHALAROPE, Phalaropus platyrhyncus. The few examples of this graceful little species which are met with in England generally appear in autumn, and are, for the most part, young birds on their way south, it is supposed, for the winter. So seldom does an opportunity occur for observing it, that

the habits of the Grey Phalarope are but little known, and, so far as I am aware, no authentic specimens of its eggs have been received in this country. Mr. Bullock, in a letter to Col. Montagu, referring to the Rednecked Phalarope,* a bird, it is presumed, of very similar habits, says: "It swims with the greatest ease, and, when on the water, looks like a beautiful miniature of a Duck, carrying its head close to the back, in the manner of a Teal."

In the 'Zoological Journal' for April, 1825, Mr. Yarrell has recorded the fact that a Grey Phalarope was shot while swimming on the Thames, near Battersea, in November, 1824. It was seen there by a gardener, who went home, a distance of a mile and a half to fetch his gun, and, on his return, found the bird still swimming and feeding near the same spot. "It proved to be an old female, having nearly completed its winter plumage, but still bearing sufficient marks of its summer dress to form an interesting state of change." Mr. Bond shot a pair of Grey Phalaropes at Kingsbury Reservoir, in September, 1841, killing the female on the 28th and the male on the 30th of that month; and I learn from Mr. Spencer that his brother shot two birds of this species, at the same sheet of water, in the autumn

^{*} This bird, although commoner in some parts of Britain than the Grey Phalarope, and breeding in limited numbers in the Orkneys, has not been met with in Middlesex.

of 1850. I have lately seen a specimen in winter plumage which was killed in November, 1862, on the Thames, at Blackwall.

ORDER NATATORES.—Family ANATIDÆ.

GREYLAG GOOSE, Anser ferus. This species, although supposed by many to be the original stock of our domestic goose, and formerly not uncommon in most winters, is now rarely met with in England. The term "greylag" has no reference, as some suppose, to the colour of its legs, which are pink, but is probably a modification of the word "lake" (lacus, Lat.; lago, It.) When flying, or at a distance, this bird so closely resembles the other so-called Grev Geese—that is, the Bean, Pinkfooted, and Whitefronted Geese, that it is impossible to distinguish the species. On a nearer inspection, however, it cannot be confounded with any of these, except, perhaps, the Pinkfooted, which it resembles more than any of the others, but from which it differs in a few points to be mentioned presently. The following table will suggest the readiest means of distinguishing the four species of British Grey Geese

Species.	Bill.	LEGS.
GREYLAG	Flesh-colour; nail white.	Flesh-colour.
Bean	Orange; nail, edges and base black.	Orange.
PINKFOOTED .	Pink; nail and base black.	Pink, tinged with vermilion, like Egyptian Goose.
WHITEFRONTED	Pink; nail and base white; forehead white.	Orange.

In addition to these differences of bill and legs, the first and third differ from each other in the following respects. The Greylag invariably has some black feathers on the belly, which the other has not, and the grey colour in the wings of the Greylag runs through the wing like a double bar, which is very conspicuous when the pinions are stretched; whereas in the wing of the Pinkfooted Goose the grey colour is more uniformly distributed in a mass.

It is the Greylag Goose which is still to be found breeding in the Highlands. Mr. St. John once thought that the Pinkfooted Goose bred on one of the lakes in Sutherlandshire, and went there to ascertain this point, accompanied by my friend, Mr. John Hancock. The birds proved, however, without exception, to be the Greylag.

Wild Geese may be known on the wing by their

peculiar mode of flight. They generally proceed in a wedge-like form with a single bird as leader; but, if only a few in number, they fly in a straight line, in close order, looking as if linked together by a string; hence they are spoken of as a "skein" of geese. When in the water or on land, they are called by the fowler a "gaggle." Their habit is to remain on the water by day, flying inland in search of food a little before dusk. They may then be looked for upon the fields of growing corn, where they do much damage by nibbling off the tender shoots and young blades. They are generally wary enough to keep in the centre of the field, so that it is not easy to get within shot of them.

Occasionally a small skein of Geese drop down upon our reservoirs in hard weather, but seldom stay longer than a day, for their large size at once attracts attention, and they either get shot or frightened away. An intelligent labourer tells us that, in former years, he has several times seen Wild Geese in winter upon some of the small retired ponds on Hungry Downs, and that on one occasion he counted fourteen there. During the winter of 1860-61 two Geese were shot by the keeper at Kingsbury Reservoir, out of a gaggle of thirty which alighted in a field on the Brent, in the parish of Hendon. From his accurate description of them, I have no doubt that they were Anser ferus. In January, 1864, I observed some small skeins of Grey Geese passing

over, but they made no stay. They were at too great a height to determine the species. My last memorandum with regard to Geese seen here is to the effect that four-and-twenty passed over Kingsbury early one morning during the first week of March, 1865. They were flying in the direction S.W.

It is more than probable that the Bean Goose, A. segetum, which is generally known as the Common Wild Goose, and which is of more frequent occurrence in winter than the Greylag, has many times been killed in Middlesex, but of this I have no direct proof. In a note in 'The Zoologist' for 1843, Mr. Bond, referring to wild-fowl killed at Kingsbury Reservoir, says: "One or other of the Grey Geese has occurred several times, but I have not been able to get hold of one to examine."

Whitefronted Goose, Anser albifrons. Provincial, Laughing Goose and Bar Goose; the former synonym arising from its noisy cackle when on the wing; the second, from the dark bars upon its breast. Although it has been stated above that the Greylag Goose is supposed to be the original parent of our domestic stock, many naturalists consider that the Whitefronted Goose has a stronger claim in this regard, and urge in support of their views that many of our tame birds are found to have the characteristic orange legs and white forehead of A. albifrons.

An experienced wildfowler says that this bird does not come so far inland as the other Grey Geese, and seldom alights in corn-fields, its favourite resorts being fens, marshes, and rivers near the sea-coast, where, from its being a regular winter visitant to this country, it is often shot by puntmen.

Meyer, in his finely-coloured work,* mentions a Whitefronted Goose which he shot on the Thames, near London, in February, 1847.

This species is not uncommon on the poulterers' stalls in London, from November till March, and fetches a good price for the table. Looking at some Whitefronted and Pinkfooted Geese in March, 1865, as they hung in a poulterer's stall, there appeared a noticeable difference in the wings, the Whitefronted having dark grey, and the Pinkfooted light grey shoulders.

Brent Goose, Anser brenta. This is the smallest and most abundant of our British Geese, but, from being exclusively marine in its habits, never feeding on fresh-water herbage, nor resorting to the fields and marshes, like the Grey Geese, its appearance so far inland must be considered as purely accidental, and probably to be attributed to unusually severe weather on the east coast. Mr. Bond has recorded the occurrence of this species at Kingsbury Reservoir, in 'The Zoologist' for 1843.

REDBREASTED GOOSE, Anser ruficollis. A very rare visitant to this country, being a native of

^{* &#}x27;Illustrations of British Birds.'

Northern Asia and Siberia. Col. Montagu, in his 'Ornithological Dictionary,' states, on the authority of Dr. Latham, that a bird of this species was shot near London in the severe frost of 1766. This bird passed into the collection of Mr. Tunstall, and is now preserved in the museum at Newcastle-on-Tyne, where I saw it in May, 1863. From this specimen Bewick executed the beautiful engraving in his 'British Birds.'

CANADA GOOSE, Anser canadensis. Many winters ago five of these birds appeared on the Reservoir at Kingsbury. Mr. Bond observed them on the water while taking a stroll with his gun, and with some difficulty managed to stalk them. He got a single shot, killing one dead, and wounding another so severely that it was barely able to get away and top the wall at the head of the reservoir. Notwithstanding a long search he failed to find it that day, but the following week he learnt, from the landlord of the 'Spotted Dog' at Willesden, that a Goose exactly answering his description had been killed some days previously by a boy who found it lying, disabled, in a ditch, and had furnished him with an excellent dinner. Mr. Bond was of opinion at the time, from an examination of the bird first killed, that it was not an escaped specimen, but a veritable wild goose. The weather at the time was very severe.

MUTE SWAN, Cygnus olor. So much has been

said by Mr. Yarrell, in his admirable treatise on British Birds, with regard to this Swan, and so fully and ably has that author described the swanneries in Middlesex, whether belonging to the Crown, to private individuals, or public companies, that I can here add nothing which would not be a repetition.

As I have drawn attention, however, in many instances to the notes of birds, I may now include that of the Swan. This bird being identified with Orpheus, and called also the bird of Apollo, the god of Music, powers of song have been often attributed to it and as often denied. It is, however, perfectly true that it has a soft low voice, rather plaintive, and with little variety, but not disagreeable. I have heard it often in the spring, and sometimes later in the season, when moving slowly about with its young. Col. Hawker, in his 'Instructions to Young Sportsmen,' says: "The only note which I ever heard the Wild Swan in winter utter, is his wellknown 'hoop.' But one summer evening I was amused with watching and listening to a domesticated one as he swam up and down the water in the Regent's Park. He turned up a sort of melody made with two notes, C, and the minor third E flat, and kept working his head, as if delighted with his own performance."

The melody, taken down on the spot by a first-rate professor, Auguste Bertini, was as follows:—

Allegro, or by Maelzel's Metronome =126.



WILD SWAN or HOOPER, Cygnus ferus vel musicus. Formerly an occasional winter visitant to the Thames and our reservoirs, but none have been seen for many years. It is only during severe weather that Wild Swans come so far inland, and even then they make no stay, for their conspicuous size and colour at once attract attention, and all the guns in their neighbourhood are directed towards them.

Although a Swan rises very heavily from the water, flapping along the surface for some distance before it is fairly on the wing, yet, when once launched, it is a bird of powerful flight, and the loud whistling sound caused by the rapid beats of its pinions may be heard at a considerable distance,

Tame Swans in hard weather will occasionally take flight, and wander a long way from ther owners, but the sportsman need never be afraid of shooting a tame Swan in mistake for a wild one; for as the bird comes within shot, flying with outstretched neck, which looks unnaturally long for the body, he has only to look at the head, and if the base of the bill appears very black, with the tip yellow, let him reserve his fire; but if the colours are reversed, and

the bright yellow appears close to the forehead, let him aim a little in advance and pull. He will have the satisfaction of picking up the largest of all wild fowl, if not the most dainty.

A smaller species of Wild Swan, now well-known to naturalists by the name of *Cygnus Bewickii*, has, of late years, frequently been met with in England. Until attention was drawn to its specific distinction, it was confounded with the commoner species, but besides being about a third smaller than *C. ferus*, it differs from that and other species of Swan slightly in the form and colour of the bill, and considerably in its anatomical structure.*

From its general outward resemblance, however, to *C. ferus*, it is easily overlooked, and it is not improbable that among the Wild Swans which, from time to time, have been shot in this county, *C. Bewickii* has occurred, although not recorded.

In February, 1861, while passing through Leadenhall Market, I noticed at one of the poulterers' stalls a Swan which was new to me. My attention was first attracted by the colour of the legs, which were grey instead of black, and, on a closer inspection, the shape and arrangement of colour in the beak differed considerably from the only three species of Cygnus with which I was acquainted. Believing it to be the Polish Swan (C. immutabilis of Yarrell),

^{*} See Yarrell's 'British Birds,' vol. iii., p. 205.

a rare visitant from the Baltic, I should have purchased the bird for preservation, had it not been that it was evidently long killed, and much disfigured with mud and congealed blood. I therefore contented myself with making a sketch of the head, and noting down some particulars in my pocketbook, when, on reaching home and referring to authorities, I found my suspicions verified; it was, without doubt, C. immutabilis.

Mr. Yarrell, who named the species "immutabilis," from a peculiarity in the Cygnets, which are always white instead of grey, like those of other Swans, observed that, "during the severe weather of January, 1838, several flocks of these Polish Swans were seen pursuing a southern course along the line of our north-east coast, from Scotland to the mouth of the Thames, and several specimens were obtained."

Shoveller, Anas clypeata. An occasional winter visitant, never appearing in any numbers, and, although arriving in company with other Duck, always separating on reaching the inland fresh water. The habits of the Shoveller bring it nearer to the shore, where it seeks its food in shallow water, while the majority of the other species which visit us keep out in deeper water, obtaining their food by diving during the day, and coming inshore at night.

Seldom more than five or six Shovellers are seen here at one time. Occasionally I have known a

single pair to remain about the fresh-water pools until comparatively late in the spring,* when all the other Ducks had departed except the Common Wild Duck.

Gadwall, Anas strepera. A rare bird in England, where it is an uncertain winter visitant. So far as I am aware, but one example has occurred in Middlesex. This was an adult male, which was obtained at Kingsbury Reservoir in 1842-43, and is now in the collection of Mr. Bond. The word "Gadwall" is said to imply "Grey Duck," and its loud voice has procured for it the specific term "strepera."

The habitat of this species seems to be E. and N.E. Europe; and the British Islands generally lie too far west to be much visited by it.

PINTAIL, Anas acuta. The Pintail is seldom found in any numbers on the coast, and is considered to be rather an inhabitant of fresh water. It has occasionally been killed on our reservoirs and freshwater pools in winter, but its appearance is very uncertain.

It is a particularly graceful bird in all its movements, and, from the way in which it carries the head and neck, occasionally skimming the bill along the surface of the water, it puts us much in mind of a Swan.

The food of the Pintail, when inland, seems to be

^{*} Latest stay observed, April 9th.

chiefly vegetable matter and the seeds of aquatic plants. On the coast the diet is varied with small univalve shell fish. It is excellent eating.

A remarkable instance of affection in a bird of this species came under my observation in the winter of 1863-64. A sportsman, returning home late one evening, surprised a pair of ducks in an old gravelpit, now half full of water. As they rose he killed the duck with the only charge he had left, dropping her in the middle of the water. Before he could get her out, he observed that the drake, which had flown to a considerable distance, finding himself alone, returned to the spot, and, notwithstanding that his enemy was still moving on the bank, after making one or two circles in the air, alighted on the water close to the dead body of his mate. Swimming round and round her, from time to time he uttered a mournful note, and appeared very unwilling to leave the spot. Instead of pitying the distress of the poor mallard, and regretting the loss he had occasioned, the sportsman, I am sorry to add, hastened home, the distance of nearly a mile, and procuring some more powder and shot, returned and killed the faithful bird, which still remained upon the water near its mate. I saw the pair shortly afterwards; they were the Pintail Duck, in remarkably good plumage.

WILD DUCK, Anas boschas. Of the Wild Ducks which are observed here during the year, by far the

greater number are winter visitants, a few pairs only remaining throughout the summer to breed in favourable localities. The arrival of the winter visitants generally commences in October, and, as the season advances, especially if there be much cold and ice, a gradual increase in the numbers takes place, which reaches its maximum height in February, after which time a perceptible decrease is observed, and by the end of March none are to be seen, except the few scattered pairs which meditate nesting.*

"Wild Ducks rarely collect into dense flocks, like Brent Geese or Widgeon; they are more scattered, and hence do not offer such tempting shots. They, and Teal also, differ from those birds and from other wild fowl by suddenly bounding from the water right into the air, without giving any warning to the shooter; whereas the others swim a little off, or give some indication that they are about to rise." †

^{*} While I am writing (20th April, 1866), a Wild Duck is sitting upon twelve eggs about a mile from hence. Yesterday, April 19th, she had left the nest, and was swimming at some little distance from it, when I came suddenly upon her. Instead of taking wing, she only swam slowly away from me, and seemed in no way alarmed at a setter who stood eyeing her from the bank. On my speaking to the dog, she rose off the water, and, after circling round two or three times, went off in the direction of the nest.

⁺ Thompson's 'Natural History of Ireland,' vol. iii. p. 83.

Ducks always fly with the head and neck stretched out in a line with their bodies, and may be distinguished from Widgeon by the steadier and greater regularity of their movements in the air, and, when within range, the brown of the Duck's feathers may be distinctly discerned. Ducks, when bent on long flights, do not all move through the air at the same altitude, but some much higher than others; and large flights generally seem to have a break in the centre, and present a figure very much resembling the outline of North and South America as it appears on the map. When flying near the surface of land or water they are often in a confused mass.*

Occasionally I have found a pair of Wild Ducks in a small quiet pond at a distance from any road, and in autumn often come upon them in ditches, where they resort to pick up acorns, of which they seem very fond. At other times they feed upon the seeds and leaves of aquatic plants, worms, snails, and small shell-fish.

In 'The Zoologist' for 1860-64 (pp. 6922, 9049) will be found a list of the wild fowl observed in winter in the London waters. From this list it appears that, exclusive of hybrids, no less than eight species have been noticed—viz., Gadwall, Widgeon, Teal, Shoveller, Pochard, Tufted Duck, Ferruginous Duck, and Golden Eye. The observer, Mr. Henry

^{*} Folkard's 'Wild Fowler,' p. 113.

Hussey, thinks that "they are too numerous to have escaped from the Zoological Gardens, and the facilities for breeding in the other London waters are very small indeed. Hence it is more than probable that the birds, having perfect wings, are really wild birds."

While on the subject of London waters and wild fowl, I am tempted to give the following extracts for the amusement of ornithologists in London.

"St.James' Park was much enlarged and improved by Charles II., who added several fields to it, and caused it to be planted with lime-trees. He also contracted the water into a canal, 100 feet broad and 2800 long, with a decoy and other ponds for water-fowl. The same monarch had likewise an aviary adjoining to the Bird-cage Walk, thus named from the cages which were hung in the trees."*

"Charles," says Cibber, "was often here amidst crowds of spectators, feeding his ducks and playing with his dogs, and passing his idle moments in affability even to the meanest of his subjects, which made him to be adored by the common people; so fascinating in the great are the habits of condescension."

Teal, Anas crecca. Of late years Teal have much decreased in numbers, and, though formerly regular winter visitants, are now very uncertain in their

^{* &#}x27;London and Middlesex,' by Rev. J. Nightingale.

appearance. Within the last five or six years I have remarked that they are most plentiful here in February, during which month they may be found in the brooks and at quiet pools which lie at a distance from any public thoroughfare.

Teal, as a rule, suffer a much nearer approach than any other species of Duck, and, on being disturbed at a brook which has plenty of cover along the banks, they will, after flying a short distance, drop down suddenly again, like Snipe and Woodcock. Owing to this peculiarity, a friend once bagged five Teal out of one "sprig," in three double shots.

During the winter I frequently see Teal swimming in company with Wild Ducks; but, although they mingle together when on the water, on being disturbed the species always separate, the Teal going off in one flock, the Ducks in another.

Mr. Thompson says: "On looking to the contents of the stomachs of twenty-seven Teal, killed at various times, from late in autumn until the beginning of spring, I have ascertained that they feed chiefly on the seeds of aquatic plants of various kinds; among others, of rushes, duckweed (*Lemna*), &c.; also on other vegetable matter, and occasionally on insect larvæ; a quantity of sand and gravel, likewise, is taken into the stomach."

The nest is generally placed at a distance from water, and, being concealed with much care, it

requires a careful search to discover it. I once had the extraordinary good fortune to find three Teal's nests in one day. They were all situated among heath, and, as they exactly resembled each other, the description of one will suffice. I accordingly extract, verbatim, from my note-book.

"Between two preserved covers lay an open tract of unbroken ground, about fifty acres in extent. A strong growth of heather, about a foot high, waved over a thick carpet of soft moss (two species), while here and there, in a small open space, a little pool or puddle appeared. Although it would have been difficult to find a more suitable locality for a Teal's nest, the thick growth of heather almost made me despair of finding one; and I stood still, musing for some time, when my eye fell upon a feather-a small feather-clinging to a spray of heather. This apparently insignificant circumstance was to me most significant. Peering under the bush on which it hung, great was my delight at discovering the neat little nest of a Teal containing ten fresh eggs. Placed in a hollow at the foot of the overhanging bunch of heather, it was composed of moss and dry grass, very compact, and lined with down from the bird's breast. The poor Duck, in flying from her home, had dropped a feather at her doorway, which betrayed her."

The young, as soon as hatched, are extremely lively, and display wonderful power in diving. Under

date April 29th, I find the following entry in my note-book:—

"While observing a Snipe which continued to fly round me, 'drumming,' my attention was diverted by the peculiar chirping of some young chicks, and, looking along the narrow and shallow stream, which ran into the pond on my left, I saw on my right several young Teal, only a few days old, actively swimming towards me. As soon as they caught sight of me, instead of retreating to the flags on either side of the stream to hide, they instantly dived, and, the water being clear, although with a muddy bottom, I could easily see them shooting along, with outstretched necks, looking more like fish than birds. Thinking to catch one, I held my umbrella over the water, prepared to strike, when, although so much above me, they seemed to perceive my movements, and turned rapidly, continuing their dive.

"By a quick stroke, however, I held one to the bottom with my umbrella in one hand, while I seized the little fellow by the legs with the other. The rest, meantime, escaped. My little captive appeared to be only three or four days old, and was wonderfully active and noisy. His description was as follows:*—

^{*} I depart, in this case, from my rule of abstaining from particular descriptions; firstly, because young Teal are dif-

"Upper mandible brownish grey, a distinct nail at the extremity; edges emarginate and yellowish pink; under mandible yellowish pink; inner edges of both perceptibly serrated. Crown, nape, back, and sides dark olive-brown; over the eye a yellow line; a dark brown line from base of bill through eye to occiput, meeting the dark brown on head. Cheeks yellowish, with dark spot on the ear; chin and neck yellowish; throat dusky; breast and belly a nondescript colour, between yellow, grey, and white. Wings rudimentary, dark olive-brown above, yellow beneath, small white plumules in place of secondary quills. Legs and toes minutely reticulated, pale brown; webs a darker brown, almost black."

Widgeon, Anas Penelope. A regular winter visitant, arriving towards the end of October, their numbers increasing as the season advances. In most winters Widgeon are more plentiful than any other species of wild fowl, affording capital sport to the wild fowler, and furnishing a very dainty dish.

"Their movements on the wing are quicker than Ducks, and the size of their bodies being smaller,

ficult to obtain at any time, and an opportunity of examining one seldom occurs; and secondly, because the delicate colour of the bill and legs so quickly fades after death, that a dedescription from life may be with some naturalists a desideratum.

and their necks shorter, it is not difficult to distinguish their species. Widgeon, when in flight, always keep up their call-note; Ducks fly in silence."*

This last remark, however, is not in accordance with my own experience, for I have frequently heard Ducks, when suddenly sprung, commence to quack, continuing their cry until out of hearing.

Mr. Waterton remarks that the Widgeon differs from many other wild fowl, both in the nature of its food and in the time of procuring it. "The Mallard, the Pochard, and the Teal obtain nearly the whole of their nourishment during the night. On the contrary, the Widgeon procures its food in the day-time, and that food is grass."

I have observed Widgeon call a good deal at night. Their soft whistling note, like "whee-ou, whee-ou," may be heard on still nights at a great distance. When sitting on the water, they look smaller and blacker than Ducks.

COMMON SCOTER, Anas nigra. Provincial, Velvet Duck and Black Duck. This is almost exclusively a sea bird, and is seldom seen inland, except during heavy gales, when it comes no further from the coast than possible, but accepts the nearest refuge, and that only as a temporary retreat.

I have seen two examples of the Common Scoter

^{*} Folkard's 'Wild Fowler.' London, 1859, p. 113.

^{† &#}x27;Essays in Natural History,' 1st Series, p. 180.

which were shot on Kingsbury Reservoir in severe weather; and a local keeper states that many years ago, before this sheet of water was so much frequented, a few 'Black Ducks' generally made their appearance every winter.

POCHARD OF DUN BIRD, Anas ferina. A winter visitant, varying much in numbers in different years. It is a wary and suspicious bird, and on this account, as well as through its expertness in diving back through the pipe, it is rarely taken in a decoy. Like the Wild Duck and Teal, it feeds chiefly at night, its diet consisting of the seeds of aquatic plants and other vegetable matter, varied with different species of freshwater shells.* The note is a low whistle, except when the birds are suddenly sprung, when they quack like the Wild Duck. Dun Birds fly very rapidly, with a noisy twitter of the wing, and may be known by the shortness of their pinions and their heavy-looking bodies, and especially by their flying in a closelypacked lump, and not in line or figure as Widgeon and Duck.

Ferruginous or Castaneous Duck, Anas nyroca. This bird, sometimes called the "Whiteeyed Pochard," is a rare winter visitant from the East. It somewhat resembles the Pochard in appearance, but may be distinguished by its smaller size, dark brown

^{*} Some bivalves belonging to the genus Pisidium recognized.

back, and a white bar across the wing. Examples are occasionally seen in the London market, hanging up with other wild fowl, but are probably imported to this country from Holland.

So far as I am aware, the Ferruginous Duck has only once occurred in Middlesex, if we except the birds seen by Mr. Hussey,* which it is not certain were not escaped and semi-domesticated specimens.

On the 24th December, 1863, Mr. W. H. Power was shooting at Kingsbury Reservoir, and, sheltered by the high bank at the head of this sheet of water, he approached sufficiently near to a solitary Duck to kill it with a cartridge. It proved to be a female of this species, and is now preserved in Mr. Power's collection.†

Scaup, Anas marila. Willughby remarks that this bird is called the Scaup Duck, because it feeds upon "scaup," i. e., broken shell-fish. It is almost exclusively a sea bird, and is seldom found inland upon fresh water, except in severe weather.

Two examples only of this Duck have come under my notice in Middlesex. They were both killed at

^{*} See ante, p. 228.

[†] The Rev. L. Jenyns and Mr. Yarrell state that specimens of the Red-crested Pochard, or Whistling Duck (Anas rufina) have been obtained in the London market; but these may have come from Holland, from whence great numbers of wild fowl are sent to our markets every winter. This bird is an inhabitant of North-eastern Europe.

Kingsbury Reservoir. One of them is in the collection of Mr. Bond, who recorded its capture in 'The Zoologist' for 1843; the other is in the collection of Mr. C. Minasi, and was, I believe, obtained about the same time.

TUFTED DUCK, Anas fuligula. A regular winter visitant, but varying much in numbers in different years. As many as thirty have been seen at one time during hard weather upon Kingsbury Reservoir, but it is seldom that so many can be counted in one "team;" the more usual number is ten or a dozen. They are expert divers, and in open water difficult to get at, but a little hard work and stratagem will repay the sportsman who bags a couple; for, besides affording good sport, he will find them excellent eating.

Mr. Thompson says that in fresh water the Tufted Duck feeds upon the seeds of several species of plants, soft vegetable matter, insects of various kinds; amongst others, the Notonecta, or boat-fly, and minute bivalve shells, such as Pisidia. In one example were four of the Limneus pereger, full-grown shells and animals, both being perfect.

Some Tufted Ducks, killed on the coast, exhibited numerous small mollusca, Rissoa ulvæ, and other Rissoæ, together with Littorinæ, and small shells of Mytilus edulis. In addition to this food, all contained sand and gravel.

GOLDENEYE, Anas clangula. An uncertain winter

visitant, never appearing in large flocks like some others of the Duck tribe, but usually seen in little parties of ten or a dozen. These parties keep much by themselves, and seldom associate with the Common Wild Ducks and Mallards, as do the Pochard, Teal, and some others, which, no doubt, is owing to a difference in their habits and in the nature of their food. The Goldeneyes are expert divers, and, from their extreme wariness and the difficulty of approaching them, afford capital sport to the wild-fowler.

They generally keep out in the open water by day, coming inshore to feed by night, where they remain till morning. At early dawn, after feeding, they appear lazy and disposed to remain alongshore, so that, if there be any cover to screen an approach, the sportsman will find this the best time to get at them. Col. Hawker, in speaking of these birds, which in some places are called "Curres," gives the following good advice: *—"If you see a single "Curre" by day, when he dives, you must run; and the moment he comes up, squat down. So you may go on till within ten yards of him, and then stand ready to shoot him as he flies up, which he will do on coming up again and seeing you suddenly appear so close."

I have found this plan very successful, not

^{* &#}x27;Instructions to Young Sportsmen,' p. 310.

only with Ducks, but also with Grebes and Divers.

In the winter of 1863-64, out of a small flock of Goldeneyes which visited Kingsbury Reservoir, three were shot by Mr. W. H. Power. On the 25th March, 1865, I saw two male Goldeneyes at this sheet of water. They were very shy, and kept out a long way from the shore. I tried to approach them, both by land and in a boat, but could never get within gunshot of them. On the 2nd April following, two male Goldeneyes, probably the same two, were on this reservoir, and I again tried, unsuccessfully, to get a shot at them.

SMEW, Mergus albellus. A rare winter visitant, seldom coming so far inland, except in severe weather.

Mr. Bond has recorded, in 'The Zoologist' for 1843, the occurrence of a single bird of this species, which was shot on Kingsbury Reservoir. Mr. Spencer informed me that his brother killed three of these birds at the same sheet of water in January, 1849: two of these were immature males, the third an adult female. The last Smew which came under my notice as having been killed in the county was a fine old male bird, shot at the above-named reservoir during the winter of 1860-61. The adult male Smews are rarely met with, the majority of the birds which visit us being females and immature males. But little is known respecting 'the habits of this

species in the breeding season, or of its nidification, and, with the great majority of collectors, an egg of the Smew is still a great desideratum.

REDBREASTED MERGANSER, Mergus serrator. Provincial, Sawbill. This species has been shot two or three times on Kingsbury Reservoir, but in every instance in winter. Mr. Yarrell observes that they visit the Thames, and he received from Mr. Jesse a fine specimen that was killed during severe weather above Putney Bridge.

Mr. James Dutton, of Hammersmith, wrote me word that two Redbreasted Mergansers were shot on the river in his neighbourhood, in January, 1854, and another specimen, in his brother's collection, was killed on the river, near Chiswick, in the winter of 1855.

GOOSANDER, Mergus merganser. A fine male Goosander was shot at Kingsbury, several winters ago, by a labouring man, who, thinking the bird unique, refused a crown for it, and carried it to London, expecting to sell it for a fabulous sum.

I have occasionally seen Goosanders hanging up in the London markets in the spring, but could never obtain satisfactory proofs of any having been killed in the county. These were almost invariably females and immature males.

Family COLYMBIDÆ.

GREAT CRESTED GREBE, Podiceps cristatus. I cannot learn that this handsome bird has ever been seen in Middlesex in the peculiar stage of plumage from which it derives its name; the few examples which have occurred have all been in winter or immature plumage, minus the crest. Mr. Yarrell has recorded the capture of a young bird in its first winter, which was shot on the Thames at Penton Hook, near Laleham, and I have seen three examples in winter plumage which were shot during February and March, in different years, at Kingsbury Reservoir. On the 24th March, 1865, and following day, I noticed a bird of this species at the same sheet of water, and find the following entry relating to it in my note-book for that year.

"On the first day the reservoir was frozen over, with the exception of a long, narrow space in the centre, and in this confined spot, out of gunshot from the shore, the Great Grebe appeared to feel safe. The ice was too thick to permit the use of a boat, and yet not sufficiently strong to bear our weight, while several cartridges aimed point-blank at the bird were, owing to the distance, ineffectual in killing or inducing it to change its quarters. On the afternoon of the second day the ice broke up with loud cracks, and, in a strong wind

and violent storm of rain, we proceeded in search of the Great Grebe again.

It was with difficulty discovered swimming very low in the water, and showing little more than head and neck, and oftentimes invisible amid the rough waves. As the boat approached within gunshot, and a cartridge sped over the water, the bird, with scarcely an effort, disappeared, and in a prolonged dive soon doubled the distance between itself and its pursuer. Stretching to the oars again, we drew near, and another charge of No. 5 was sent after the hapless Grebe, but apparently ducking the flash it escaped the shot, and appeared in an unexpected direction two hundred yards away. The diving powers possessed by this bird are so extraordinary that, to one who has never seen it, a true description would appear an exaggeration. In an hour's hard rowing we could never keep pace with the bird, and shot after shot was fired, at long distances, while, like a phantom, it escaped unscathed. Once, and once only, in the pelting storm, did it rise upon the wing; hemmed into a corner it was forced either to dive under the boat or fly. The right trigger had been pulled as it sat upon the water, and the cap snapped, when the bird, stretching its long narrow wings, flew low across the bows, a fair cross-shot; but, in the previous excitement of rowing, the gun had got wet, and a deliberate and confident aim only resulted in the vexation of another misfire, while the

object of our desire flew steadily on, and was lost in the distance amid the rough water. Cold, wet, and disappointed, we turned homewards in the driving rain, and left *Podiceps cristatus* in the enjoyment of the liberty it had so hardly earned. The following day it had disappeared.

The food of the Grebes is chiefly fish, but they also take numbers of insects.

A fine Crested Grebe, kept on the water in St. James's Park, is mentioned by Mr. Yarrell, and Mr. Thompson says: "This was probably the same individual which afforded much amusement to a friend and myself one evening at the end of April, by the extreme agility displayed in flycatching. It pursued its prey in all possible ways, shooting its neck vertically upwards for any passing over-head, the next moment to one side or other, and again making a rush along the surface of the water for two or three yards after some winged insect. I never saw so much agility displayed by any bird in this pursuit; all the numerous species of Anatidæ on the water, though busied by flycatching also, were the veriest dolts compared with the Grebe."

EARED GREBE, Podiceps auritus. The rarest of our British Grebes. The earliest notice which I have been able to find of its occurrence in this county, is in Edwards' Gleanings.' That author, writing in 1743, says that he found several birds of this species in the London markets, during the hard

winter of 1839, but had never previously observed it. He subsequently obtained one which was "taken about the large ponds at Hampstead, near London, and sent alive to Sir Hans Sloane, who, when it died, sent it to me that a draft of it might be preserved." Of this example the author gives a coloured figure and description, and adds that, as he had the bird soon after it was dead, before the colour of the eyes and feet was changed, he was thereby enabled to describe it accurately. He does not give the date of the capture, but the description given is that of an adult male in imperfect summer plumage.

In the 'British Miscellany' (p. 19, t. 70) there is a representation of a male and female of this species, accompanied by the nest and eggs, which were taken in a pond on Chelsea Common, in June, 1805. Two specimens, killed at Kingsbury Reservoir in 1841, are mentioned in Yarrell's 'British Birds' (vol. iii., p. 421), and the subsequent occurrence of this rare species at the same sheet of water is recorded in 'The Zoologist' for 1843.

LITTLE GREBE, Podiceps minor. Provincial, Dabchick. This interesting little bird appears most numerous in spring and autumn, when there is apparently a migration through the county. It seldom remains to breed, except in the most favourable localities, such as quiet ponds, where an abundance of flags, or other thick cover, affords sufficient shelter; and the majority of the birds

which have come under my notice were in the winter plumage. I have noted the species as occurring at Hampstead, Hendon, Elstree, and Kingsbury. On the 11th February, 1863, Mr. Henry Hussey observed a Little Grebe on the Serpentine in winter plumage. He has also, on one occasion, seen this bird on the Round Pond in Kensington Gardens. He says: "It kept well out in the middle of the pond, but, by means of a glass, I could distinguish its size, shape, and action, and satisfy myself that it was not a young duck, of which, indeed, there was not one in the pond. It seems to me very extraordinary that a bird whose powers of flight are supposed to be very small, should make its appearance in a pond without an atom of cover in or near it, and surrounded by many miles of brick and mortar."

The activity displayed by the Little Grebe when in pursuit of fish, its usual food, may be witnessed by all who will pay a visit to the Regent's Park Zoological Gardens, where several are at present in excellent health.

BLACKTHROATED DIVER, Colymbus arcticus. Rarely found inland, except during severe weather. So far as I am aware, but one example has occurred in Middlesex. This was a young male, which was shot by Mr. Bond in the winter of 1843, at Kingsbury Reservoir.

REDTHROATED DIVER, Colymbus septentrionalis. Of more frequent occurrence than the last-named.

I have seen a Redthroated Diver in winter plumage that was killed on the Thames, between Richmond and Twickenham, nearly opposite Eel-Pie Island; and birds of this species have frequently been seen, and occasionally shot, on Kingsbury Reservoir, during winter. The last which came under my notice was killed there on the 9th February, 1864.

Family LARIDÆ.

COMMON TERN, Sterna hirundo. Provincial, Sea Swallow. During the periodical migrations in spring and autumn we are visited by several species of Tern, of which the most numerous is Sterna hirundo. These birds generally arrive with an east wind, and, if not disturbed, remain upon the river and about the reservoirs for some days. The first flocks arrive during the first week of May, and consist almost entirely of old birds. In August, on the return southwards, young as well as old birds are seen. At night I have seen them roosting upon boats, and upon posts projecting above the water below high-water mark. The flight of all the Terns is exceedingly graceful, and there can hardly be a prettier sight, or one more interesting to the ornithologist, than a flock of these birds fishing in undisturbed enjoyment.

A peculiar trait in the character of Terns is, that when one is killed or wounded its companions fly screaming towards it, and the quickness with which they perceive its fall is very surprising. They dart down until almost touching it, and, finding that it cannot rise, keep circling over it with mournful cries, until repeated shots deal death or teach them caution. Sir William Jardine truly says,* that all the Terns are very light, and the body being comparatively small, the expanse of wings and tail so buoys them up, that, when shot in the air, they are sustained, their wings fold above them, and they whirl gently down like a shuttlecock.

When inland the food consists of small fish, which are taken very dexterously, with a graceful plunge; while, in specimens killed on the coast, I have found, in addition, shrimps and small sand-eels. In Middlesex the Common Tern justifies its name, and is more frequently met with than any of the other species, although in some years the Black Tern is very common. Examples have frequently been met with on the Thames, more than forty miles above Gravesend. None of the four species which visit us ever remain to breed.

ARCTIC TERN, Sterna arctica. Although less plentiful than the last-named, small flocks visit us annually in spring and autumn, the two species frequently consorting together. The habits of both S. hirundo and S. arctica are very similar, and the general resemblance such, that, except by the note (which is

^{* &#}x27;British Birds,' vol. iv., p. 275.

difficult to imitate),* it is impossible to distinguish them on the wing.

The Arctic Tern is so frequently confounded with the Common Tern, which it certainly very much resembles, that I may be excused for departing, in this case, from my rule of abstaining from descriptions, to point out here the leading features by which the two species may be distinguished. Many authors give measurements of the wing, tail, and total length; but, from an examination of a great number of specimens of each, it appears that individuals of the same species vary so much, according to sex and age, that these measurements are practically of but little use. We are also told that the Arctic Tern is always much darker beneath than its congener, but I have seen some Common Terns, shot in June, which were quite as dark as many Arctic Terns which I have examined. Again, many naturalists say that while the bill of the Common Tern is red, with a black tip, that of the Arctic is invariably red throughout its whole length; but this is only the case with fully adult birds. The young of both

^{*} Mr. W. Thompson remarks that the cry of the Common Tern resembles the sound "pirre," and that of the Arctic, "che-eèp, cheep, or chip," when uttered quickly; while that of the Roseate Tern sounds like "crake," uttered in a hoarse grating key. See 'Nat. Hist. of Ireland,' vol. iii., pp. 273, 284.

species at first have the bill of a dark horn-colour, orange-red at the base. As the bird gets older, the dark colour recedes further from the base, while the red becomes brighter, and finally only the tip of the bill remains black in the Common Tern, while in the Arctic species the black colour disappears entirely. The only features which really appear to be constant, and may consequently be considered indicative of the species, are the comparative length of bill and tarsus, and the length of closed wings in proportion to the tail. In a few words, the differences may be shortly stated as follows:—

COMMON TERN.

Bill, longer and stouter, average = 2 in., red, black at tip.

Tarsus, longer, average 8½ lines.

Tail, equal to, or (generally) shorter than closed wings. Underparts, whiter.

Black-cap, extends perhaps a little further, and is more pointed in form.

ARCTIC TERN.

Bill, shorter and more slender, average = 1 in. 6 lines, in old bird red throughout.

Tarsus, shorter, average 6½ lines.

Tail, longer than closed wings.

Underparts, greyer.

Black-cap, rather shorter and more rounded in form.

This last statement requires confirmation. In most cases the shape and colour of the eggs may be taken as a good indication of the species to which they belong, but those of the Common and Arctic Terns so nearly resemble each other, and at the same time vary to such an extent in the colour and

disposition of their markings, that it is scarcely possible to separate them when mixed.

Lesser Tern, Sterna minuta. Examples of this graceful little bird are observed here in spring and autumn, but it is very irregular in its movements, and is the least common of the Terns which visit us. In appearance and habits it much resembles the Common Tern, and its note is also similar. (See ante, p. 248, note.)

BLACK TERN, Sterna nigra. Next to the Common Tern this is the commonest of the four species which visit us, and is the earliest to appear in the spring. In 1863 I shot one on the 25th April; it proved to be a male bird in incipient summer plumage. Adult males in full summer dress are seldom obtained, the majority of those which appear in spring being old birds in winter or incipient summer plumage, and, in autumn, the females and young of the year.

The Black Tern evinces a great partiality for fresh water, and, so far as I have been able to observe, does not prey upon fish to the same extent as its congeners. The stomachs of several which I examined contained a quantity of insects. Their flight is very graceful, closely resembling that of the Swallow (hence the popular name of Sea-Swallow), and, during May, they may be seen sporting over the water in company with innumerable Swallows and Sandmartins, with whom they always appear to be on very good terms.

Sabine's Gull, Larus Sabini. This rare and beautiful little Gull, from its peculiar form of tail, which is forked, and from the slenderness of its bill and legs, may well be considered as the connecting link between the Terns and Gulls. It was first met with and killed* by Captain Sabine, R.A., in July, 1818, on low rocky islands off the west coast of Greenland, and was described and named after him by his brother, Mr. Joseph Sabine, in the 12th vol. of the 'Linnæan Transactions.' Three specimens only were known to Mr. Yarrell as having occurred in England,† and Mr. Thompson records but four captures in Ireland.;

The species was first described as British by the last-named gentleman, in a paper read before the Linnæan Society, in April, 1834, and in every instance, hitherto, the specimens obtained in Britain have been young birds in the plumage of the first year.

I have now the pleasure of recording the capture of a fourth example in England, and the additional satisfaction of being able to include it in my Catalogue of Middlesex birds.

Early in September, 1862, Mr. J. Sorrell, of the Trinity House, proceeded in a boat towards the

^{*} In the adult black-headed plumage.

⁺ Yarrell's 'British Birds,' vol. iii., p. 550.

t Thompson's 'Birds of Ireland,' vol. iii., pp. 309-314.

mouth of the river for the diversion of shooting Gulls, which, at this season of the year, appear in some numbers; and, when nearly opposite Blackwall, he killed the rare specimen which is now before me.

Referring to Mr. Thompson's description of the first British example recorded, and which was taken from a young bird shot in Belfast Bay, I find, on comparison, that it will apply to the bird now under consideration, except in a few particulars presently to be mentioned. The description of the Thames bird is as follows:—

Bill slender and dark brown; irides hazel; forehead, cheeks, throat, and sides of neck white; crown. nape, back, scapulars and wing-coverts smoke-gray, the tip of each feather margined with dirty white, giving all the upper parts of the plumage a peculiar mottled appearance. Throat, breast and under parts white. Primaries black, with outer half of inner webs white, and the 4th, 5th and 6th tipped with white: secondaries white: upper and under tailcoverts white. Tail-feathers twelve in number. white, with tips black to the extent of an inch from their extremities, giving the appearance of a broad black band when the tail is spread. The two outer tail-feathers the longest, the two centre ones the shortest (an inch shorter); the intermediate ones on each side growing shorter as they approach the centre, giving the tail a very forked appearance

when spread.* Legs, toes and webs flesh-colour;

The measurements as follows: +-

			Inches.	Lines.
Total length			11	6
Length of bill		May Har	,,	10
" wing from carp	as .		10	6
" tail	1.	day .	4	6
" tibia (bare porti	on) .	marke.	,,,	9
" tarsus .	Lu Die		. 1	5
" middle toe and	nail .		. 1	2
Extent of wing			26	,,

It will be seen, from the above description, that it applies to a bird of the year, and it is somewhat remarkable that none but immature examples of this species have hitherto been met with in Great Britain, all of which were obtained in autumn.

The bird now under consideration differs from that described by Mr. Thompson in the following particulars:—the "space immediately above the eye," instead of being "white," is pale grey; the "under part of the throat and upper part of the breast," instead of being "pale ash-colour," is white;

^{*} This is, probably, sufficiently conspicuous when the bird is flying to afford a ready means of distinguishing it.

[†] It is proper to state that these measurements were taken after the bird was stuffed, and cannot, therefore, be considered as *quite* exact.

and there is no "white spot of an oval shape" on the outer web of the sixth primary. From this I conclude that the bird now before me is older than that described by Mr. Thompson, and approaches more nearly the adult plumage.

LITTLE GULL, Larus minutus. Almost as rare a visitant to this country as the last-named, being an inhabitant of Eastern Europe. It was first noticed as a British species by Col. Montagu, who described a specimen in the collection of Mr. Plasted, which had been shot on the Thames near Chelsea. This was a young bird in the plumage of the first year, and at the sale of Mr. Plasted's collection it passed into the possession of Mr. Leadbeater. I have lately seen a beautiful specimen of the Little Gull in nearly mature spring plumage, which was shot from a boat while flying over the Thames in Blackwall Reach, in the early spring of 1863. Adult birds in summer have the head black, in this respect resembling the mature Sabine's and Blackheaded Gulls at the same period of the year.

BLACKHEADED GULL, Larus ridibundus. Of the few species of Gulls which visit us in spring and autumn, the Blackheaded Gull is certainly the commonest. It would be more properly described as the Brown-headed Gull, for the colour of the head in summer certainly approaches nearer to brown than black. An old bird of this species in the breeding plumage, with red bill and legs, hazel eyes

with orange eyelid, and the back and wings pale grey, while all the under parts are snowy white, is one of the most beautiful of all the Gulls.

In winter the brown head disappears almost entirely, a few spots or streaks only of that colour remaining on the crown, ear-coverts, and nape. The young birds may always be known from their parents by having the grey of the back more or less spotted with brown, the scapulars, particularly, presenting a very mottled appearance, and by having the tail, which is square, and in old birds pure white, barred with black at the extremity.

The Blackheaded Gull differs chiefly from others of the genus in its partiality for fresh water, and in its breeding inland in colonies upon the ground instead of in cliffs facing the sea. Oftentimes the centre of a marsh is selected, where, from the treacherous nature of the soil, the eggs are comparatively safe. Elsewhere, when discovered, they are eagerly carried off and sold as "Plover's eggs," and, in truth, are very good eating. When visiting a breeding station of the Blackheaded Gull during the last week of May, 1864, one or two facts presented themselves which seemed worthy of note. In the first place none but old birds in full summer dress were breeding; amongst several hundred I could not detect a single bird in the plumage of the second year. In the next place the period of laying seemed uncertain, varying with different individuals, some

having young hatched while others had empty nests, or only a single fresh egg. Again, it appeared that incubation commences as soon as the first egg is laid, for some nests contained both eggs and young birds.

The nests, as usual, were placed on the ground within a few feet of each other, and were, for the most part, built in tussocks of coarse grass, and composed entirely of the same material. The majority of them contained three eggs each, but many had four, and, in a few instances, I noticed three eggs, cracked, and a young bird. Several of the young birds, two or three days old, were running about or hiding in the coarse herbage, while overhead, it might be safely asserted, hundreds of the parent birds were dashing about on outstretched wings, rending the air with their wild screams. was truly a beautiful and interesting sight! The variety which exists in eggs of the Blackheaded Gull is very curious, and, if we except those of the Common Guillemot, perhaps no other eggs vary so much. I may mention a few of the most marked varieties which I have taken, the common type being dark olive-brown, with dark spots and blotches.—Var. 1. Green, with darker spots or blotches. Var. 2. Light grev, with olive blotches. Var. 3. Pale sea-green, with a zone of brown spots at larger end. Var. 4. Pale bluish white, with scarcely any markings at all.

There is no breeding station of the Blackheaded

Gull in Middlesex, but the bird is (or was) plentiful towards the mouth of the Thames, both in Kent and Essex, breeding on some of the low flat islands on the coast, and in the marshes of the interior.

I have seen and shot several at Kingsbury,* which must be thirty miles from the sea, but it is only during spring and autumn (when the birds are on their way to and from their breeding-grounds), or after a gale, that they are found so far inland. Nearer the coast I have seen them in flocks upon the ploughed fields, busily searching for worms and grubs, thus rendering good service to the farmer. Besides worms, the stomachs of several which I examined contained small beetles and flies, remains of fish and shrimps, and small univalve shells belonging to the genus Rissoa.

The Blackheaded seems the most fearless of all the Gulls, and, like the Lesser Tern, will occasionally suffer a very near approach.

Early one winter's morning, while standing on Wellington Quay, Dublin, I was much entertained in watching a flock of Blackheaded Gulls which were hovering round the mouth of a sewer and picking up the bits of offal which floated out. At first, on my approach, they seemed disposed to retreat,

^{*} The last I killed so recently as the 11th April, 1866. It was one of three immature birds which frequented the reservoir at Kingsbury for two or three days.

but finding that I had no hostile intentions, they continued their fishing, and I was enabled to watch them at the distance of about forty yards. Seeing that they were getting but a precarious breakfast from the water, it occurred to me to try and feed them. Accordingly I got a roll at the nearest baker's, and began throwing small pieces into the water. At first the birds paid no attention, and I inclined to think my good intentions in their regard were not appreciated; but at length one bolder than the rest swooped down and carried off one of the pieces. His example was shortly followed by others, and I soon had the inexpressible delight of seeing the whole flock busy feeding within a few yards of me as I leant over the quay.

Their flight was exceedingly graceful and buoyant, and oftentimes in circling round, on the look-out for food, the birds swept so close to my face that with a butterfly-net I might have caught one. I was particularly interested with the dexterous way in which a piece of bread was taken from the water. Hovering for an instant over the spot, the bird swooped down, and bending the body in the form of a semicircle, it seized the morsel in its bill without wetting the wings or body, and only just skimming the water with its toes.

KITTIWAKE, Larus tridactylus. Neither the Kittiwake nor the Common Gull, next to be considered, are met with so frequently as the Blackheaded Gull,

which is, in fact, the "Common" Gull in Middlesex. nor do they appear so regularly in the spring and autumn. In severe weather, after a strong wind has been blowing from the east or north-east, a few individuals are sometimes seen, but they make no stay. Sir Humphrey Davy says: *- "I believe that the reason of this migration of sea-gulls and other sea-birds to the land, is their security of finding food. They may be observed at this time feeding greedily on the earth-worms and larvæ, driven out of the ground by severe floods, and the fish on which they prey in severe weather in the sea leave the surface when storms prevail, and go deeper." On referring to my note-books for different years, under the head of Kittiwake Gull, I find record of one killed at Elstree Reservoir in May, 1850; another at the same place in the spring of 1858; three at Kingsbury Reservoir in May, 1859; one at this sheet of water in August, 1863; and another, a fine adult male, now in my collection, shot also at Kingsbury, on the 3rd April, 1865. This last bird was in company with two Blackheaded Gulls, which disappeared, with loud screams, when their companion fell.

The Kittiwake may always be known from the Common Gull, which it closely resembles in size and colour when fully adult, by the absence of a

^{* &#}x27;Salmonia,' p. 193.

hind toe, which peculiarity has obtained for it the specific name of tridactylus.

COMMON GULL, Larus canus. This bird, although called the "Common" Gull, is by no means so in Middlesex, and indeed, so far as I have been able to observe, it is nowhere so numerous in the South of England as its congener the Kittiwake. The few examples which have been met with in this county must be considered as accidental visitants. Mr. Jesse notices one that was killed in winter at Hampton Court, and I have seen some half-dozen examples in different stages of plumage which were shot lower down on the Thames, by Blackwall, in September. Three specimens of this Gull have come under my notice at Kingsbury; the last, on the 5th January, 1864, was an adult bird in winter plumage. Dr. Günther informed me that towards the end of October, 1865, he observed a flock of these Gulls in Bushy Park. They numbered about twenty, and were so busily engaged in fishing at one of the ponds that he was enabled to approach within a very short distance, and thus identified the species. A larger, brown Gull, believed to have been a Skua, accompanied them, and remained in the neighbourhood for several days.

The variation of colour in the legs and toes of different individuals of *Larus canus* is very remarkable. Not only do the old birds differ in this respect from the young, which is the case with many birds,

but the former also differ inter se in summer and winter. An old bird, killed in June, had the tarsi and toes bright yellow, while another adult bird, shot in February, had the same parts greyish green. Two old birds, procured in October, exhibited the yellow colour only around the tarsal joint, the rest of the leg and foot being pale greenish grey. Temminck calls this species "Mouette à pieds bleus."

Lesser Blackbacked Gull, Larus fuscus. In a list of water-birds occurring at Kingsbury Reservoir, published in 'The Zoologist' for 1843, the occurrence of the Lesser Blackbacked Gull is recorded; but it is a rare bird in Middlesex, and only met with in severe weather, or after there has been a prevalence of east wind. I have seen a young bird of this species, which was shot at Kingsbury Reservoir, in autumn; and in October, 1865, William Sawyer, the keeper at this reservoir, killed a fine old bird in good plumage.

Gulls appear to be longer in arriving at maturity of plumage than, perhaps, any other class of birds. Many species attain the adult plumage after the first moult; but I believe most, if not all, of the Gulls pass three years in a state of gradual transition before they display the colours of their parents. Whether they pair and breed before they have assumed the adult plumage has not yet, so far as I am aware, been ascertained, but my own observations lead me to think that they do not.

When visiting a stronghold of the Lesser Blackbacked Gull at the Farne Islands, in the breeding season, I do not remember to have seen a single individual at this time in the mottled plumage peculiar to the immature bird. And I have remarked the same thing with regard to the Blackheaded* and Herring Gulls.† Independently of its smaller size, the Lesser Blackbacked Gull may be distinguished from its congener, the Great Blackbacked Gull, by the colour of its legs, which (in adult birds) are yellow; those of the larger species being flesh-colour.

HERRING GULL, Larus argentatus. An accidental visitant; no regular migration in spring and autumn taking place, as in the case of the Terns.

The few Herring Gulls which I have seen, killed on the Thames and at our reservoirs (generally in autumn), were all immature birds.

In other counties I have remarked a habit of the Herring Gull, when inland, of visiting newly-ploughed ground, to feed on the worms and grubs which are turned up; and there can be little doubt that in this respect it is a very useful bird to the farmer.

The different cry of different Gulls, although

^{*} See ante, p. 255.

[†] See "A Visit to the Dorsetshire Coast in the Nesting Season," Zoologist, 1865, p. 9677.

difficult to imitate, is worthy of attention, since it helps us to determine the species at a distance, and this is the more important in the case of immature birds. The ordinary note of the Herring Gull is a hoarse laugh or cackle, of five syllables, so to speak, and sounding like "wa-a-a-a-agh," quickly uttered.

GREAT BLACKBACKED GULL, Larus marinus. This Gull may often be seen towards the mouth of the Thames, and used formerly to breed there, in the marshes on the flat shores of Kent and Essex. Occasionally individuals stray up the river to a considerable distance. I have heard of one which was killed as high up as Putney during a frost. Mr. Bond shot an old bird of this species many years ago at Kingsbury Reservoir. On the 7th March, 1862, I saw a large grey Gull at this sheet of water, which I took to be an immature specimen of the Great Blackbacked Gull: it had probably been driven inland by the east wind of the previous day. On looking to my note-book for 1864, also, I find an entry to the effect that, on the 5th January, in that year, two large grey Gulls, probably of this species, were seen at Kingsbury. The cry of this bird sounds like "ke-aw, ke-aw."

In September, 1863, I brought home a live Great Blackbacked Gull which had been slightly winged. It was a bird of the year, in the mottled plumage peculiar to all young Gulls. As it is still alive (May, 1866) and in good health, I have had an opportunity of

observing the change of plumage for two years and a half, and so gradually does this change take place that it is only at long intervals that any great difference of plumage can be noticed. When the bird was first captured, it was spotted all over. In September, 1864, when, perhaps, fifteen months old, the spots on that portion of the plumage which ultimately remains white, disappeared, and the back and wings from being spotted became light brown, with patches of dark grey feathers appearing here and there at regular intervals. The bill at this time was of a dark horn-colour; the eye very dark brown, almost black; the legs and toes light brownish white.

In September, 1865, at the age of two years and three months, the head, neck, breast, and tail had become a purer white; but the crown and nape were still speckled with dark grey, and the distal half of the tail was transversely and irregularly marked with grey. On the back and wings the light brown feathers had given way, in irregular patches, to others of a dark grey colour, and the upper parts might now be described as almost of a dark slate-colour, just a tinge of brown still pervading. The bill was gradually getting lighter in colour at the base, but might still be described as of a light horn-colour; the eye dark brown; the legs and toes a nondescript colour between brown, pink, and white.

In May, 1866, at the age of three years, the full adult plumage not yet attained, the description of

the bird was as follows: -Bill, black at tip, extreme point white, base yellowish white; eye dark brown, pupil black, eyelid yellow; crown pure white, nape white, with longitudinal light brown streaks (as in Larus canus), the feathers of the nape being white with light brown quills and tips; back and wings above brownish black, approaching nearly to black, the feathers being of two shades, and darkest towards the roots. [This induces the inference that the change is effected, not by a complete moult, but by a gradual change of colour in each feather, the light tips wearing off and giving place to new material of a darker shade.] The whole of the under parts pure white; upper and under tail-coverts pure white; principal tail-feathers white, marbled with light brown, the two centre ones the most devoid of markings. Wings, first primary black with white spot at tip (one inch long by half-an-inch wide); second primary black, with smaller circular white spot of a quarter of an inch diameter; third and fourth black, with just the tip of feather white and much worn, the inside web of each feather much lighter, inclining to grey. Secondaries dark slate-colour, inner webs lighter, tips white. Legs and feet pale flesh-colour, lightest at tarsal joint, darkest on webs; toes dark horn-colour.

The omnivorous habits of the genus Gull are fully exemplified in this tame bird. Nothing seems to come amiss to him,—meat, both raw and cooked,

fish, mice, small birds, snails, worms, and flies, are all consumed in turns, as opportunity offers. If a live mouse is turned down on the lawn before him, he at once gives chase, and, coursing rapidly in pursuit of it, like a Wagtail after a fly, seizes it with unerring aim behind the head, and after a sharp pinch or two, which crushes the skull and larger bones, the unfortunate mouse is swallowed whole. Sparrows and other small birds are treated in the same way, being invariably first crushed and then swallowed, head-first, whole. In this way I have seen him take five Sparrows in rapid succession.

A curious fact with regard to this Gull is that he catches Sparrows for himself very dexterously, and the way in which he does it is this: - About the time that the fowls are being fed, he makes his way to the poultry-yard, and, mingling with the hens, walks very slowly about with head drawn in, so as to make his neck look very short, and as if, in fact, he were trying to look as much like a fowl as possible. As soon as the general rush for the grain is over, the Sparrows drop down one by one, and then it is that the Gull, drawing gradually within reach, suddenly darts out his long neck and seizes an unfortunate Sparrow by the head. So rapidly is this done that escape for the unsuspecting Sparrow is hopeless, and in another second he is crushed and devoured.

As I have said, this Gull has swallowed as many

as five Sparrows at a meal, and his capacity in this respect is very wonderful. On one occasion a cat brought two of her kittens out upon the lawn to enjoy the sun, but while engaged in bringing the second, the first was unceremoniously carried off by the Gull, who thought, no doubt, he had secured a good meal. Instead of tearing it up piecemeal, however, as a Hawk would have done, he vainly endeavoured to swallow it whole, and while thus engaged he was discovered by a horrified member of the family with the kitten's head down his throat, while he was making frantic efforts to get the rest of the body to follow. Of course the poor kitten was rescued and restored to its anxious mother, and the Gull was left to testify his disappointment by the most discordant cries.

A little white terrier is extremely jealous of the Gull, and whenever the latter appears at the window to be fed, the dog rushes forward, barking furiously, but always contriving to keep just out of reach of the formidable bill. One day the dog was observed in the garden, trotting slowly towards the house, while his enemy the Gull was standing unseen by him behind a Laurustinus, as if watching for an opportunity to be revenged. No sooner had the dog passed the shrub than he was seized by the back, violently shaken, and carried, howling, across the lawn, without offering the least retaliation. He was then released, and probably never ran so fast in

his life before as he then did, to escape. Ever since he has kept at a most respectful distance, and, whenever he is obliged to pass by the Gull, his walk quickens to a trot, and the trot to a gallop, as if his ribs still smarted with the sharp digs he had received.

In the garden this Gull is very useful, feeding upon snails, worms, and beetles, and I have several times seen him running like a Wagtail in pursuit of flies and moths.

He is now so tame that he comes up to the house to be fed, and will take a Sparrow from my hand. When he feels hungry he usually makes his presence known by a loud trumpeting or braying, which often has the desired effect; but occasionally, when I have passed him without taking any notice, I have received a reminder in the shape of a sharp pinch in the calf of the leg.

As soon as the wounded wing got well, he used to take long flights in the neighbourhood, but always returned to be fed. At length, for fear that he might get shot, I was compelled to cut one wing to keep him at home, and here he still lives a useful and ornamental under-gardener.*

^{*} I regret to say that, since these notes were written, this amusing bird is dead. He was discovered one morning in the small fish-pond, where he took his daily swim, cold and stiff. A post-mortem examination failed to reveal the cause

GLAUCOUS GULL, Larus glaucus. An immature specimen of the Glaucous Gull was purchased in London, in a fresh state, by Mr. Bartlett, during the winter of 1838. This winter was a very severe one, and numbers of rare wild fowl visited us from the north. It is not improbable, therefore, that the bird in question was killed upon the river, or upon one or other of the large sheets of water in the county. It was placed in the collection of Mr. Yarrell, and a full description of it will be found at p. 619, vol. iii., of that author's 'History of British Birds.'

Pomarine Skua, Lestris pomarina. The Skua Gulls differ so much in their structure and habits from the others of the family Laridæ, that they have been considered entitled to generic distinction. They seldom take the trouble to fish for themselves, but give chase to other Gulls and force them to disgorge the fish which they have taken, and so active are they on the wing, that they frequently catch a disgorged fish before it reaches the water. A

of his death, which can only be accounted for by supposing that, owing to a clipped wing and the removal of some steps, he was detained a prisoner in the water all night, and perished from cold and cramp. The night in question was excessively cold, and before morning there was a sharp frost. Except in very calm weather, Gulls never remain all night upon the water.

young bird of this species was shot some years ago at Kingsbury; the exact date I have been unable to ascertain, but the capture of this specimen is recorded in 'The Zoologist' for 1843.

Another example, also a young bird, was killed near Harrow in 1841, and, more recently, a third was picked up dead in Wembley Park. Mr. Yarrell mentions an example of this species that was shot some years since in Hackney Marshes, near London, and observes that early in the winter of 1837 many were received in the London markets for sale, and among them were eight or ten birds which had been caught alive.

I have lately seen a young Pomarine Skua which was shot on the Thames, towards the mouth of the river, in August, 1862.

RICHARDSON'S OF ARCTIC SKUA, Lestris Richardsonii vel parasitica. The following notice relating to the occurrence of this species in Middlesex occurs in Yarrell's 'British Birds,' vol. iii., p. 633:—"Some years since I saw a young bird that had just been shot on the Thames at Battersea; and in the autumn of 1842 four young birds of the year were shot on the Reservoir at Kingsbury, a few miles north of London. Two of these specimens were more uniformly dark brown than the other two, from having lost many more of the light brown margins of the first set of feathers."

In the 'Zoological Journal' for April, 1825,

there is a note from Mr. Yarrell to the effect that a young Arctic Gull (*Lestris parasiticus*) was shot on the Thames, near Battersea, in September, 1824. This, probably, is the specimen referred to in the 'History of British Birds.'

In the autumn of 1862 an immature bird of this species was shot on the Thames, in Greenwich Reach, and is now in my collection. Several of the Common Skua (*Lestris cataractes*) were exhibited for sale in the London market during the winter of 1837, but no particulars of their capture could be obtained.

FORETAILED PETREL, Thalassidroma Leachii. The Petrels being such thoroughly oceanic birds, are of rare occurrence in a midland county; but, as in the case of Gulls and Terns, individuals are occasionally driven inland by severe weather, and are generally found to be much exhausted. A Petrel of this species was caught alive, in an exhausted state, by a man at work on the high road between Edgeware and Stanmore, on the 4th January, 1850. Mr. Yarrell says several have been observed "near London," and one, shot near the Steam Mill, opposite Bow Creek, in March, 1864, lately came under my notice.

Storm Petrel, Thalassidroma pelagica. The same remark will apply to this as to the last-named species: it is only after a prevalence of high winds, or severe weather on the coast, that it leaves its true element

and comes inland. A Storm Petrel was shot in November, 1824, from a coal-barge, while flying over the Thames between the bridges of Blackfriars and Westminster. The capture of this specimen is recorded by Mr. Yarrell in the 'Zoological Journal' for April, 1825, and in the 'History of British Birds,' where, however, the date given is March, 1825.

Towards the end of October, 1857, a Storm Petrel was knocked down with a stick and caught on the Edgeware Road, at Paddington, about seven o'clock in the evening. It was a wet, windy night, and the bird was much exhausted. It was supposed to have strayed up the river from the coast.

APPENDIX.

Schinz's Sandpiper, Tringa Schinzii (Buonaparte). While the foregoing pages were in the press, I accidentally met with a county-killed specimen of this rare Sandpiper in the collection of my friend Mr. H. E. Dresser. He had purchased it at a sale at Messrs. Stevens' in December, 1865, but no particulars respecting it were given in the Sale Catalogue, nor could he ascertain where it had been killed. On taking down the case in which it was mounted, in order to examine the bird more narrowly, I discovered on the back a small label, on which was written, "Schinz's Sandpiper. Shot by Mr. Goodair at Kingsbury Reservoir, 1856."

The particular season at which it was killed does not appear; but the bird is in winter plumage, and may possibly have found its way to our reservoir in company with a flock of Dunlins, the only Sandpipers which visit us in winter.

I have associated the name of Buonaparte with the specific name given above, in order to distinguish the subject of these notes from the European Tringa Schinzii of Brehm, which is now considered to be only a variety of the Dunlin, Tringa variabilis. Tringa Schinzii of Buonaparte is a native of North America, and of extremely rare occurrence in England. Although resembling the Dunlin in habits and general appearance, particularly in the winter plumage, it may be distinguished from that bird by its shorter and straighter bill, longer and more slender legs, white upper tail-coverts, and longer wings, which, when closed, reach considerably beyond the tail.

Four examples only of this bird are recorded to have been met with in Great Britain. It is, therefore, gratifying to me to add a fifth example to the list, and I have the additional satisfaction of being able to include this species amongst the "Birds of Middlesex."

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