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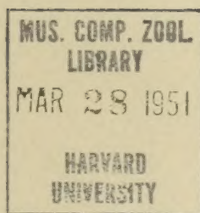


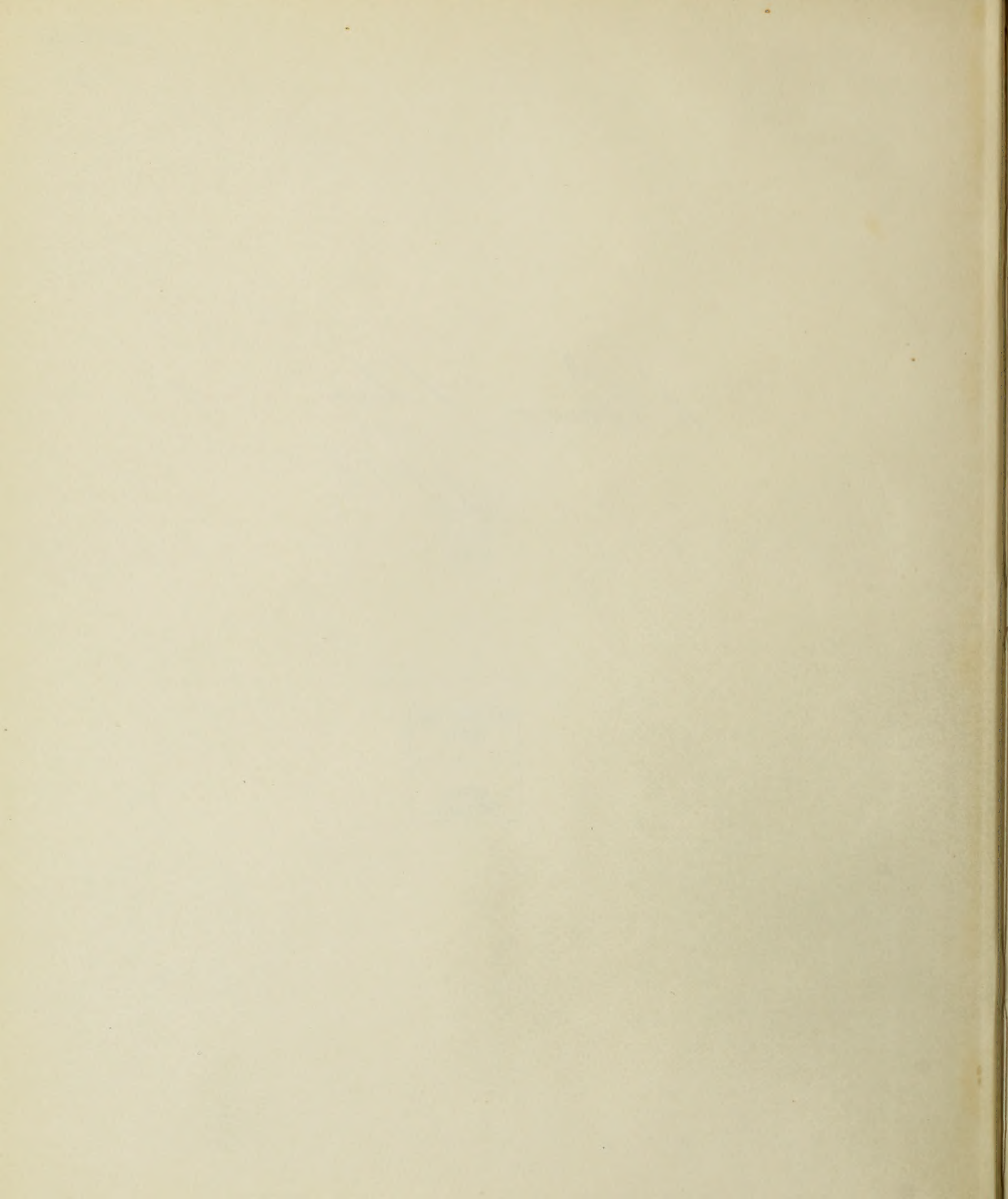
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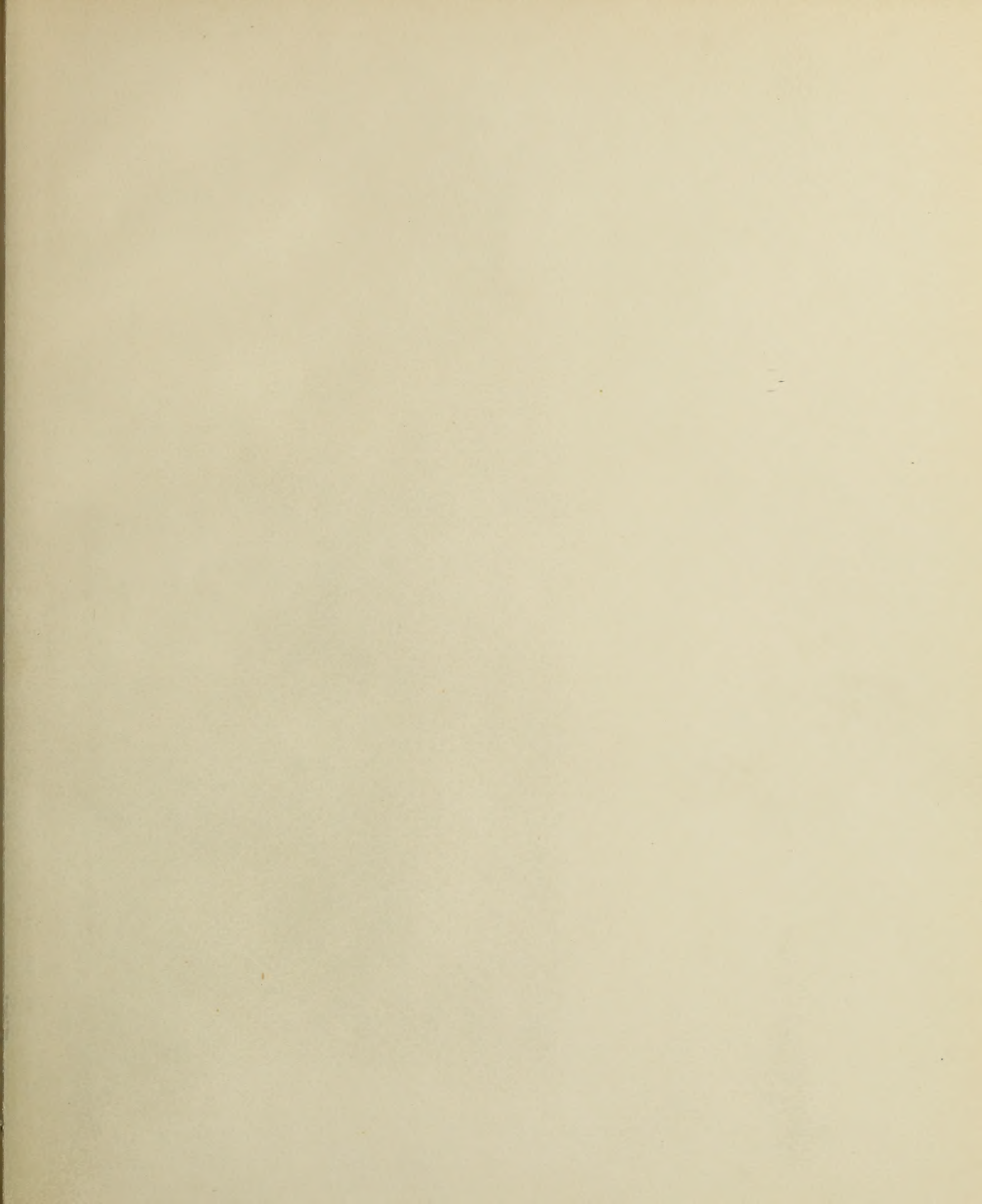
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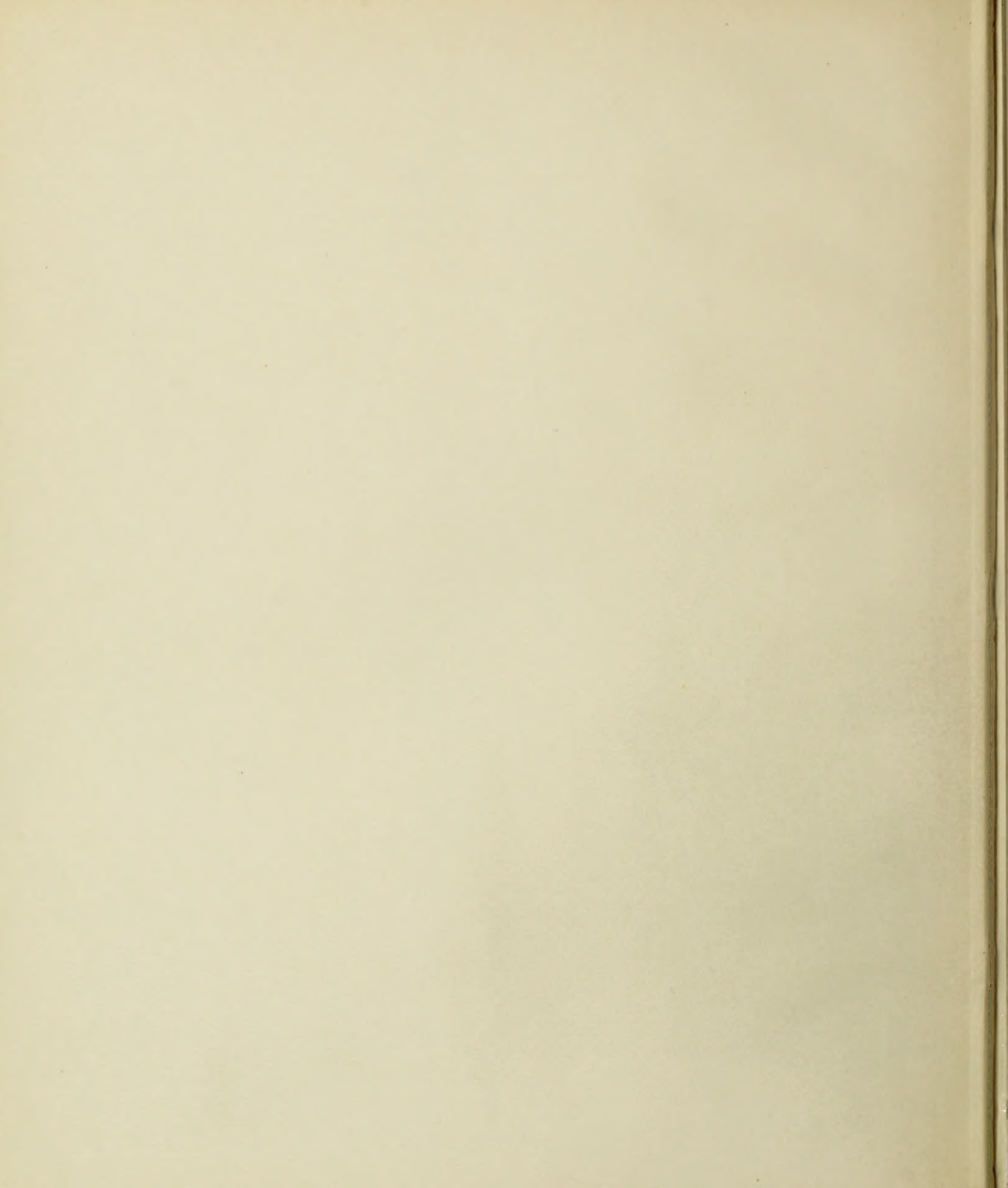
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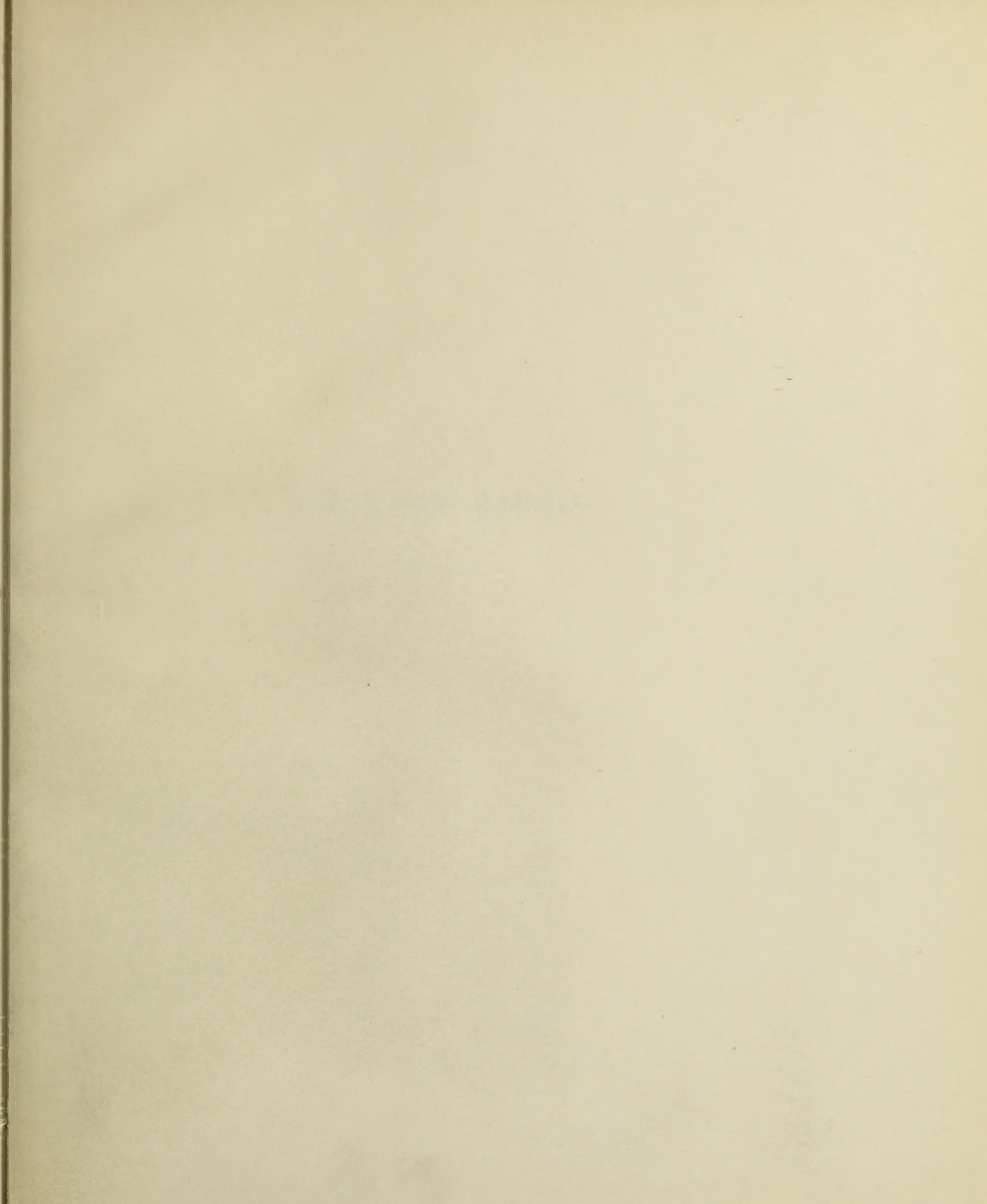
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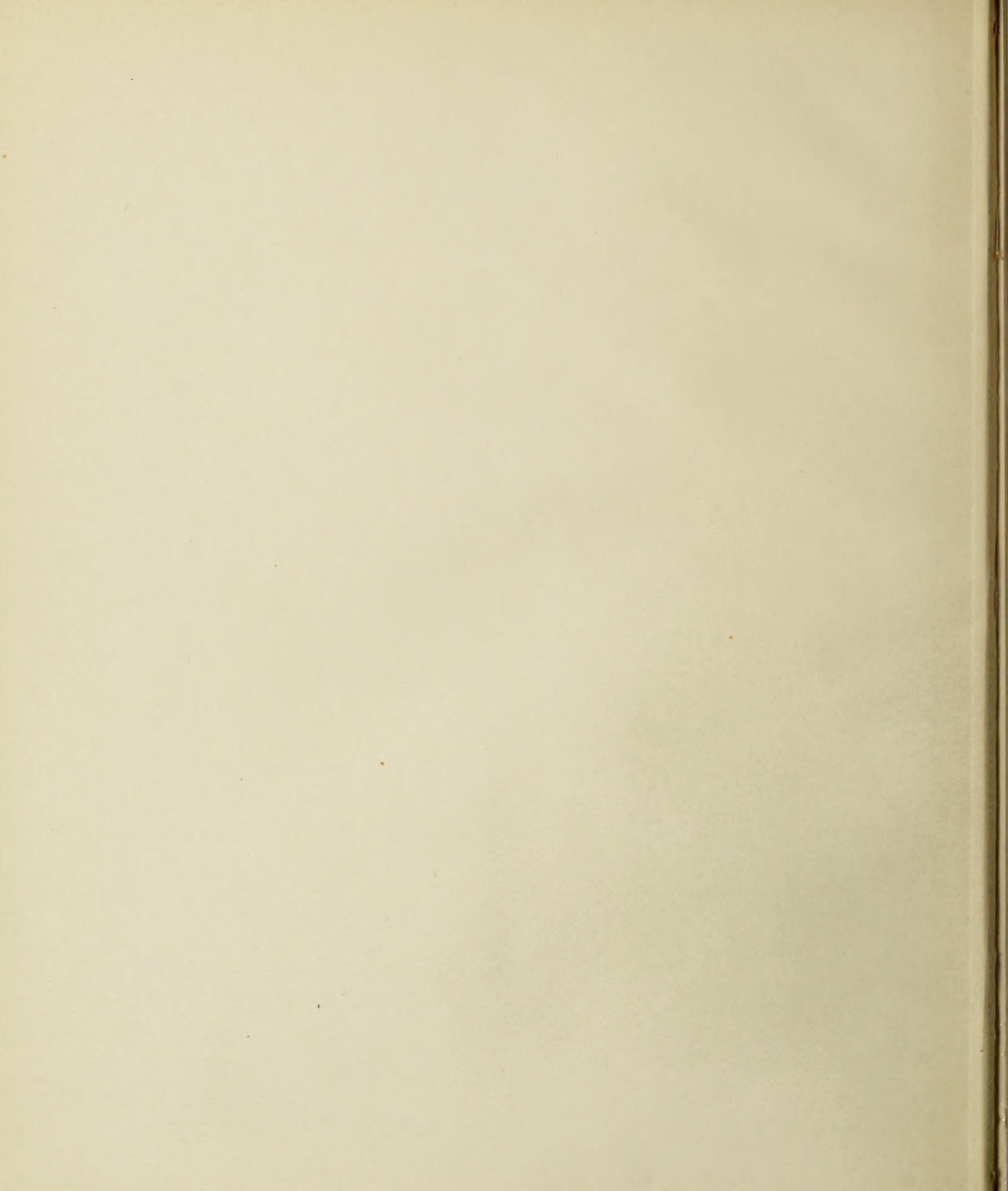












BRITISH BIRDS

VOL. IV

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Sooty Tern

Onychoprion fuscatus

Sooty Tern

Onychoprion fuscatus

Sooty Tern

Sooty Tern

BRITISH BIRDS

WRITTEN AND ILLUSTRATED BY
A. THORBURN, F.Z.S.

WITH EIGHTY PLATES IN COLOUR, SHOWING OVER
FOUR HUNDRED SPECIES

IN FOUR VOLUMES
VOL. IV

LONGMANS, GREEN AND CO.

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1916

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ERRATA.

On Plate 75. For 'Pomatorine' read 'Pomatorhine.'
 On Page 73, line 3. For 'catarractes' read 'catarrhactes.'

BRITISH BIRDS

Sub-Order OTIDES.

FAMILY OTIDIDÆ.

THE LITTLE BUSTARD.

Otis tetrax, Linnæus.

PLATE 61.

The Little Bustard is an irregular straggler to the British Islands, usually arriving during the winter months, and although found occasionally on the southern coast of England, it occurs with greater frequency in the counties of Yorkshire, Norfolk and Suffolk, whilst it has been recorded five times in Scotland and eight times in Ireland. This species breeds in Central and Southern Europe and North Africa, ranging eastwards as far as Western Siberia, and in winter reaches North-west India. Usually inhabiting more southerly regions than its larger congener the Great Bustard, it shows a partiality for rolling grass-lands and corn-fields during the breeding season, where the nest, a slight hollow in the soil, lined with a few straws or bents, is hidden among growing corn or some similar cover affording concealment. The three or four eggs, usually a glossy olive-green, blotched with dark brown, are laid early in May.

The food consists of various herbs, seeds, insects, small mammals, and reptiles. Colonel Irby, in his *Ornithology of the Straits of Gibraltar*, 2nd ed. pp. 259-260, says: "The male Little Bustard in the breeding-season has a most peculiar call, which can be easily imitated by pouting out and pressing the lips tight together and then blowing through them; the birds when thus calling seem to be close to you, but are often in reality half a mile off. They must possess powers of ventriloquism, as I have often imagined that they were quite close to me, and upon hunting the spot with a dog found no signs of them anywhere near; indeed, at that season it is sometimes as difficult to make them rise as a Landrail."

Lord Lilford describes the nuptial display of the male in spring, when the bird with dilated throat and partially extended wings may constantly be seen springing two or three feet from the ground. After the nesting season the birds often

BRITISH BIRDS

congregate in large flocks, and, except during the hot days of August and September, are then usually very shy and wary. In autumn the male Little Bustard loses the distinctive black and white gorget on the throat, when his colour in general resembles that of the female, except that the black vermiculations are finer and less blotched.

MACQUEEN'S BUSTARD.

Otis macqueeni, J. E. Gray.

PLATE 61.

This rare visitant has only been obtained four times in the British Islands, the first having been shot near Kirton-in-Lindsey, Lincolnshire, in October 1847, the next in 1892 in Yorkshire, another in the same county in 1896, whilst the last was obtained as far north as Aberdeenshire in 1898. All these birds occurred during the month of October. Macqueen's Bustard inhabits the western part of Siberia, Turkestan, Persia, Afghanistan, Baluchistan, and North-western India. In the last mentioned country, where it occurs as a winter visitor, it is known as "Houbara," which name is also applied to a closely allied species, *Otis undulata*, inhabiting Africa.

The nest consists of a slight hollow scratched in the sand, in which the female lays her eggs; these are olive-brown in colour, blotched with shades of darker brown. According to Blandford (*The Fauna of British India*, vol. iv. pp. 197-198), "This Bustard is generally found solitary or in small parties on open sandy semi-desert plains, very often in the neighbourhood of mustard-fields. It feeds on seeds, small fruits, shoots of plants, and insects. It runs quickly and is difficult to approach on foot, but it is generally shot from a camel. I have repeatedly shot Houbara (from horseback) by circling round, never going directly towards the bird until it squats down. When thus lying down, even in bare ground, only a trained eye can detect it; this resemblance to a stone or a small heap of sand is remarkable, and the transformation that takes place when a Houbara, or, as sometimes happens, two, three, or more, spring into flight from the apparently lifeless waste, is not easily forgotten by anyone who has witnessed it. Houbara are excellent eating as a rule, but they contract a strong and unpleasant flavour at times from feeding on shoots of mustard and other allied plants grown as oil-seeds."

The female is hardly so large as the male, and although the colour in general is similar in both sexes, her crest and neck plumes are less developed than those of her mate.

Sub-Order GRUES.

FAMILY GRUIDÆ.

THE CRANE.

Grus communis, Bechstein.

PLATE 61.

From an old Act of Parliament, protecting the eggs of the Crane, passed about the year 1533, it is evident that this fine species nested regularly in the fens of our eastern counties at that period and for some time onwards, but it is not known to have bred in England later than 1590, though flocks regularly visited this country in winter to a much later date. Now it is only known as a bird of passage, and is rarely seen in our islands.

In spring large flocks leave their winter quarters in Africa and travel northward to breed in various parts of Europe, from Scandinavia, Russia, and Northern Germany, southwards to Spain, Italy, and the Balkan Peninsula, also possibly in Western Siberia and Turkestan, whilst a paler race breeds in Eastern Siberia and winters in North-west India.

Wooley, who has given a charming account of the breeding of the Crane in Lapland (*Ibis*, 1859), says: "The two eggs lay with their long diameters parallel to one another, and there was just room for a third egg to be placed between them. The nest, about two feet across, was nearly flat, made chiefly of light-coloured grass or hay loosely matted together, scarcely more than two inches in depth, and raised only two or three inches from the general level of the swamp. There were higher sites close by; and many of them would have seemed more eligible. . . . At length, as I had my glass in the direction of the nest, which was three or four hundred yards off, I saw a tall grey figure emerging from amongst the birch-trees, just beyond where I knew the nest must be; and there stood the Crane in all the beauty of nature, in the full side-light of an Arctic summer night. She came on with her graceful walk, her head up, and she raised it a little higher and turned her beak sideways and upwards as she passed round the tree. . . . At length she turned back and passed her nest a few paces in the opposite direction, but soon came into it; she arranged with her beak the materials of the nest, or the eggs, or

BRITISH BIRDS

both ; she dropped her breast gently forwards ; and as soon as it touched, she let the rest of her body sink gradually down. And so she sits with her neck up and her body full in my sight, sometimes preening her feathers, especially of the neck, sometimes lazily pecking about, and for a long time she sits with her neck curved like a Swan's, though principally at its upper part."

The eggs vary in colour from pale buff to olive-brown, blotched with reddish-brown.

The Crane feeds chiefly on vegetable food, grass of all kinds forming a large part of its diet, as well as the green shoots of water-plants ; it also eats worms, insects, and reptiles.

Col. Irby, describing the migration of this species as witnessed in Spain, states (*The Ornithology of the Straits of Gibraltar*, 2nd ed. p. 251) : "These Andalucian-breeding Cranes are very largely reinforced by the autumn migration, which arrives early in October ; and they then form immense bands of from two to three hundred in number, though generally they keep in smaller lots of from five to thirty or forty. Those which do not remain to nest, pass north in March. On the 11th of that month, in 1874, Mr. Stark and myself had the pleasure of seeing them on passage ; and a grand and extraordinary sight it was, as flock after flock passed over at a height of about two hundred yards—some in single line, some in a V-shape, others in Y-formation, all from time to time trumpeting loudly."

The long convoluted trachea or windpipe and hollow keel to the sternum of the Crane no doubt enable the bird to utter its loud trumpet-like notes.

The sexes are much alike in colour, but the male is said to be darker.

An example of the Demoiselle Crane, *Grus virgo*, was shot in the Orkneys in May 1863, and another is said to have been picked up dead in Somersetshire, but these are supposed to have escaped from captivity. During summer this species occurs in Southern Europe, ranging eastwards into Asia, and winters in Africa and India.



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Order LIMICOLÆ.

FAMILY ŒDICNEMIDÆ.

THE STONE-CURLEW.

Œdicnemus scolopax (S. G. Gmelin).

PLATE 61.

The Stone-Curlew, distinguished also by the various names of Great Plover, Stone-Plover, Norfolk Plover, and Thick-Knee, the last having been applied to it on account of the swollen tibio-tarsal joint, noticeable in the immature birds, is best known as a summer visitor to England, though a few remain during the winter, especially in Devonshire and Cornwall. Its favourite haunts are the chalk-downs and barren sandy warrens of the southern and eastern counties, and though it is known to breed as far north as Yorkshire, it is only an occasional visitor to the other parts of England and Wales, and rarely occurs either in Scotland or Ireland.

Inhabiting Central and Southern Europe and ranging eastwards as far as Central Asia, this partially migratory species is also found in North Africa, Abyssinia, India, Burma, and Ceylon.

In England, the birds usually arrive at their breeding stations in April, and the nest, consisting only of a slight hollow in the sand or chalky soil, generally contains two eggs; these are yellowish-buff in ground colour, blotched and streaked with brown, with underlying grey shell-markings, and closely resemble the stones and flints scattered around.

The Stone-Curlew is nocturnal in its habits, and after dark usually leaves the higher barren uplands to forage among the fields and pastures for worms, slugs, beetles, and other insects on which it feeds. It will also capture mice and reptiles.

When passing to their feeding grounds the birds are very noisy and clamorous, their note, according to Stevenson (*Birds of Norfolk*), being a "loud vibratory whistle which may be heard at all times of the night. By moonlight their cries become even more incessant. . . ."

If approached by day they endeavour to escape observation by squatting, when they are not easily seen owing to their colour matching so closely the surrounding sand and pebbles, although their large yellow eye will often betray them.

Before leaving us in autumn, Stone-Curlews congregate in large flocks, but since the cultivation of so much waste land and the increase of plantations, they are not now so numerous as in former days.

The sexes do not differ in plumage.

FAMILY GLAREOLIDÆ.

THE PRATINCOLE.

Glareola pratincola (Linnæus).

PLATE 62.

This beautiful species, which in some of its habits takes after the Plovers, though its manner of flight resembles that of the Swallows and also the smaller Terns, is a rare straggler to the British Islands, some twenty occurrences having been recorded in England, mostly in the eastern, southern, and south-western counties. It seldom visits Scotland, where only four have been noted, whilst one is said to have been shot in Ireland.

The Pratincole is a common bird in many parts of Southern Europe, breeding in Spain, South-eastern France, Sicily, and eastwards as far as the Black and Caspian Seas; it also inhabits North Africa, and ranges to Turkestan, Persia, and India.

The two or three eggs, which are thin-shelled and extremely fragile, are in ground colour buff or slaty-grey, spotted and streaked with very dark brown. They are usually laid on the open expanses of hard and sun-baked mud left exposed after the waters of the previous winter have dried up. At this time the birds are bold and fearless and allow a close approach, but otherwise are generally shy and take wing at some distance.

Lord Lilford says (*Coloured Figures of the Birds of the British Islands*): "In flight, cry, and general habit of life the present bird much resembles the Marsh-Terns, and its eggs have a certain resemblance to those of some of that group," whilst it "frequently cowers with extended wings on the bare ground without any apparent cause, and as frequently lies upon its side with one wing partially elevated." Towards dusk the birds become very active, and continue hawking till long after dusk for the beetles, grasshoppers, and other insects on which they feed. Seebohm describes their note as "a peculiar rattle, impossible to express on paper; but the principal sound may be represented by *kr* rapidly repeated." The young, like the Plovers, are active, and can run about shortly after leaving the egg. At first they are mottled brown and buff above, with white underparts.

The adult male and female are alike in colour.

THE BLACK-WINGED PRATINCOLE

THE BLACK-WINGED PRATINCOLE.

Glareola melanoptera, Nordmann.

PLATE 62.

This species inhabits the steppes of Southern Russia, ranging westwards to Hungary and eastwards as far as Turkestan, and migrates for the winter to tropical and South Africa. The Black-winged Pratincole is a very rare visitor to England, where it has only been obtained four times, the first on Romney Marsh, Kent, May 30th, 1903, the next in the same locality, June 17, 1903, another at Rye on the following day, and the last near Northallerton, Yorkshire, on August 17th, 1909. It differs chiefly from the Common Pratincole in having the under wing-coverts and axillaries black instead of chestnut, and has no white on the secondaries.

According to the late H. E. Dresser's *Birds of Europe*, "In its habits and mode of nidification, the present species closely agrees with *Glareola pratincola*, and like that bird it frequents the open steppes and treeless localities."

The eggs are not unlike those of the Common Pratincole, but the ground-colour is usually a rather deeper ochre, with bolder markings.

THE CREAM-COLOURED COURSER.

Cursorius gallicus (J. F. Gmelin).

PLATE 62.

The Cream-coloured Courser is a rare straggler to Great Britain, some twenty occurrences having been recorded in England and Wales and one in Scotland. The habitat of this desert bird stretches from the Canaries and Cape Verde Islands, across the sands of North Africa, Arabia, and Persia, and in winter includes North-west India.

No nest is made, the two eggs, of a yellowish stone-colour, marbled and dotted with markings of brown and grey, are laid in some slight depression among the stones and sand, and owing to their colour are very difficult to find. Mr. E. G. Meade-Waldo, in his "Notes on the Birds of the Canary Islands," published in *The Ibis* for 1889, says: "The young are much easier to find than the eggs. The hen only remains at the nest whilst she is sitting; the cocks either go about in little

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parties or mix with birds that are not breeding. When the young are hatched, however, both parents care for them, the male being rather more shy than the hen. It is easy to tell the cock from the hen while running about; he carries himself much higher and seems to have a bigger head; when shot, this difference vanishes. The males breed in their first year, as two that I shot were in partly spotted plumage. Nevertheless, many do not breed at all, as I saw flocks of some fifteen to forty birds, while others had eggs or small young. In flocks they were very wild, and reminded one generally of Lapwings; they skim a great deal with outstretched, motionless wings. Their note is a low *qua qua* when they have young."

The food consists chiefly of grasshoppers and other insects.

In colour the sexes are alike.

FAMILY CHARADRIIDÆ.

THE DOTTEREL.

Eudromias morinellus (Linnæus).

PLATE 62.

A summer visitor to Great Britain, this beautiful Plover usually reaches the southern and eastern parts of England and Southern Scotland about the end of April or beginning of May, when small parties or "trips" may be seen on the open downs and fallows as they make their way to their breeding stations on the northern hills.

Though now very rare, the Dotterel has long been known to nest on the hills of the Lake District, but its chief breeding haunts in the British Islands are the mountains of the Scottish Highlands, where in summer at high elevations it nests among the mists of the Grampians and in a few other favourable localities. This species occasionally visits Ireland on passage, chiefly in the autumn months.

It breeds in Scandinavia and as far north as Novaya Zemlya, and, according to Howard Saunders' *Manual*, "on the highlands of Transylvania, Styria, and Bohemia," whilst it also ranges in summer to Northern Asia. In winter it migrates to North Africa, Turkestan, and Persia.

The nest, consisting of nothing more than a slight hollow in the moss-covered ground, contains three eggs, of a pale greyish-buff colour, blotched and spotted with blackish-brown. The food consists of grasshoppers, beetles, and other insects, as well as of worms and grubs.

The Dotterel, which in its habits has much in common with the Golden Plover, is, however, much less wary than that bird, and will usually allow a close approach. Macgillivray thus describes a flock he came across in the parish of Towie, Aberdeenshire, in September: "Not having been molested, the birds merely ran along before us as we approached them. Several, on being first roused, stretched up their wings, as is customary with all birds of this group, and moved about in a lifeless sort of way, seeming to entertain little apprehension of danger. On being urged, they rose on wing, but presently alighted in the neighbourhood. It is this insensibility to danger which has procured for them the names of Dotterels and Morinelli, or little fools. It has been alleged, too, that by stupidly looking on, and imitating the

BRITISH BIRDS

gestures of the fowler, they suffered themselves to be driven into the net ; but this propensity to imitate is probably imaginary, although it is certain the bird runs along with an outstretched wing, which might be supposed to be in imitation of an elevated arm."

Heysham's account of this bird in the Lake District, published in the *Magazine of Natural History*, has been often quoted ; he says : "In the neighbourhood of Carlisle Dotterels seldom make their appearance before the middle of May, about which time they are occasionally seen in different localities, in flocks which vary in number from five to fifteen, and almost invariably resort to heaths, barren pastures, fallow grounds, etc., in open and exposed situations, where they continue, if unmolested, from ten days to a fortnight, and then retire to the mountains in the vicinity of the lakes to breed. The most favourite breeding haunts of these birds are always near to or on the summits of the highest mountains, particularly those that are densely covered with the woolly fringe moss (*Trichostomum lanuginosum*, Hedw.), which indeed grows more or less profusely on nearly all the most elevated parts of this alpine district. In these lonely places they constantly reside the whole of the breeding season, a considerable part of the time enveloped in clouds, and almost daily drenched with rain or wetting mists, so extremely prevalent in those dreary regions ; and there can be little doubt that it is owing to this peculiar feature in their economy, that they have remained so long in obscurity during the period of incubation."

The female is the larger bird, and is said to be more brightly coloured than her mate.

THE CASPIAN PLOVER.

Ægialitis asiatica (Pallas).

PLATE 62.

The first occurrence of this rare species in the British Islands was on May 20th, 1890, when two birds were seen in a market garden at Great Yarmouth, Norfolk, and later in the day one of these was shot on the denes. Two more were obtained in Sussex, July 13, 1911.

During the breeding season this Plover inhabits South-eastern Russia, from where the Volga joins the Caspian Sea eastwards to the Altai mountains, and southwards to the desert lakes of Turkestan and the Amu-Daria. It migrates for the winter to Africa, reaching Cape Colony, and has been recorded in Western India.

THE CASPIAN PLOVER

When nesting, the birds frequent the neighbourhood of salt-lakes and lay three eggs, which are in ground-colour ochreous, blotched and spotted with blackish-brown, in a slight hollow in the ground.

THE RINGED PLOVER.

Ægialitis hiaticola (Linnæus).

PLATE 62.

The Ringed Plover or Ringed Dotterel is very plentiful on stretches of sand and shingle along the coasts of the British Islands, and in the breeding season it also frequents the margins of many inland lakes and rivers, the sandy warrens of Norfolk, and other localities suited to its habits. Two forms of this species have been recognised, one rather larger and duller in colour, resident in our islands and on the coasts of France and Holland, and the other smaller, which visits England in spring (not to be confounded with the Little Ringed Plover, *Æ. curonica*). Abroad the Ringed Plover is widely distributed, breeding as far north as Spitsbergen and southwards to Central Europe and Central Asia, also in Greenland and the eastern parts of North America. In winter it ranges to the Mediterranean countries, and southwards to Cape Colony in Africa.

The nest consists of a hollow in the sand or pebbly beach, occasionally with a lining of small stones, and contains four eggs, generally laid about the middle of April, of a yellowish-buff, spotted and blotched with brownish-black and shades of purplish-grey. This species generally breeds twice in the season. When the eggs or young are approached the parent bird shows great anxiety, and will endeavour to lead away the intruder by feigning lameness or a broken wing. Though without bright colouring, few birds are so attractive as this dainty little wader, with its strongly contrasted markings of black and white and grey-brown mantle.

Flocks of varying size may be seen scattered along our shores in autumn and winter, and when feeding on the flats left bare by the receding tide they spread out, and, keeping a little apart, run a few paces, quickly pick up some small sea-worm, shrimp, or other marine creature, then pausing for a moment or two proceed in their quest. When thus engaged they usually keep near the margin of the waves, where a larger supply of food is obtained, and now and again, as they move along, they utter their soft and plaintive whistle, one of the most pleasing sounds in nature.

When their feeding grounds are covered, the birds retire to some quiet spot above high-water mark, when they rest and preen their feathers. Macgillivray

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says: "Their flight is rapid, even, performed by regularly-timed beats, and they glide along, often at a very small height, or ascend, and perform various evolutions before alighting, sometimes all the individuals in a flock inclining to one side, so as to expose now their upper and again their lower surface to the spectator. Frequently when feeding they intermix with Sandpipers, Turnstones, Redshanks, and other species; but in flying they generally keep apart. At high water they repose on the sands or on the pastures, usually in a crouching posture. They are partly nocturnal, and I have often found them searching for food by moonlight. As the autumn advances, they collect into larger flocks, and at the mouths of rivers may often be seen in very numerous bands. During winter and the greater part of spring they continue along the sea-shore, none then being found by the rivers or lakes."

The young, which leave the nest as soon as hatched, are at first clothed in down of a mottled greyish-brown above and white beneath. In the immature birds, the black bands on the forehead and breast are absent and the dark parts of the head are brown, while the bill is blackish without any orange at the base, and the legs and feet are dull yellow.

The female resembles the male in colour, but is rather duller, while in winter both sexes have the black markings less distinct.

THE LITTLE RINGED PLOVER.

Ægialitis curonica (J. F. Gmelin).

PLATE 62.

This species, smaller than our common Ringed Plover, differs also in having all the shafts of the primaries dark, except the outer one, which is white. These shafts in the larger bird are all marked with white, whilst the only yellow on the bill of the present species is at the base of the lower mandible, and the legs and feet are of an ochre colour instead of orange.

The Little Ringed Plover is a rare straggler to the British Islands, eight having been recorded in England and one in the Outer Hebrides.

It nests in Spain and other parts of Southern Europe, ranging as far north as Scandinavia, and eastwards throughout a great part of Asia to Japan. During the breeding season it is also found in North-west Africa, and in winter visits Africa, India, the Malay Archipelago, and wanders to New Guinea.

According to Lord Lilford (*Coloured Figures of the Birds of the British Islands*), "Except in the matter of its preference for the sandy banks of fresh-



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THE LITTLE RINGED PLOVER

water lakes, ponds, and streams, to the sea-shore, this species differs but little in habits from the common Ringed Plover, but it is considerably smaller and proportionately much more slenderly built than that bird. The eggs of the present species, found by us in Spain were laid in slight depressions of the sand amongst stones and stunted vegetation, without any attempt at a nest; the complement is four, they are, of course, smaller, and more elongated and thickly speckled, than those of the Ringed Plover. In one instance I came upon three of these eggs on the sand between the wheel-ruts of a rough cart-road."

Seebohm says (*British Birds*, vol. iii. pp. 17-18), "It is rather more shy than its larger ally and takes wing more readily. In its flight it is very similar to the Ringed Plover, but its notes are very different from that of either of its near allies.

"Its ordinary call-note is a loud, clear, plaintive, and monotonous *pee*, almost lengthened into two syllables. When alarmed the note is pronounced much shorter and repeated more rapidly; and in spring it is uttered still more rapidly, so as to become continuous, especially at the close of its love song, when it becomes a trill."

THE KENTISH PLOVER.

Ægialitis cantiana (Latham).

PLATE 62.

A summer visitant to our coasts, this species, which is very local in its distribution, breeds regularly on the shores of Kent and Sussex, but elsewhere in England has occurred only as a more or less rare straggler from as far north as Teesmouth, Durham, southwards to the coasts of Devonshire and Cornwall. It is hardly known in Ireland, not having occurred there for many years, but is fairly common in the Channel Islands.

In Europe it breeds in Southern Sweden, southwards to Spain and the Mediterranean, also in North Africa, the Azores, Madeira, Canaries, and Cape Verde Islands. Eastwards it is found during summer frequenting the margins of the Black and Caspian Seas, and ranges across Central Asia as far as Japan. In winter it migrates to Africa, India, Ceylon, Burmah, and the Malay Peninsula.

The Kentish Plover was first brought to notice by Latham, who described specimens obtained at Sandwich by Dr. Boys in 1787 and 1791. In its habits this species resembles the Ringed Plover, but according to Lord Lilford "appears to be more exclusively addicted to shingle and hard sands than that bird." Well on in May, the eggs, usually three in number, are laid in a depression in the sand or

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shell-strewn pebbly beach. In ground-colour they are yellowish-buff, of a deeper tint than the Ringed Plover's, irregularly marked with scratches and spots of blackish-brown. During the breeding season the birds are very tame and fearless, and may easily be approached. They seek their food along the margin of the tide, running hither and thither on the wet surface to secure the tiny shell-fish and other marine animals stranded by the waves.

The female differs somewhat from the male in colour, having the dark markings less distinct and browner, and the buff tint on the head duller.

THE KILLDEER PLOVER.

Ægialitis vocifera (Linnæus).

PLATE 63.

This rare species, a wanderer from America, has been recorded half-a-dozen times in the British Islands, viz. in Hampshire, April 1859; Aberdeenshire, 1867; Tresco, Isles of Scilly, January 15, 1885; and three on Romney Marsh, Kent, April 1908.

According to the B.O.U. *List of British Birds* (2nd ed. 1915), "The Killdeer Plover breeds in North America, from central British Columbia and central Quebec southwards to central Mexico. It winters from California, New Jersey, and the Bermudas, southwards to Venezuela and Peru, and has occurred in Chile and Paraguay."

Inhabiting the coast in winter, and at other times usually found on inland swamps or pastures, the Killdeer Plover makes no nest beyond a mere hollow in the ground, lined with a few dry bents, in which it lays its four eggs, in colour yellowish-buff, with spots and blotches of black.

This bird is noisy and restless, running with great rapidity and possessing great power of flight, whilst it owes its name of "Killdeer" to its loud clear call.

The food consists of insects, worms, and small crustaceans. Larger than our Ringed Plover, it is easily distinguished by its long rufous tail, double band of black across the chest, and longer legs.

THE GOLDEN PLOVER

THE GOLDEN PLOVER.

Charadrius pluvialis, Linnæus.

PLATE 63.

The Golden Plover may be found at all times of the year in the British Islands, where it breeds freely on the moors of Northern England, in smaller numbers in Devonshire and Somersetshire, while in Scotland and Ireland it is plentiful in summer on the mountain sides and heathery bogs. In autumn and winter it seeks the low-ground pastures and mud-flats on the shores, when its numbers are increased by flocks arriving from the Continent of Europe, which remain with us till spring. This species has a wide distribution over Central and Northern Europe, and ranges as far east as the Yenesei in Siberia. In winter it visits Southern Europe, Africa, the Azores, and Canaries, and has wandered to India.

The nest consists of a slight depression in the ground, sparsely lined with bents and bits of heath, and generally situated among stunted grass or heather. It contains four eggs, arranged with their pointed ends together, which in colour are buff or yellowish-grey, blotched and spotted with deep rich brown and purplish-brown markings. In the breeding season the Golden Plover loses much of its usual wariness, and may then be watched at fairly close quarters.

The bird represented in the plate in full summer plumage, showing the characteristic black breast only assumed in the breeding season, was painted from a sketch made in the month of April on a heathy flat by the Helmsdale in Sutherland, when the birds were returning to their nesting haunts. After their usual manner when feeding, they were scattered over the moor, some yards apart from each other, at one time standing motionless, then again running forwards a few paces to pick up some grub or worm, while at intervals they uttered that soft and melodious whistle which harmonizes so well with their wild surroundings. In autumn and winter, when the flocks come down to the fields and tidal estuaries, they are much sought after by gunners, when the birds become very wary and difficult to approach. In flight they move with great speed, progressing with steady beats of their long pointed wings.*

The female resembles the male in colour, but in summer the white parts of the plumage are less pure and the black duller and not so extensive.

BRITISH BIRDS

THE ASIATIC GOLDEN PLOVER.

Charadrius dominicus, P. L. S. Müller.

PLATE 63.

This species, also known as the Lesser Golden Plover and the Eastern Golden Plover, is represented by two forms, only slightly differing from each other. One inhabits in the breeding season Northern Asia, from the Yenesei to Bering Sea and south to Mongolia, and is also found at that time in Alaska, while in winter it migrates to China, Japan, Southern Asia, and the countries of the Pacific Ocean.

The other, which is usually slightly larger than the Asiatic race, and has been distinguished under the name of the American Golden Plover, breeds in the Arctic parts of North America, and winters in the south of that continent. This bird, including both the above-mentioned forms, has occurred about eight times in the British Islands. The specimen shown in the plate, kindly lent to me for the purpose by Lt.-Commander Millais, is of the Asiatic race, and was obtained at Loch Stennis, the Orkneys, in November 1887. It is apparently a young bird in first plumage. The Asiatic Golden Plover, which in summer has the colour in general brighter and the black and white on the breast more richly marked than our bird, may at all seasons be distinguished from the other by the smoke-grey axillaries, which may be seen when the wing is extended. These in the common Golden Plover are white. The present species is also a smaller bird.

Miss Maud D. Haviland, who found the Asiatic Golden Plover breeding in numbers by the Yenesei in Siberia in the summer of 1914, says (Witherby's *British Birds*, vol. ix. pp. 82-83), "I first saw a few birds at Dudinka, where they were probably on migration, and afterwards the species was common all the way down to Golchika. Each pair occupied perhaps two furlongs of tundra. I should think that every acre of moss and lichen from the Yenesei to the Lena in summer is thus parcelled out. Your progress across the tundra in July is heralded and attended by a chorus of plaintive cries. Both birds meet you a quarter of a mile from the nest, and never leave you until you are at the boundaries of their own territory, and they can safely hand you over to their next neighbours for espionage. Covert, of course, there is none—but it is needless to say more. The suspiciousness and patience of the Golden Plover are the same all the world over; and I will not dwell upon them to those who themselves have no doubt walked vainly for half a day about the bird's breeding grounds in this country, and listened to its maddening but at the same time most musical protests."

THE ASIATIC GOLDEN PLOVER

Seebohm describes the nest in his work on *British Birds* (vol. iii. p. 42) as "merely a hollow in the ground, upon a piece of turfy land, overgrown with moss and lichen," and this was "lined with broken stalks of reindeer-moss." According to the same authority, the four eggs "vary in ground-colour from light buff to very pale buff with a slight olive tinge, blotched and spotted with rich brown." He describes the note as "very similar to that of the Grey Plover. Its commonest note is a plaintive *kö*; occasionally the double note *kl-ēē* is heard, but more often the treble note *kl-ēē-kö* is uttered."

THE GREY PLOVER.

Squatarola helvetica (Linnæus).

PLATE 63.

This beautiful Plover visits our shores in late summer and autumn, some only as birds of passage, while others spend the winter and leave for their northern breeding quarters in the spring. Sometimes individuals in full breeding plumage may be seen on the coast as late as the end of May. It is more numerous on the southern and eastern shores of England and east coast of Scotland as far north as the Moray Firth, where I have seen it in autumn near Lossiemouth, than in the west.

It visits Ireland in small numbers during the winter, but, according to Lord Lilford, the term "Grey" is applied there to the Golden Plover, to distinguish the latter from the Peewit, which has caused confusion.

The late H. E. Dresser, in his *Manual of Palæarctic Birds*, gives the habitat of the Grey Plover as "the extreme northern parts of Europe, Asia, and America; in winter migrating south throughout Europe, Africa, Asia, Australia, North and South America."

Seebohm describes the nest (*British Birds*, vol. iii. p. 47) as "a hollow, evidently scratched, perfectly round, somewhat deep, and containing a handful of broken slender twigs and reindeer-moss." He states that the eggs are "four in number, intermediate in colour between those of the Golden Plover and the Lapwing, and subject to variation, some being much browner, and others more olive, none quite as olive as typical Lapwing's eggs or as buff as typical ones of the Golden Plover, but the blotching is in every respect the same; the underlying spots are equally indistinct, the surface-spots are generally large, especially at the large end, but occasionally very small and scattered, and sometimes taking the form of thin streaks."

BRITISH BIRDS

The plaintive call-note differs from that of the Golden Plover. Although the winter plumage of both species has some resemblance, the birds may easily be distinguished by the larger size of the Grey Plover, its longer and heavier bill, and the presence of a small hind-toe, which is absent in the Golden Plover, and also by the black axillaries, seen under the wing in the second figure in the plate. Their habits in general, and also their food, are much alike, although in our country the Grey Plover is seldom met with away from the coast, while the other frequently occurs inland.

THE SOCIABLE PLOVER.

Vanellus gregarius (Pallas).

PLATE 63.

About the year 1860 a specimen of this rare Plover, accompanying a flock of Peewits, was shot in the neighbourhood of St. Michael's-on-Wyre, Lancashire, but was not identified till many years later. Another was obtained at Meath in August 1899, six in Kent, May 1907, and four near Winchelsea, Sussex, in May 1910.

A rare straggler to Central and Southern Europe, this species breeds in Southern and South-eastern Russia, eastwards through Western Siberia and Turkestan to Mongolia, migrating in winter to North-eastern Africa, Arabia, North-western India, and Ceylon.

Regarding the habits of the Sociable Plover, von Heuglin, as quoted in Dresser's *Birds of Europe*, writes (*Orn. N.O. Afr.* p. 997), "During autumn and winter it regularly visits the localities we explored; it appears in Egypt early in October, and migrates southwards to the savannas of Kordofan, Takah, and Senaar, usually in flocks of from five to fifteen individuals, each flock keeping close together; and generally they are extremely shy. I observed it during the month of December in places where the plains had been burnt, and in sandy places around Rahad and Atbara. It appears seldom to settle on the ground, but is usually seen flying swiftly near the ground over the plains, now and again crossing the caravan roads; and I succeeded in shooting several from horseback as they crossed the road; for I could not otherwise get within range. Sometimes we heard it utter a shrill, short whistle; but otherwise it uttered no sound."

It resembles the Peewit in its habits, making its nest, a mere hollow lined with bents, among the steppes. The four eggs are somewhat paler in colour than those of the last-mentioned bird, and less boldly marked.



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THE LAPWING

THE LAPWING.

Vanellus vulgaris, Bechstein.

PLATE 63.

The Lapwing, Peewit, or Green Plover, as it is variously called, is resident and widely distributed throughout many parts of England, and is even more numerous in Scotland and Ireland, whilst in autumn its numbers are increased by the arrival of flocks from the continent of Europe. This species is found breeding more or less over the whole of Europe, from the Arctic Circle, southwards to Spain, also in small numbers in North Africa and Egypt, and across Asia eastwards to Japan. In winter its migrations extend as far as Southern China and North-west India.

The nest, which is only a depression in the ground lined with a few bents and usually situated in rough pastures, moorland wastes, or on fallows, contains four eggs. These vary somewhat in colour, but are generally brownish, yellow, or olive, blotched and spotted with blackish-brown. When their treasures are approached, the parent birds show great anxiety and distress, uttering their loud peevish cries and attempting to lure aside the intruder by feigning lameness or a broken wing.

I know no bird which excels the Lapwing in its marvellous powers of twisting, turning, and diving in the air, and in the breeding season they may constantly be seen performing these aerial evolutions, while their notes at this time are more modulated and varied, and blend with the vibrating sound made by their wings.

The food consists chiefly of earthworms, grubs, and insects. The female is duller in colour than the male, and has the crest less developed. In winter the black on the throat in both sexes changes to white.

THE TURNSTONE.

Streptilas interpres (Linnæus).

PLATE 64.

The Turnstone, though mostly occurring on our coasts during autumn and winter, partly as a visitor and also on passage, remains throughout the year in some localities, though it has never been known to breed in the British Islands. I have seen small parties, including birds in full breeding plumage, on the shores of Tresco, Isles of Scilly, about the middle of May, which were easily approached, as

BRITISH BIRDS

they worked their way along the edge of the sea, probing and searching the wet shingle for their food.

The Turnstone breeds in Northern Europe and the lands within the Arctic Circle, from Northern Siberia to the Arctic regions of North America. In winter it migrates to the warmer shores of Europe, Africa, Asia, South America, and the countries of the Pacific Ocean, and, according to Gould, "it inhabits the sea-shores of every part of the globe."

The nest, placed on the shore, near salt-water, consists of a slight hollow scantily lined with herbage, and generally sheltered by a stone or low bush. The four eggs are greenish-grey in ground-colour, blotched and spotted with brown and grey. In our islands this species is mostly found on rocky shores or beaches of shingle, and avoids the bare sands and mud-flats. Running hither and thither among the stones and sea-weed, it seeks the small crustaceans and other marine animals which compose its food, deftly turning over the pebbles in its search or exploring likely crevices where its prey may be concealed. Their long and pointed wings enable them to fly with great power and speed, when the pure white of their rumps and underparts show conspicuously.

The usual cry is a shrill clear whistle, but, according to Macgillivray, they occasionally utter a mellow note. The female is less richly coloured than the male, and is said by Howard Saunders to be a trifle larger.

THE OYSTER-CATCHER.

Hematopus ostralegus, Linnæus.

PLATE 64.

The Oyster-Catcher or Sea-pie is a common bird, inhabiting the greater part of the British coasts throughout the year, where it nests on the sand dunes and stony beaches, or higher up on the lichen-covered rocks, among tufts of flowering thrift.

On the eastern side of Scotland, many pairs leave the sea at the beginning of the breeding season and make their way up the larger streams and rivers, laying their eggs among the sand and shingle of the river-beds, or by the side of lochs far inland, sometimes at a considerable elevation.

This species has a wide range over Europe and Asia, breeding as far north as the Arctic Circle, and visiting the Mediterranean coasts in winter, when its migrations extend to Africa, North-west India, and Ceylon.

The three or occasionally four eggs, deposited not far above high-water mark,

THE OYSTER-CATCHER

are greyish-buff in ground-colour, marked with blotches, dots, and streaks of blackish-brown and with grey shell-markings.

The Oyster-Catcher is extremely shy and difficult of approach, and when its feeding grounds are covered by the tide the flocks betake themselves to quiet stretches of sand or flat rocky islets, where they while away the time, standing on one leg with their long bills hidden under the feathers of their shoulders, or preening their showy black-and-white plumage. The rather unfortunate name of this species is misleading, as it certainly does not catch oysters, but feeds chiefly on limpets, mussels, and other shell-fish, which it wrenches off the rocks or picks up among the ripples of the incoming or receding tide.

The name is no doubt derived from the Dutch word for Magpie, *aekster* or *ackster* (see Howard Saunders' *Manual* and Canon Rawnsley's *Round the Lake Country*), and must originally have signified Oyster-magpie.

The cry or alarm-note is shrill and penetrating, and when heard at night on approaching their haunts is very striking.

The sexes are alike in colour.

THE AVOCET.

Recurvirostra avocetta, Linnæus.

PLATE 64.

In former days this species annually visited in spring the eastern and southern counties of England, where it nested on the mud-flats and estuaries; but now it is a rarity and no longer breeds, though still seen occasionally at the time of the vernal migration and also in autumn. During summer the Avocet inhabits various parts of Europe, where it can find suitable breeding grounds, from as far north as Denmark southwards to Spain and also Africa. Eastwards it ranges over a great part of Asia, the birds nesting in the colder regions, migrating to warmer latitudes in winter.

The three or four eggs are laid on dry expanses of mud or sand in the neighbourhood of water, and in colour are pale yellowish-brown, blotched and spotted with blackish-brown and marked with shades of grey. The birds are very noisy when their territory is invaded, and their clamour, according to Lord Lilford, "is almost deafening, consisting of a continued series of shrill yelps, from which the Avocet derived some of its most common English designations, such as 'Yelper' and 'Clinker.'"

BRITISH BIRDS

Referring to the extinction of this bird as a breeding species in England, Stevenson says (*Birds of Norfolk*, vol. ii. p. 240), "At Salthouse, long prior to the drainage of the marshes and the erection of a raised sea-bank, the Avocets had become exterminated by the same wanton destruction of both birds and eggs as is yearly diminishing the numbers of Lesser Terns and Ringed Plover on the adjacent beach. I have conversed with an octogenarian fowler and marshman named Piggott, who remembered the 'Clinkers' (as the Avocet was there called), breeding in the marshes 'by hundreds,' and used constantly to gather their eggs. Mr. Dowell, also, was informed by the late Harry Overton, a well-known gunner in that neighbourhood, that in his young time he used to gather the Avocet's eggs, filling his cap, coat pockets, and even his stockings; and the poor people thereabouts made *puddings* and *pancakes* of *them*."

The manner of feeding of the Avocet is peculiar, the long flexible recurved bill is swept from side to side across the surface of the mud or shallow pools, as a mower uses his scythe. The food consists chiefly of small crustaceans, water-insects, and their larvæ, secured by this method.

The female resembles the male in colour, but has the black rather browner and the white duller.

THE BLACK-WINGED STILT.

Himantopus candidus, Bonnaterre.

PLATE 64.

The Stilt is a rare wanderer to the British Islands, and has been recorded more often in the eastern and southern counties than in other parts of England, and less frequently in Scotland and Ireland. In the breeding season it is plentiful on many of the marshes of Southern Europe, thence eastwards through Central Asia to China and southwards to India and Ceylon, and also in suitable localities all over Africa.

In winter the birds which have bred in the more northerly regions migrate to warmer climates. The nest, composed of dry bents or fragments of withered reeds, and placed amongst the surface vegetation of swamps or on the bare partially dry mud near pools of water, contains four eggs, pale sandy-brown in ground-colour, with blotches and scrolls of blackish-brown.

The extraordinarily long legs of this graceful species allow it to wade with ease among the pools and swamps, where it picks up water-beetles, small shell-fish, and

THE BLACK-WINGED STILT

tadpoles from the surface of the water, or catches winged insects as they hover near. When disturbed at their breeding grounds, the birds fly around overhead, making a great outcry.

The fully adult birds of both sexes have the head and neck pure white, though the younger males are found breeding before they lose the black nape and hind neck of immaturity.

THE GREY PHALAROPE.

Phalaropus fulicarius (Linnæus).

PLATE 64.

Chiefly visiting the south-western coast of England in autumn and very rarely in winter and spring, this circumpolar bird, best known to us in its grey winter plumage, occurs here and there at irregular intervals, though at times, as in the visitations of 1866, 1869, 1886, and 1891, in much larger numbers, so that, according to Mr. J. H. Gurney, over four hundred were accounted for in the first-mentioned year.

The Grey Phalarope nests sparingly in Iceland, which appears to be its most southerly breeding range, and more plentifully in Spitsbergen and Novaya Zemlya, and through the Arctic regions of Northern Asia and America, as well as in Greenland. In winter the migrations of this species extend far and wide over the Old and New Worlds, when it visits the shores of Southern Europe, North Africa, China, Japan, South America, and even New Zealand.

The nest, placed on the ground among withered grass or moss, and often situated in wet places, usually contains four eggs, pale buffish-olive in ground colour, and thickly spotted and blotched with dark brown.

Miss Maud D. Haviland, describing the habits of this bird on the Yenesei, Siberia (Witherby's *British Birds*, vol. ix. p. 12), says, "I found the first nest on Golchika Island early in July. My attention was called to it by the male bird, which flew round uneasily. Even when the nesting-ground is invaded, this Phalarope is very quiet and not very demonstrative. He flits round the intruder with a peculiar silent flight, rather like a big red moth, while he utters his chirruping alarm note—*zhit zhit*. This call is shriller than that of *Phalaropus lobatus*, and quite recognisable when the two species breed side by side."

Like the Red-necked Phalarope, the male in the present species is smaller and duller in colour than the female, is courted by her, and carries out the duties of

BRITISH BIRDS

incubation as well as attending to the young, but, according to the authority above quoted, when the breeding ground is approached both sexes "fly around and call anxiously."

The Grey Phalarope, owing to its curiously lobed feet, is a powerful swimmer, and flocks are often met with far out at sea, even among icebergs. The food consists of gnats, water-insects, and small marine animals, sometimes obtained from stretches of floating sea-weed, sometimes by following the schools of whales, which seem to bring a supply to the surface.

At all times these birds are tame and unsuspicious, and show little fear of man.

THE RED-NECKED PHALAROPE.

Phalaropus hyperboreus (Linnæus).

PLATE 64.

The Red-necked Phalarope visits our islands in summer to breed in the Orkneys and Shetlands, on some of the Outer Hebrides, and in one district in Western Ireland. It is known in England only as a passage migrant, more often seen in autumn than at other seasons, but never in any numbers. This species breeds in Iceland and Northern Europe, thence across Northern Asia and Arctic America, and also in Greenland; and migrates southwards in winter to warmer regions, in Europe ranging as far as the Mediterranean, and also to Arabia, India, China, Japan, the Malay Archipelago, and Central America.

The birds, which usually breed in small companies, select for their nest a tussock of grass in boggy ground, intersected with pools of water, and lay four eggs, in ground-colour yellowish or olive, blotched and spotted with dark blackish-brown or umber.

Before pairing, the larger and more brightly coloured female woos the husband of her choice, resembling the Grey Phalarope in this respect, and, like the other, this charming little bird is extremely fearless and confiding, and may be seen swimming or floating lightly on the water, from the surface of which it obtains a good deal of the insect food on which it lives.

Seebohm describes the note as "a clear sharp *wick*."



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THE WOODCOCK

THE WOODCOCK.

Scolopax rusticula, Linnæus.

PLATE 65.

The Woodcock, at one time considered to be chiefly a winter visitor, breeding rather rarely in the British Islands, is now known to nest regularly and in increasing numbers in favourable localities in many parts of the three kingdoms, though the majority of the birds found here, from October onwards until spring, have undoubtedly travelled from overseas. Our home-bred Woodcocks and their parents disappear early in September, and whither these birds go seems to be unknown. Howard Saunders considered (*Manual of British Birds*, 2nd ed. p. 569) that "their disappearance is partially attributable to self-effacement during the moult, for many birds which had been captured and marked with metal rings in the spring in Northumberland, have been shot in the same county in autumn."

In the breeding season the Woodcock has a very extensive range over Europe and Asia, from the Arctic Circle southwards to the Pyrenees and Himalayas, and eastwards to Japan, whilst in winter numbers migrate to the countries on both sides of the Mediterranean and Southern Asia.

Very early in the year, generally about the middle of March, the Woodcock lays her four eggs within the shelter of some dry coppice or similar cover, the nest being merely a slight depression in the ground among withered leaves or bracken, which form a lining. In colour the eggs are pale yellowish-buff, blotched and spotted with shades of reddish-brown and grey. The young, which are able to run soon after being hatched, are often carried by the mother to and from their feeding-grounds in marshy places, and sometimes are caught up and removed to a place of safety when in danger. There has been much difference of opinion as to how this singular action is carried out, and I have never had an opportunity of witnessing it myself, but from the evidence of competent observers it appears that the nestling is usually carried clasped by the feet of the parent bird.

St. John, in his *Wild Sports and Natural History of the Highlands*, p. 264 (ed. 1878), says, "In the woods of Altyre and Darnaway (as well as in all the other extensive plantations in the country), during the whole spring and summer, I see the Woodcocks flying to and fro every evening in considerable numbers. As early as six or seven o'clock they begin to fly, uttering their curious cry, which resembles more the croak of a frog than anything else, varied, however, by a short shrill chirp. Down the shaded course of the river, or through the avenues and glades of the

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forest, already dark from the shadow of the pine trees, the Woodcocks keep up a continual flight, passing and repassing in all directions, as if in search of each other. As the twilight comes on, in the open parts of the country, they leave the shade of the woods and fly down to the swamps and pools near the sea-shore and elsewhere, to feed during the night. . . . In the evening the Woodcock's flight is rapid and steady, instead of being uncertain and owl-like, as it often is in the bright sunshine. I consider their vision to be peculiarly adapted to the twilight, and even to the darker hours of night—this being the bird's feeding-time."

Woodcocks eat enormous quantities of worms, grubs, and insects to satisfy their ravenous appetite.

THE GREAT SNIPE.

Gallinago major (J. F. Gmelin).

PLATE 65.

This species, also known as Solitary or Double Snipe, visits our islands in autumn, but never in any numbers, and is more frequently seen in the eastern and southern counties than elsewhere in England, while it is rare in Scotland and in Ireland. It breeds in the northern and north-eastern parts of Europe and in Northern Asia as far east as the Yenesei, and migrates southwards in winter, when it visits Southern Europe and Africa, ranging as far south as Cape Colony in the latter country.

The nest, consisting of a slight hollow in the ground among grass or rushes, contains four eggs, in colour a greyish- or olive-buff, blotched and spotted with deep brown and with purplish shell-markings. The food consists of worms, insects and their larvæ, and slugs.

The late H. E. Dresser, in his *Birds of Europe*, quoting some notes from Professor Collett, states that the Double Snipe "is chiefly a nocturnal bird. Not only does it migrate at night, but it is in motion almost solely after twilight, when its peculiar 'spil' or drumming takes place; and it also searches after food chiefly during this time of the evening, remaining quiet and hidden during the day time, seldom or never taking wing unless flushed, but sitting well hidden amongst dense grass. On the whole, it is an unsociable bird; yet each pair has its own small district, where they appear to take but little notice of their neighbours. They also rise singly; and it is one of the most uncommon occurrences if two are killed by the same discharge.

THE GREAT SNIPE

"It is not a shy bird, and may usually be approached within a few paces distance; and when it rises it flies but a short distance and drops again. . . . During the pairing season the habits of this bird are very peculiar; for it has a so-called 'Lek' or 'Spil,' like some of the Grouse tribe, a sort of meeting place, where they collect to 'drum,' and often engage in combat for the possession of the females: and in this respect it differs widely from its allies; for it does not engage in aerial evolutions, but remains on the ground. Though its habits are so peculiar at this season, they are, comparatively speaking, seldom observed, as its note, or song as it may be called, is very low in tone. . . .

"The drumming place (Spil-plads) is usually in some damp place in the marsh, where there is water between the tussocks; and the number of pairs resorting to the same drumming place is usually eight or ten, frequently less and often more."

This species is always distinguishable from our Common Snipe, not only by its larger size, but in having sixteen, and occasionally eighteen, tail-feathers, instead of the fourteen possessed by the latter. The tail has also a larger amount of white, whilst the dark bars on the flanks are broader and more distinct.

THE COMMON SNIPE.

Gallinago cœlestis (Frenzel).

PLATE 65.

The Common Snipe breeds in localities suited to its marsh-loving habits throughout the greater part of the British Islands, whilst in winter, especially during severe weather, its numbers are much increased by birds reaching our shores from the Continent of Europe. The Western Islands of Scotland are a great resort of this species, where large bags have been obtained by sportsmen. In the breeding season it has a wide range over northern and temperate Europe and Asia, while later in the year many birds move southwards to warmer latitudes in Africa and Asia.

The nest is situated among tussocks of grass or rushes in wet ground, and consists of a slight depression, with a scanty lining of withered grasses, and contains four eggs, laid usually in April, which in colour are pale greenish-olive, blotched with shades of brown. Late in the evening or at night the Snipe seeks its feeding grounds among the bogs, probing the soft surface with its sensitive bill, which is sometimes so deeply plunged that the mud may be found adhering to the

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bird's forehead. If the wet ground be closely examined, the footprints may be seen and the small borings with irregular crater-like edges, made by the working of the bill, which is so wonderfully adapted to secure the worms, larvæ, and insects on which this species feeds. When put up, the usual cry, which has been syllabled as "scape, scape," is uttered, and when the young have left the nest I have noticed a softer double chuckling note emitted by the parent bird as it circled round the marsh at a considerable height.

By what means the "drumming" or "bleating" of the Snipe—which has given the bird its name of "heather-bleater" in Scotland—is produced, has for long been a puzzle to naturalists; it is certainly not vocal like the other notes, but is apparently caused by the vibration of the two stiff and peculiarly shaped outer tail-feathers, though I should not like to say that the wings may not have some connection with the sound produced, as they appear to quiver during the performance. Rising to a height, the bird swings around in wide circles, shooting downwards and again ascending, and it is during this downward stoop that the sound, which has some resemblance to the bleating of a goat, is heard.

The drawing on Plate 65, made from sketches taken in the spring of 1914 after watching the bird, shows the position of the outer tail-feathers, spread out and separated only during the descent.

Snipe are much affected by weather conditions, and in times of severe frost suffer considerably, when they frequent the open spring-heads or leave the locality altogether.

A dark form of the present bird, known as Sabine's Snipe, was formerly considered to be a distinct species, but is now known to be only a variety of the Common Snipe. This has very seldom been obtained except in the British Islands.

THE JACK SNIPE.

Gallinago gallinula, Linnæus.

PLATE 65.

This little bird usually arrives in the British Islands in September and October and remains till March or April, when it leaves for its breeding haunts among the swamps of Northern Europe and Asia, chiefly within the Arctic Circle. It has never been known to nest with us. In winter it migrates southwards to the Mediterranean countries, when it also visits Africa, India, and China.

THE JACK SNIPE

The first authentic account of the nest of this species was given by Wooley, who found the bird breeding at Muonioniska in Lapland in June 1853. In a communication to Hewitson (*Eggs Brit. Birds*, ed. 3, ii. p. 357) he describes the nest as "all alike in structure, made loosely of little pieces of grass and *equisetum* not all woven together, with a few old leaves of the dwarf birch, placed in a dry sedgy or grassy spot close to more open swamp." The four eggs, which are very large in proportion to the bird, are of a yellowish-olive colour, blotched and spotted with dark brown.

The food is similar to that of the Common Snipe. Wooley, in his letter to Hewitson, alludes to the curious "drumming" made by the Jack Snipe in spring. He says, "I know not better how to describe the noise than by likening it to the cantering of a horse in the distance, over a hard hollow road; it came in fours with a similar cadence, and a like clear but hollow sound." Besides being much smaller, the Jack Snipe differs considerably from the Common Snipe in colour, having a glossy sheen of green and purple on the upper parts, and it lacks the pale buffish streak on the centre of the crown and forehead of the larger species. The tail is sharply pointed.

The two birds also differ in character, the present species being rather solitary in its habits and more sluggish than the other, while it is much less affected by severe weather, due doubtless to the fact, as Mr. R. J. Howard informs me, that it adds vegetable matter to its diet of worms and larvæ.

THE BROAD-BILLED SANDPIPER.

Limicola platyrhyncha (Temminck).

PLATE 65.

The Broad-billed Sandpiper, represented in the plate in summer plumage, is a rare straggler to our shores, about sixteen having been recorded in Great Britain, mostly on the southern and eastern coasts, and only one in Ireland.

It breeds on the mountains in Scandinavia, in Northern Russia, and probably in Siberia, and migrates in winter, when it visits most of the European countries, Egypt, Southern Asia, the Philippines, and Madagascar.

Quoting some notes on this species by the late Richard Dann, "Yarrell" (4th ed. vol. iii. p. 365) states, "This Sandpiper is by no means uncommon during the breeding-season in Lulea and Tornea Lapmark, frequenting grassy morasses and swamps in small colonies, generally in the same places as those frequented by the

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Totanus glareola, our Wood Sandpiper. It breeds also at Fokstuen on the Dovre Fjeld mountains, about three thousand feet above the level of the sea, in Norway, where it arrives at the latter end of May. On its first appearance it is wild and shy, and similar in its habits to the other species of the genus, feeding on the grassy borders of the small pools and lakes in the morasses. On being disturbed it soars to a great height in the air, rising and falling suddenly like the Snipe, uttering the notes *two woo*, which are rapidly repeated. . . . It seems to lay its eggs later than others of this tribe generally. I found the eggs not sat upon on the 24th June, and the last week in July the young were unable to fly; a period when all the other Sandpipers are on the move south. The eggs were of a deep chocolate colour, and its nest, like that of the Snipe, was on a hummocky tuft of grass."

The Broad-billed Sandpiper feeds chiefly on insects and larvæ, and is more partial to fresh-water marshes than to the coast. In winter the general colour of the upper parts is ashy-grey, when, except for its singularly broad bill, it is not unlike the Dunlin at that season.

A paler form of this species is found inhabiting Eastern Siberia.

THE TEREK SANDPIPER.

Terekia cinerea (Güldenstädt).

PLATE 65.

Two pairs of this rare species, which has never before been known to visit the British Islands, were obtained on Romney Marsh, Kent, in May 1912.

According to the *List of British Birds*, published by the British Ornithologists' Union (2nd ed. 1915), "The Terek Sandpiper breeds in north-eastern Europe and north Siberia from the valley of the Onega in Russia, to the valley of the Kolyma, in east Siberia, and probably to the Anadyr Peninsula; on the Yenesei it ranges to 70° N. latitude, southwards it breeds to about 51° N. in the Ural Mountains and Central Asia, but has not been found breeding on the shores of the sea of Okhotsk. In winter it visits the coasts of Africa, ranging south to Damaraland and Natal, southern Asia, and the Malay Archipelago to Australia."

This species is found along the courses of rivers and on the shores of fresh-water lakes, it takes after the Common Sandpiper in its habits and food, and utters a loud clear call-note.

It lays four eggs in a slight hollow in the ground; these are greyish-buff in ground-colour, blotched and spotted with brown and purplish-grey.



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THE PECTORAL SANDPIPER

THE PECTORAL SANDPIPER.

Tringa maculata, Vieillot.

PLATE 65.

This American species, which visits our shores more often than any other wanderer from the Western World, has been recorded about fifty times in the British Islands, ten of these having occurred in the Isles of Scilly, which seem to have a strong attraction for American waders.

The Pectoral Sandpiper breeds in the Arctic regions of North America, and winters in the southern part of that continent, ranging as far as Patagonia. The nest is placed on the ground amongst grass, and contains four eggs, either buffish or pale greenish-brown in ground-colour, blotched with deep warm brown.

The food consists of insects, tiny shell-fish, etc., and also, according to Howard Saunders, of sea-weed. Various authors have referred to the remarkable display performed by the male during the breeding season, which seems peculiar to this species. Inflating his throat, he utters deep reverberating notes, sometimes delivered in the air, sometimes on the ground. The sexes are alike in plumage. The bird represented in the plate was drawn from a specimen obtained at Buenos Aires, Argentina, in winter plumage, kindly lent by Lord Rothschild.

An example of the Siberian Pectoral Sandpiper, *Tringa acuminata* (Horsfield), was obtained at Breydon, Norfolk, in August 1892, and another is said to have been taken near Yarmouth in September 1848. This Sandpiper breeds in North-eastern Asia, and migrates southwards in winter, when it visits Japan and China, ranging as far as Australia and New Zealand.

In general the colour of the upper parts in this bird is more rufous than in the other just described, and the tail feathers are more pointed.

BAIRD'S SANDPIPER.

Tringa bairdi (Coues).

PLATE 65.

Baird's Sandpiper is another rare American visitor to Great Britain. The first was obtained in Sussex in October 1900, the next in Norfolk in September 1903, a third on St. Kilda, Outer Hebrides, in September 1911, while two more were taken

BRITISH BIRDS

in Sussex in 1912 and 1914, both in the month of September. Baird's Sandpiper inhabits the Arctic shores of North America during the breeding season, whence it migrates in winter to the southern parts of the New World, ranging as far as Argentina and Chili.

In habits this bird does not appear to differ from others of the genus, and nests on the ground amongst grass. According to the late H. E. Dresser (*A Manual of Palearctic Birds*, vol. ii. p. 768) it lays four eggs of "a light creamy buff, sometimes tinged with rusty, thickly speckled and spotted with deep reddish brown or chestnut."

The specimen shown in the plate was painted from a bird in Lord Rothschild's collection, obtained in British Columbia in August. In winter the colour of the upper parts becomes greyer, with dusky central streaks on the feathers.

BONAPARTE'S SANDPIPER.

Tringa fuscicollis, Vieillot.

PLATE 66.

Bonaparte's Sandpiper only occasionally wanders to our country from America, having been obtained fourteen times in England, and once or possibly twice in Ireland. It breeds far northwards in the Arctic wastes of America, and in winter migrates to the southern parts of the Continent and to the Falkland Islands.

The nest, a slight depression in the ground, with a scanty lining of withered leaves, contains four eggs of a dull rufous or greyish-buff colour, blotched with deep brown.

Dr. E. Coues observed this species on rocky coasts, and describes its note as a soft, low *weet*, differing from that of other Sandpipers. The food consists chiefly of insects and tiny shell-fish.

The bird in the plate was drawn from a male in summer plumage, obtained at Pt. Barrow, Alaska, early in July. In winter the upper parts become greyer, with dusky streaks in the centre of the feathers, and the dark marks on the breast are paler. The female, according to Howard Saunders' *Manual*, is "a trifle larger and more richly coloured."

THE DUNLIN

THE DUNLIN.

Tringa alpina, Linnæus.

PLATE 66.

Frequenting our shores in large numbers during the autumn and winter months, especially mud-flats and estuaries, this wader breeds regularly in suitable localities in the British Islands, though many leave us in spring for their summer quarters in other lands.

The Dunlin is more plentiful in the breeding season on the moors of the northern counties of England than in the south, and nests in some favourable districts in Wales, but is still more numerous in the wilder parts of Scotland and its islands, where it often associates with the Golden Plover, hence its name of "Plover's Page." A few pairs breed in Ireland.

In summer this species inhabits many parts of Northern Europe and Asia, and in winter visits the Mediterranean, as well as Africa and India.

The nest, lined with a few dry bents, is placed in a tuft of grass or in some slight hollow in the ground, and contains four eggs which vary in ground-colour from a light greyish-green to a pale brown, blotched and spotted with rich warm brown and purplish-grey shell-markings. The food consists of worms, insects, and small marine animals.

The striking effect produced by a flock of Dunlin in their ordered masses when in flight, as the birds incline first to one side and then the other, flashing as their snowy underparts catch the light or melting into the background as they turn, has often afforded delight to lovers of nature and has been alluded to by most authors who have described this bird.

Macgillivray thus describes their habits, "If it be pleasant to gaze upon the flocks as they sweep over the water, it is not less so to watch them searching the shores. They are seen moving about in a quiet manner, never interfering with each other, but busily picking up the food which comes in their way, or which they discover by tapping or probing, without, however, thrusting their bills deep into the sand or mud. Frequently, keeping along the edge of the water, they are seen to run out as the wave retires, and retreat as it advances on the beach. In still shallow water they may often be seen wading, and it is observable that their bills are just about the length of their tarsi and the exposed part of the tibia; but they never go beyond their depth or resort to swimming, although when wounded, should one drop into the water, it floats buoyantly, and is capable of advancing.

BRITISH BIRDS

Their ordinary cry when on wing is a single shrill peep, and when feeding a softer and less loud note. Very frequently they associate with Sanderlings, sometimes with Ring-Plovers; but although while feeding they may often be seen mingling with Curlews, Redshanks, Godwits, or Oyster-Catchers, they separate from these birds when put up, as their mode of flight is different."

THE LITTLE STINT.

Tringa minuta, Leisler.

PLATE 66.

The Little Stint visits the British Islands on passage in the autumn and again in spring on its way from and to its breeding grounds in Northern Europe and Western Siberia. In winter it ranges far and wide, when it visits Africa, India, and Ceylon.

The eggs of this little wader were unknown until Middendorf found it breeding in Siberia, and the late Henry Seebohm and Mr. Harvie-Brown were the first to discover the nest in Europe, near the Petchora river, in July 1875. The nest is only a slight hollow in the ground, with a lining of dry leaves, etc., and contains four eggs, which, except for their smaller size, are indistinguishable from the Dunlin's. When on our shores in autumn the habits and manner of feeding of the Little Stint are very like those of the latter bird, as it runs along the sand by the water's edge in search of the small marine animals on which it lives.

In winter the general colour of the upper parts is greyish-brown, with dusky markings caused by the darker centres of the feathers.

THE AMERICAN STINT.

Tringa minutilla, Vieillot.

PLATE 66.

There are only four recorded visits of this small species to England, two having been obtained in Cornwall—October 1853 and September 1890, and the same number in Devonshire, September 1869 and August 1892. It breeds in Arctic America, and migrates in winter as far as Chili in South America.

THE AMERICAN STINT

The present species is rather smaller than the Little Stint, and differs only slightly in colour, though if a series of specimens of the two in summer plumage be compared, the American bird is seen to be generally blacker on the upper parts.

The nest is merely a slight hollow in the ground, scantily lined with withered leaves, and contains four eggs, similar in colour to those of the Little Stint.

TEMMINCK'S STINT.

Tringa temmincki, Leisler.

PLATE 66.

Like the Little Stint, this small bird of passage visits the British Islands in autumn and again in spring, but is much rarer and less regular in its appearances on our shores than its congener. It breeds in Northern Europe and Asia, and migrates southwards in winter, when its range extends to Africa and India.

Wooley, in a communication regarding Temminck's Stint, published by Hewitson in his *Eggs of British Birds* (3rd ed. vol. ii. p. 362), says: "Grassy banks and pastures by the water-side are the kind of places where it takes up its breeding quarters; and it seems to like to be near houses. Nothing could be more interesting and pretty than this little bird in the early part of summer; it is so tame one could often catch it in a net at the end of a stick. At one time it is hovering with its wings raised over its back, or floating about, and it reminds me rather of some insect than any other bird; at another time it will be standing on the top of a stone or stake, or the gable end of a cottage; and whether hovering or standing on its perch, it utters a constant trilling note, of which I can best give an idea by saying that it brought to my recollection the Grasshopper Warbler, though the resemblance is perhaps slight.

"When its eggs are very near, it sometimes runs about one's feet, and though it cannot but be anxious, it seems as busy as ever, picking gnats and other insects off the grass. . . . The nest is very simple—a few short bits of hay, in a little saucer-shaped hollow, placed amongst thin grass or sedge, generally not far from the water's edge, but sometimes in the middle of a meadow."

The eggs are four in number, and are of a pale greenish or buffish stone-colour, blotched with shades of brown.

In winter the colour of the upper parts of the bird is a dull greyish-brown with dusky streaks.

BRITISH BIRDS

THE CURLEW-SANDPIPER.

Tringa subarquata (Güldenstädt).

PLATE 66.

This wader visits our shores on passage in autumn and spring, showing a preference for those of the eastern and southern counties of England and east coast of Scotland. Though seldom seen on the western side of Great Britain, in autumn it is found in favourable localities in Ireland, where it has been known to linger till December. It breeds on the tundras of Northern Siberia, and migrates southward in winter to Africa, Southern Asia, and Australia.

The nest of the Curlew-Sandpiper appears to have been unknown to zoologists till Mr. H. L. Popham described one containing four eggs, which he discovered in July 1897 at the mouth of the river Yenesei in Siberia. This nest was a somewhat deep hollow in the moss, and the eggs, though smaller, were very like those of the Snipe (see *Proceedings of the Zoological Society*, 1897, p. 490).

While tarrying with us, this Sandpiper often associates with others of its kind, and in its actions is very like the Dunlin, tripping hither and thither and dabbling with its curved bill on the sand and mud in search of its food, which does not differ from that of its allies.

The deep russet of its summer dress is very striking, but in winter this colour changes to a sober grey, streaked with darker tones.

The second figure in the plate represents a young bird in autumn.

THE PURPLE SANDPIPER.

Tringa striata, Linnæus.

PLATE 66.

The Purple Sandpiper is a fairly common winter visitant to the rocky parts of our coasts, arriving in autumn and departing in spring. Its nest has never been discovered in the British Islands, though Lord Lilford and others had a suspicion that it might be found breeding in some localities.

In summer it inhabits the Færoes, Iceland, Northern Europe, Asia, and Arctic America, and leaves the colder portion of its territory in winter, when it ranges to the Mediterranean and in the American continent as far south as Florida.

THE PURPLE SANDPIPER

The four eggs are laid in some hollow in the ground, which is lined with pieces of moss or dry leaves, and vary in colour from a pale olive-green to buffish-stone colour, with underlying shell markings of purplish-grey and blotches of reddish-brown.

The Purple Sandpiper is very tame and confiding, and when feeding among the sea-weed is easily approached, and can be watched at very close quarters. They show little fear of the waves as they break against the rocks, and are able to swim easily, and on passing across the water from one group of rocks to a fresh feeding ground fly swiftly, usually keeping together in a flock. When unemployed at high-tide, they loiter on the drier places, quietly resting or preening their feathers.

THE KNOT.

Tringa canutus, Linnæus.

PLATE 66.

The Knot is another of our birds of passage, occurring in numbers on many parts of the British coasts and tidal estuaries in autumn and spring. This species breeds in the remote Arctic solitudes of Parry's Islands, Melville Peninsula, Grinnel Land, and Greenland, and ranges very far southwards in winter, occurring at that season in South Africa, India, as well as in Australia, New Zealand, and South America.

Although in the summer of 1876 Col. Feilden and Mr. Chichester Hart obtained nestlings of the Knot in latitudes $82^{\circ} 33'$ and $81^{\circ} 44'$ N., when Sir George Nares made his voyage to the Polar seas, no authentic eggs appear to be known, but, according to Dresser's *Manual of Palearctic Birds*, there "is said to be a specimen in the Smithsonian Museum at Washington."

At one time the late Lord Lilford possessed a number of these birds, and by keeping them in a warm aviary in winter and then transferring them to a colder one in spring, hoped by this means to induce them to breed. At last an egg, which I believe is now in the museum at Cambridge, was found in the enclosure, but some doubt occurred regarding the origin of this egg owing to the discovery in the aviary of a Wader of another species, which had unfortunately been overlooked when the place was prepared.

When on our shores the habits of the Knot are very much like those of its congeners; it frequents the sands and mudflats at low-tide, usually seeking its food of sand-worms, small crustaceans, and other marine creatures by the sea-margin,

BRITISH BIRDS

but on its breeding grounds in Grinnel Land, Col. Feilden noticed that the birds fed largely on the buds of the little rock-plant, *saxifraga oppositifolia*.

Describing this species at its breeding stations, he states ("Notes from an Arctic Journal," *Zoologist*, 1879, pp. 102, 103), "The Knot has not the power of drumming like the Common Snipe, but, after soaring in mid-air with outspread pinions, they frequently descended to the ground. During this descent the wings were beaten over the back with such rapid motion that a loud whirring noise was produced, which might be heard at some distance. According to my observations, this action was confined to the males and to the period of courtship."

The sexes are much the same in colour.

THE SANDERLING.

Calidris arenaria, Linnæus.

PLATE 66.

This restless little wader is common on the sandy parts of our shores in autumn and also in spring, before leaving for its summer quarters in the far north. It breeds in the Arctic portions of Siberia, in Greenland, and also in the circumpolar regions of the New World, migrating southwards in autumn to spend the winter in warmer lands, when it visits the southern parts of Africa, Asia, and America, and also Australia.

The nest is a slight depression in the ground, scantily lined with dry grass or leaves, and contains four eggs. These, according to Seebohm (*British Birds*, vol. iii. pp. 223, 224), are "buffish olive in ground-colour, thickly spotted with pale olive brown, and with a few indistinct underlying markings of violet-grey."

Like the Dunlin and other members of this family, the Sanderling may usually be seen feeding close to the water's edge, nimbly running after the receding waves and picking up tiny marine animals.

It differs from its allies in having no hind toe, and when in the pale winter dress of white and grey it is easily recognised even at a distance.

This species shows a strong partiality for stretches of pure sand.



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THE SEMI-PALMATED SANDPIPER

THE SEMI-PALMATED SANDPIPER.

Tringa pusilla, Linnæus.

PLATE 67.

A specimen of this Sandpiper, a young bird in autumn plumage, was obtained on Romney Marsh, Kent, on September 12th, 1907. In summer it inhabits the Arctic regions of North America southwards to the mouth of the Yukon river on the eastern, and Labrador on the western sides of the continent, whilst in winter it migrates as far south as Patagonia.

In its habits this species does not appear to differ from its allies, but is distinguished by the webbing at the base of the front toes.

The eggs are of a yellowish or greenish stone-colour, blotched and spotted with dark brown.

THE RUFF.

Machetes pugnax, Linnæus.

PLATE 67.

This species, noted for the remarkable feathered shield which adorns the necks of the males during the nuptial season, was once a common summer visitant to our English fens, but owing to the draining and enclosure of its favourite haunts, and also to the value put upon the eggs by unscrupulous collectors, it is now almost banished from the land, except as a bird of passage. In summer the Ruff inhabits localities suited to its marsh-loving habits in various parts of Europe and Western Asia, and in winter visits Africa and Southern Asia.

The plainly coloured female, known as the Reeve, builds her scanty nest on the ground among grass or rushes, and lays four eggs, in colour pale greyish-green, blotched with umber-brown.

The food consists chiefly of various insects, worms, slugs, etc.

In former days, when this polygamous species was so plentiful in the fens of the eastern counties, the males soon after their arrival in spring betook themselves to their breeding stations, and, collecting on some piece of ground a little above the level of the marsh, known to fowlers as a "hill," fought for possession of the Reeves.

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As the Ruff was held in high estimation for the table, large numbers were regularly netted or taken in snares of horsehair at these places, and after having been fattened in confinement were sold at high prices.

The singular variety of pattern and colour in the plumage of the male birds is extraordinary.

The late Professor Newton, in his *Dictionary of Birds*, pp. 799–800, says : “ It has often been said that no one ever saw two Ruffs alike. That is perhaps an overstatement ; but, considering the really few colours that the birds exhibit, the variation is something marvellous, so that fifty examples or more may be compared without finding a very close resemblance between any two of them, while the individual variation is increased by the ‘ear-tufts,’ which generally differ in colour from the frill, and thus produce a combination of diversity.” Birds which are decorated with a white tippet are said to be the rarest ; one of these is shown in the background of the plate, taken from a specimen in the collection of Lieut.-Commander Millais.

Before summer is far advanced, all the variously coloured feathers of these decorative shields are shed, when the bird is not unlike the Reeve in appearance, though larger.

THE BUFF-BREASTED SANDPIPER.

Tringites rufescens (Vieillot).

PLATE 67.

The Buff-breasted Sandpiper, a native of America, seldom visits the British Islands, only about eighteen having been recorded in England, and two or three in Ireland. It breeds in the Arctic regions of North America and Asia, and ranges far southward in winter to the warmer parts of America, Asia, and Africa. The nest, placed on the ground, and, according to Macfarlane, hardly to be distinguished from the Golden Plover's, contains four eggs, in colour buffish, occasionally tinged with pale-olive, and blotched with deep umber and shell-markings of purplish grey.

The food consists chiefly of grasshoppers and other insects. The late H. E. Dresser, in his *Birds of Europe*, says : “ We generally met with them in small flocks of from five or six to a dozen individuals, never near or on the edge of water, though in some cases there were small ponds which swarmed with waders ; but they frequented the grassy places, if any such were to be found, or were seen running along in an irregular wavy line on the road or track made by the cotton-teams. . . .

THE BUFF-BREASTED SANDPIPER

Its call-note is low and weak and is repeated several times in succession, either as it trips along or else as it rises to fly away."

The beautiful pencilled markings to be seen on the under surface of the wing in this species serve to distinguish it.

The bird in the plate was taken from a specimen in Lord Rothschild's collection, obtained in Kansas, in May.

BARTRAM'S SANDPIPER.

Bartramia longicauda (Bechstein).

PLATE 67.

Bartram's Sandpiper, which, according to Lord Lilford, resembles the Plovers much more closely in its habits than the Sandpipers, has been recorded about eleven times in the British Islands. It breeds on the grassy uplands of North America, and migrates in winter to South America.

The four eggs are laid in some depression in the ground, which is scantily lined with bents or dry leaves, and in colour are pale buffish, blotched and marked with reddish-brown, and purplish-grey.

Seebohm describes the ordinary note of this bird as "a soft mellow whistle," and its food appears to consist chiefly of beetles, grasshoppers, and other insects obtained on the prairies it frequents.

THE GREY-RUMPED SANDPIPER.

Totanus brevipes, Vieillot.

Two examples of this Sandpiper, a male and female, according to Mr. H. W. Ford-Lindsay (*vide* Witherby's *British Birds*, vol. ix. p. 205), were obtained at Rye Harbour, Sussex, in September 1914. The late H. E. Dresser (*A Manual of Palæarctic Birds*, vol. ii. p. 793) gives the habitat of this species as "Kamchatka, Eastern Siberia, and Japan, migrating south for the winter to China, the Malay Archipelago, the Papuan Islands, and Australia."

In summer the general colour of the upper parts is ashy-grey, of the lower white, while the cheeks and neck are streaked with dark markings, and the breast and

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flanks barred with greyish-black. In winter the colour is more uniform, the dark markings being then less distinct.

The habits and nest of this species appear to be unknown.

THE COMMON SANDPIPER.

Totanus hypoleucus (Linnæus).

PLATE 67.

This attractive little wader, also known as the Summer-Snipe, is a common visitor in spring to the British Islands, arriving in April and taking its departure in September. During summer it is found over the whole of Europe and a great part of Asia, while in winter it migrates to Africa, India, and as far south as Tasmania.

The nest of the Common Sandpiper is usually placed near the water on the banks of some clear running stream, or often, as in the Highlands of Scotland, among the stones and herbage by the side of a loch. It is merely a slight depression, lined with dry grass, rushes, and similar material, in which the four eggs are laid. These in ground-colour are usually creamy-buff, with blotches and spots of purplish-brown and grey.

The food consists of worms, grubs, and various insects. In summer the clear piping note of the Sandpiper may often be heard as it runs along the gravelly margins of lakes and streams with dainty steps and a graceful vertical swing of the tail. On taking flight, it skims near the surface of the water, gliding at times without any movement of the wings, then again proceeding with steady strokes. There is no difference in the colour of the sexes, but in winter the dark markings on the upper parts are less distinct.

THE SPOTTED SANDPIPER.

Totanus macularius (Linnæus).

PLATE 67.

This species is the representative of our Common Sandpiper in America, distinguished, according to Howard Saunders' *Manual of British Birds*, 2nd ed. p. 606, by having "*all* the secondaries broadly barred with ash-brown, while in the



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THE SPOTTED SANDPIPER

Common Sandpiper, the 8th and 9th are nearly white." It is an uncommon visitor to the British Islands, some seven or eight examples having been obtained, the last of these in Sussex in May 1913.

In summer it inhabits the northern parts of the New World, and migrates in winter to Central and South America. In its general habits this species does not appear to differ from our Common Sandpiper, and the four eggs are light buff or cream colour, blotched and spotted with deep brown and underlying shell-markings of grey.

THE WOOD-SANDPIPER.

Totanus glareola (J. F. Gmelin).

PLATE 67.

The Wood-Sandpiper visits England more or less regularly in autumn and in smaller numbers in spring, though on the mainlands of Scotland and Ireland it is seldom seen. Usually a bird of passage, it is supposed to have bred more than once in Great Britain, but the only authentic nest known in this country was one obtained by the late John Hancock on Prestwick Car, Northumberland, on June 3rd, 1853.

The Wood-Sandpiper breeds in various parts of Europe from Scandinavia southwards to Spain, and in Northern Asia south to China and Japan, in the winter season migrating to the Mediterranean, Africa (as far as Cape Colony), India, Ceylon, the Malay Archipelago, and Australia.

The nest, placed on the ground generally in open moorland diversified by bogs and marshy places, is usually nothing more than a little hollow in the soil, with a scanty lining of bents. The four eggs are pale buff or light pale olive-green in ground-colour, spotted and blotched with deep warm brown.

Although this species will often perch on a post or dead bough of a tree, its name seems inappropriate, as the bird is much less arboreal than its congener the Green Sandpiper, to which in appearance it has a good deal of resemblance, yet the birds may always be distinguished not only by the difference in the markings of the tail, but by the axillaries, these in the Green Sandpiper being dark with narrow bars of white, whereas in the present species they are white with dusky markings.

In the breeding season the bird utters a succession of trilling notes, and performs a courtship display; commencing in the air and continued after settling on its perch or on the ground.

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THE GREEN SANDPIPER.

Totanus ochropus (Linnæus).

PLATE 68.

The Green Sandpiper is fairly common on passage in some localities in the British Islands, where a few birds remain during the winter, though seldom throughout the summer months.

It breeds in the northern parts of Europe and Asia, migrating southwards when winter approaches as far as Africa, Southern Asia, the Malay Archipelago, and even on rare occasions to Australia.

The breeding habits of this Sandpiper are noteworthy, insomuch as this species and its near relation the Solitary Sandpiper are apparently the only members of the group which nest in trees, sometimes at some considerable height from the ground, and, at least as regards the present species, always in the neighbourhood of water.

The four eggs, in colour a delicate greenish-grey, spotted with purplish-brown, are usually deposited in the abandoned nests of various birds, such as Thrushes, Jays, and Wood-pigeons, or in Squirrels' "dreys." At other times the eggs are laid on mossy stumps of trees or even on the ground.

The late Lord Lilford, in his *Birds of Northamptonshire and Neighbourhood* (vol. ii. p. 89), says: "The Green Sandpiper is, in my experience, a very wary bird, and a very great nuisance to the Snipe-shooter, as, rising wildly, it darts up into the air, with a shrill trisyllabic whistle, which puts all the Snipes within hearing on the alert; in common with most of our waders, however, it soon becomes reconciled to captivity, and feeds readily on small worms and chopped meat; it is a good swimmer, but I have never seen one of this species attempt to dive as the Common Sandpiper often does when wounded and fallen into water and chased by a dog."

On rising from the ground the white upper-tail coverts are very conspicuous in this bird, which help to identify it.

THE SOLITARY SANDPIPER

THE SOLITARY SANDPIPER.

Totanus solitarius (Wilson).

PLATE 68.

This species has a good deal of resemblance to the Green Sandpiper in appearance and habits, but may always be recognized by the dark ground-colour of the lower back and tail feathers. A native of America, breeding in the northern parts of that continent and migrating southwards in winter, it has wandered on rare occasions to our islands, having been recorded five times, viz. in Lanarkshire, Scilly Islands, Cornwall, Sussex, and Kent.

The Solitary Sandpiper owes its name to its more or less unsocial habits, and until only a few years ago no authentic information regarding its nest and eggs had been published. According to a communication to *The Ibis* for April 1905, by the Rev. Francis C. R. Jourdain, the eggs were first discovered in North Alberta in 1903 by Mr. Evan Thomson, who was collecting for Mr. Walter Raine of Toronto. The eggs were found in an old nest of the American Robin, *Turdus migratorius*, in a tree, and in the following year some more were obtained by the same collector in the nests of other birds. Four seems to be the usual complement of eggs; these vary in ground-colour from a pale greenish white to a warmer tint, with spots and blotches of rich dark brown and purplish-grey.

THE GREATER YELLOWSHANK.

Totanus melanoleucus (Gmelin).

PLATE 68.

The Greater Yellowshank has twice been recorded in the British Islands, the first having been obtained at Tresco Abbey, Isles of Scilly, in September 1906, and another at Winchelsea, Sussex, in October 1915.

This species inhabits the continent of America, breeding in the northern portions and migrating to the south in winter, when it also visits the Bermudas and West Indian Islands.

It frequents the margins of water-pools, marshes, and estuaries, where its loud thrice-repeated alarm note may often be heard. According to Dr. Elliott Coues'

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Key to North American Birds, the eggs are "greyish or deep buff, irregularly spotted with rich dark brown."

The specimen shown in the plate, kindly lent by Lord Rothschild, was obtained at Buenos Aires, Argentina, and represents a male in winter plumage. In summer the upper parts are more strongly marked with black, whilst the under parts are whiter.

THE YELLOWSHANK.

Totanus flavipes (J. F. Gmelin).

This species has occurred thrice in the British Islands, the first having been obtained in Nottinghamshire about 1854, the second in Cornwall in September 1871, and the last on Fair Isle, Shetlands, in September 1910.

In the breeding season the Yellowshank inhabits the greater part of North America, where it is a common bird, and in winter ranges southwards to the West Indian Islands and South America as far as Patagonia. The nest is a slight depression in the ground, sometimes with, sometimes without a scanty lining of grasses, etc., and contains four eggs, in ground-colour pale cream or pale drab, blotched with deep reddish-brown.

The habits in general of the Yellowshank appear to be much like those of its congeners.

In summer the head and neck are dull white with dark streaks, the upper parts greyish-brown, blotched and marked with black and spotted with white, tail dull grey and white with dusky bars, under parts white, flanks darkly barred. The axillaries, which are also white, are marked with greyish-brown. Legs and feet yellow. In winter the plumage is less distinctly marked.

THE REDSHANK.

Totanus calidris (Linnæus).

PLATE 68.

This well-known bird is a common resident in the British Islands, breeding abundantly in many localities and haunting the coast and mudflats of the estuaries in autumn and winter. It breeds throughout Europe from Scandinavia south-

THE REDSHANK

wards to the countries of the Mediterranean, and eastwards through Asia Minor to Siberia, ranging in winter to Africa, Southern and Eastern Asia, and the Malay Archipelago.

The nest is generally well concealed in a tussock of coarse grass or rushes among the marshes or rough pastures the Redshank is so partial to in summer, and contains four eggs, in ground-colour a pale yellowish-olive, blotched and spotted with purplish-brown. The Redshank feeds on worms, water-insects, small crustaceans, and other sea animals, which the bird secures as it probes the bottom of the shallow pools of the sea-shore or marshes. This species is one of the shyest and most wary of our waders, and usually acts as a sentinel to other birds near by, when its clear and clamorous whistle, uttered when rising and often continued as it flies around, serves as a warning signal to its companions.

Macgillivray, in his work on *British Birds*, gives the following accurate description of the habits of this species: "Its flight is light, rapid, wavering, and as if undecided, and being performed by quick jerks of the wings, bears some resemblance to that of a pigeon. Alighting again at a great distance, along the edge of the water, it runs a short way, stands, vibrates its body, utters its cry, and thus continues until its alarm has subsided. It runs with great celerity, and is in every way remarkable for its activity, which becomes almost ludicrous when it is picking up its food on a beach washed by a high surf, its movements being then executed with astonishing rapidity, as it follows the retiring and retreats before the advancing waves."

The bird represented in the plate is in breeding plumage; in winter the upper parts are of an ashen-grey colour and the under parts lose more or less the dark markings, whilst the neck and breast are only slightly streaked, and the legs of an orange-red.

THE SPOTTED REDSHANK.

Totanus fuscus (Linnæus).

PLATE 68.

The Spotted Redshank is rare in the British Islands, only occasionally visiting our shores when passing to and fro between its breeding quarters in Northern Europe and Asia and the warmer regions which it seeks in winter, when it visits Southern Europe, Northern Africa, India, China, and Japan.

The nesting habits of this species in Finland were first described by Wooley

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(see Hewitson's *Eggs of British Birds*, 3rd ed. pp. 326–328, and Dresser's *Birds of Europe*). He found the birds nesting in dry places near the tops of long hills amongst forests, far away from marshes, and often, curiously enough, on black ground where the trees had been burnt, which made it difficult to see the bird when sitting on her nest amidst these surroundings.

The four eggs are laid in some small depression in the ground—those found by Wooley being bedded with a few needles of the Scotch fir—and in colour vary from a delicate green to a pale brownish tint, blotched and spotted with deep brown and having shell-markings of purplish-grey.

Like the Redshank, this species is very alert and wary, and lives on much the same kind of food, though it shows more partiality for fresh water than the other. When its breeding ground is invaded the bird utters loud cries, but the late Lord Lilford considered it less noisy on ordinary occasions than our Common Redshank. The remarkable difference between the dark nuptial plumage and the white and silvery grey of winter is shown in the plate.

THE GREENSHANK.

Totanus canescens (J. F. Gmelin).

PLATE 68.

This species, which is a good deal larger than the Redshank, visits the British Islands in autumn and spring, occasionally staying during the winter months, especially in Ireland. It has long been known to breed on the moorlands and hillsides of Scotland and the western islands, where the bird is found in summer in many localities. It also breeds in Northern Europe and Asia, migrating southwards in winter to Africa, the warmer parts of Asia, the Malay Archipelago, and even down to Australia.

The nest is placed on the ground, sometimes on a hillside among heather or by a fresh-water loch, and is merely a slight hollow lined with pieces of heath, dry grass, etc. The four eggs are pale buff or stone-colour, blotched with pale purplish-grey, and dotted with dark brown.

In April I have seen the Greenshank by the River Ewe in Ross-shire feeding among the stones and mud on the margin of the stream, when its loud musical whistle could frequently be heard. The food consists of worms, insects, molluscs, tiny fishes, etc.



THE GREENSHANK

The bird in the plate shows the dark markings on the mantle and scapulars assumed in the breeding season. In winter the upper parts in general are a paler grey, when, excepting the colour of the feet and legs, the present species resembles the Greater Yellowshank, both species having a slight upward curve in their bills.

THE MARSH-SANDPIPER.

Totanus stagnatilis, Bechstein.

PLATE 68.

This species, which is very like a diminutive Greenshank, though its legs are proportionately longer and its body more slenderly built, is a very rare wanderer to Great Britain, where only four occurrences have been noted, the first at Tring, Hertfordshire, October 1887, two at Rye Harbour, Sussex, June 1909, and the last at Bodiam Marsh, in the same county, in July 1910. In summer the Marsh-Sandpiper inhabits the south-eastern parts of Europe, ranging eastwards to Turkestan and Siberia, while in the winter season it retires southwards to Africa, India, Ceylon, the Malay Archipelago, and Australia.

According to the late H. E. Dresser's *Manual of Palearctic Birds*, vol. ii. p. 788, "It usually breeds near, but occasionally at some distance from water, in grassy places, its nest resembling that of its congeners, and its eggs, four in number, are usually laid in June or July, and are ochreous buff, sometimes with a faint olivaceous tinge, with pale purplish-brown shell-markings and rich dark brown surface spots and blotches."

The bird represented in the plate is in summer plumage. According to Dresser, in the work referred to above, "in winter the upper parts are brownish-grey, somewhat marked with white, the wing coverts darker; under parts and axillaries pure white."

THE RED-BREASTED SNIPE.

Macrorhamphus griseus (J. F. Gmelin).

PLATE 68.

This so-called Snipe, which is now known to have more affinity to the Sandpipers, occasionally straggles to the British Islands in autumn, some twenty-two occurrences having been recorded. It breeds in high northern latitudes in America,

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migrating in winter to the central and southern parts of that Continent and the West Indian Islands. The nest is placed on the ground among marshes, and contains four eggs, which, according to Seebohm's *British Birds*, "vary in ground-colour from pale buffish-brown to pale greenish-brown, spotted and blotched with dark reddish-brown, and with well-marked pale greyish-brown underlying spots." This species obtains its food like the Sandpipers, by probing the sand and mud with its long bill.

The specimen in the plate is shown in full summer dress; in winter the colour of the upper parts in general becomes a dull ashen-grey, whilst during the intermediate stage of plumage in autumn, when the bird visits the British Islands, the colour is more or less brown. It is, therefore, sometimes known as the Brown Snipe.

THE BAR-TAILED GODWIT.

Limosa lapponica (Linnæus).

PLATE 69.

This bird of passage visits our shores in some numbers every year in spring and autumn, often frequenting suitable localities throughout the winter, and even at times lingering during the summer months, but it has never been known to nest in the British Islands.

The Bar-tailed Godwit breeds in the northern parts of Europe and in Siberia, where it ranges as far east as the Yenesei, while in winter it migrates to Southern Europe, Africa, and South-western Asia.

The nest is merely a small hollow in the ground, and the four eggs are pale olive-green, with dark markings of brown.

When on our coasts this species often associates with other waders, and may be seen on the wet sands and mud-flats of estuaries and other parts of the shore searching the pools and probing the soft ground with its long, slightly upcurved bill in quest of the worms, insects, and small marine creatures on which it lives.

Macgillivray says their note is a loud shrill whistle. According to Stevenson's *Birds of Norfolk*, vol. ii. p. 253, the Bar-tailed Godwit arrives so punctually on the Norfolk coast, on its vernal passage in May, that the 12th of that month is known to the gunners as "Godwit day."

The birds are then usually in their beautiful russet summer-dress, which changes in the winter to sober brown and grey.

The female, though less brightly coloured, is considerably larger than the male.

THE BLACK-TAILED GODWIT

THE BLACK-TAILED GODWIT.

Limosa belgica (J. F. Gmelin).

PLATE 69.

The Black-tailed Godwit, unlike the preceding species, used formerly to breed regularly in the fens of our eastern counties, the eggs, according to Stevenson (*Birds of Norfolk*, vol. ii. p. 250), having been taken at Reedham as late as 1857. A few birds appear still to visit our country on passage, when they are more often seen on the eastern and southern shores than elsewhere in England, while they are rare in Scotland, though often visiting Ireland in autumn.

The Black-tailed Godwit still breeds among the marshes of Holland and in favourable localities in other parts of Central and Northern Europe, in Iceland, the Færoes, Siberia, and Turkestan, and retires southwards in winter to Southern Europe, Africa, and Southern Asia.

The nest is only a slight depression among the vegetation of the marsh or tundra, and contains four eggs, in ground-colour a pale dull green, blotched and spotted with olive-brown.

This species is very noisy on its breeding ground being approached by anyone, when it flies around the intruder, uttering loud cries, hence its local name of "barker" or "yarwhelp," mentioned by Sir Thomas Browne of Norwich, who also alludes to the reputation this bird had as "the dayntiest dish in England & I think for the bignesse, of the biggest price" (see *Notes on the Natural History of Norfolk*, by Sir Thomas Browne. Jarrold & Sons).

As with the Ruff, it was formerly the custom to keep the birds in confinement and fatten them for the table.

The male is brighter in colour than the female, but she is the larger bird.

THE COMMON CURLEW.

Numenius arquata (Linnæus).

PLATE 69.

The Curlew, known in Scotland as "Whaup," is a very common bird on our shores and estuaries in autumn and winter, and breeds plentifully among the heather of the moorlands, especially in Scotland and Ireland.

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In August and September, as they move down from their breeding grounds to the coast, their well-known cry may be heard, often in the stillness of the night, over towns and cities, even in the outskirts of London. This bird has a wide range during the nesting season over Northern and Central Europe and Northern Asia, and migrates southwards from the more northern parts of its habitat in winter, when it visits the Mediterranean countries, Africa, South Asia, and Japan.

The nest is a shallow depression amongst the grass and heather of the moorland, scantily lined with dry bents or twigs of heath, and contains four eggs—large for the size of the bird—in ground-colour pale brownish-green, blotched and spotted with brown. The usual call-note of this species, from which the bird has probably derived its name, is clear and loud, but in the breeding season a succession of soft warbling notes are uttered during flight, which are extremely pleasing to the ear. Though sometimes showing great boldness when its eggs or young are threatened, there is no more wary bird than the Curlew, and it is practically unapproachable on the mud-flats and open sandy shore where it seeks its food, consisting then chiefly of crustaceans and various small sea animals, or of earth-worms, insects, and wild fruits, when inland on the moors.

THE WHIMBREL.

Numenius phaeopus (Linnæus).

PLATE 69.

The Whimbrel is a regular visitor to the British Islands on passage in spring and autumn, while a few stay throughout the winter on our shores. It breeds in the Orkneys and Shetlands, and, according to the B.O.U. *List of British Birds* (2nd ed. 1915), it has nested in St. Kilda and apparently on North Rona, though never known to nest on the mainland of Great Britain or Ireland. It inhabits Northern Europe and Asia in the nesting season, and migrates southwards for the winter to Africa, India, and the Malay Peninsula. The Whimbrel is known by various names to the gunners on the coast, among others "May-bird," on account of the numbers seen during that month, when the bulk of these migrants appears, and "Half-Curlew," in allusion to its resemblance to the larger species. In its habits it does not appear to differ much from the Curlew, nor in its nidification. The four eggs are dull olive-green, marked with umber-brown.

THE WHIMBREL

The voice of the Whimbrel is, however, quite distinct, the birds having, according to the late Lord Lilford, acquired the local name of "Seven-whistlers" owing to their peculiar cry of seven distinct notes.

THE ESKIMO CURLEW.

Numenius borealis (J. R. Forster).

PLATE 69.

The Eskimo Curlew, a native of America, and now supposed to be almost extinct, has been obtained about eight times in our islands, the first in Kincardineshire in September 1855, and the last on Tresco, Isles of Scilly, in September 1887.

This species breeds in Arctic America, whence it migrates in autumn to spend the winter in South America.

I have copied the following notes on its habits from Dresser's *Birds of Europe*, vol. viii.: "Audubon, who met with this Curlew in numbers in Labrador, writes that, 'wherever there was a spot that seemed likely to afford a good supply of food, there the Curlews abounded, and were easily approached. By the 12th of August, however, they had all left the country. In Labrador they feed on what the fishermen call the Curlew-berry (*crow-berry*?), a small black fruit growing on a creeping shrub not more than an inch or two in height, and so abundant that patches of several acres covered the rocks here and there. When the birds were in search of these feeding-grounds they flew in close masses, sometimes high, at other times low, but always with remarkable speed, and performing beautiful evolutions in the air. . . . While on the wing they emitted an oft-repeated whistling note; but the moment they alighted they became silent.'"

In his *Manual of Palearctic Birds*, Dresser states that the four eggs "vary from light greenish to dark olivaceous in ground-colour, and marked with purplish-brown shell-markings and dark umber-brown surface spots and blotches."

The size of the Eskimo Curlew is much less than that of our common species, while the bill is proportionately shorter.

BRITISH BIRDS

THE SLENDER-BILLED CURLEW.

Numenius tenuirostris, Vieillot.

PLATE 69.

Three examples of this rare bird were obtained on Romney Marsh, Kent, in September 1910, and recorded by Mr. M. J. Nicoll in Witherby's *British Birds*, vol. v. p. 124. This species breeds in Western Siberia, and in winter visits Southern Europe and North Africa.

The late H. E. Dresser, in his *Eggs of the Birds of Europe*, has given the following notes on the breeding habits of the Slender-billed Curlew, received from Mr. Buturlin: "The present species inhabits fenlands, either such as are open or such as are covered with birch trees, or sometimes marshes adjoining the pine forests. Its nest is placed on a large hillock, or on a small dry island, often on one ten to fifteen yards square. Mr. Ushakov always found it nesting in single pairs, and often side by side with *Numenius arquata*, but he was informed by local sportsmen that it also breeds in colonies of several dozen pairs. . . . The nest is a mere depression in the ground, not more than an inch deep, scantily lined with dry grass, or sometimes with a low border of dry grass, in which case the nest takes the form of a somewhat deep cup.

"The full clutch of four eggs may be found from the 30th of May to the 10th of June, and the young are hatched about the end of June, but the birds remain for some time at their nesting place, then undertake short wanderings till about the middle of August, and finally leave for the south in the latter half of that month." The eggs "vary in ground-colour from greyish-olivaceous to ochreous brown, or occasionally reddish-brown, but always with a greenish tinge, and are marked with ashy-grey or pale olivaceous underlying shell-spots and greyish-brown and dark olivaceous surface-dots, spots, lines, streaks, and irregular blotches."

This species is smaller than our Curlew, has a shorter and more slender bill, and may also be distinguished by the distinct spade-like dark markings on the flanks.



Ala. tricolor (Linn.)

Ala. tricolor (Linn.)

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Order GAVIÆ.

FAMILY LARIDÆ.

SUBFAMILY STERNINÆ.

THE BLACK TERN.

Hydrochelidon nigra (Linnæus).

PLATE 70.

Owing to the extensive drainage of the fens and marshy places in our eastern counties and other localities, the Black Tern, or "Blue Darr," as it was called in Norfolk, has long ceased to nest in the British Islands, where it once was a common summer visitant, and at the present time only visits its old haunts in small numbers on passage, the last record of its breeding in Norfolk having been in 1858, according to Stevenson.

This species breeds in many parts of Europe, but apparently not beyond 60° N. latitude, whilst it ranges as far east as Siberia and Turkestan, and in winter migrates to Africa. It is purely a fresh-water species, frequenting reedy lakes and marshes, and feeds on various winged insects, including dragon-flies, and also on worms, leeches, small fishes, etc.

The nest, built of dead reeds and other plants, is placed in wet places in morasses, and contains three eggs, in ground-colour dull buff or olive, blotched and spotted with dark brown and purplish-grey. The birds, which breed in colonies, are very noisy when disturbed, their notes being loud and shrill.

The sexes are alike in colour, and the immature bird is very much the same as that of the White-winged Black Tern, shown on plate 70.

THE WHITE-WINGED BLACK TERN.

Hydrochelidon leucoptera (Schinz).

PLATE 70.

Though never known to have bred in our islands, this species occasionally visits England and Ireland in spring and autumn when on passage. It nests

BRITISH BIRDS

among the marshes of Central and Southern Europe, and in Asia ranges as far east as China and south to Turkestan. In the winter season it migrates to Africa, Southern Asia, and as far south as Australia and New Zealand. Like the Black Tern, the present species breeds in colonies, the nest and eggs resembling those of its congener, nor does it differ much in food or habits, though the late Lord Lilford considered that its flight is somewhat less wavering and indirect than that of the Black Tern.

THE WHISKERED TERN.

Hydrochelidon hybrida (Pallas).

PLATE 70.

This southern species is a very rare visitant to England, where about a dozen have occurred at different times, while one has been recorded in Scotland and one in Ireland. It breeds in the marshes of Spain and in suitable localities in Central, Southern, and South-eastern Europe, also in North Africa and in many parts of Asia, including India. It migrates in winter as far as South Africa, when it also visits Southern Asia, the Malay Archipelago, and Australia.

The nest, generally consisting of a heap of water-plants collected on the surface of the lake, contains three eggs, varying in ground-colour, but generally of a delicate green, blotched and spotted with blackish-brown. The present species does not differ from the Black Tern in habits, but, according to Lord Lilford, its note is "somewhat harsher and more prolonged than that of the other."

The three different species of Marsh-Tern have the webbing of the toes much more indented than in our other Terns.

THE GULL-BILLED TERN.

Sterna Anglica (Montagu).

PLATE 70.

The Gull-billed Tern, a rare visitant to Great Britain, where some twenty-five examples have been recorded, was first described by Col. Montagu in the Supplement to his *Ornithological Dictionary* in 1813 from birds obtained in Sussex and Kent. It breeds in small numbers on the Danish coasts and islands, and also in

THE GULL-BILLED TERN

Spain and other parts of Southern and Western Europe, in Asia, North Africa, and the shores of North America, whilst in winter it is found throughout Africa, in favourable localities in Southern Asia and in South America.

The nest consists of a small scratching in the sand, with a scanty lining of bents, etc., and contains two or sometimes three eggs, in ground-colour light buff, stone-colour, or pale olive, with spots and blotches of various tones of brown.

According to "Yarrel" (4th ed. vol. iii. p. 534), "In its partiality for lagoons, tidal rivers, and inland lakes of fresh or brackish water, and in its comparatively short although distinctly forked tail and moderately-webbed feet, this species forms a natural link between the Marsh Tern and those which frequent the sea-coast."

The food consists of various insects, including locusts, grasshoppers, and beetles, often taken on the wing, and according to Col. Irby green frogs are also eaten.

THE CASPIAN TERN.

Sterna caspia, Pallas.

PLATE 70.

This large Tern is an uncommon straggler to the English coasts, mostly those of the eastern and southern counties, where some twenty examples have been recorded. In Europe it breeds from as far north as the Gulf of Bothnia southwards to the Mediterranean and eastwards to the Caspian Sea, also throughout a great part of Asia, Africa, Australia, New Zealand, and America. The birds which breed in the colder parts of their range move southwards in winter. The nest is only a small depression in the sand, with a slight lining of bents or sea-weed, and contains from two to three eggs, in ground-colour pale buff or greyish-brown, spotted and marked with purplish-grey and brown.

The food, consisting almost entirely of fish, is obtained by a sudden and headlong plunge into the sea, after the bird has located its prey from above. The cry of this species, like that of all the Terns, is harsh and strident. In winter the black on the head of the bird is streaked with white.

BRITISH BIRDS

THE SOOTY TERN.

Sterna fuliginosa, J. F. Gmelin.

PLATE 70.

The Sooty Tern shown on this plate, with other species which occasionally or only rarely visit the British Islands, has occurred half-a-dozen times, the first in Staffordshire in October 1852, and the last in Sussex in April 1911. It inhabits the tropical seas throughout the greater part of the world, and breeds in large colonies on various islands, notably Ascension.

According to Dresser's *Manual of Palæarctic Birds*, it usually lays only one egg, "white or cream-buff in ground-colour, the shell-markings purplish-grey, and the surface spots and blotches deep red."

The Lesser Sooty Tern, *S. anæstetha*, Scopoli, and the Noddy Tern, *Anous stolidus* (Linnæus), are said to have occurred in British waters, but the records are not now considered satisfactory.

THE SANDWICH TERN.

Sterna cantiaea, J. F. Gmelin.

PLATE 71. (*Frontispiece*.)

This species, first recognized near Sandwich in 1784, is a regular summer visitant to the British Islands, breeding chiefly on the eastern coasts of Great Britain and on some of the loughs in Ireland. In Europe the Sandwich Tern nests on the coasts of Denmark, the Netherlands, and in some parts of the Mediterranean, ranging eastwards to the Caspian Sea, while in winter its visits extend over a great part of Africa and South-western Asia. It also inhabits America.

The nest is a slight hollow scraped in the sand, and contains two or occasionally three eggs, varying in ground-colour between a pale yellowish-white and buffish stone-colour, spotted and marked with dark brown and pale grey.

In habits, the present species does not appear to differ from the other salt-water Terns, but, compared with the Common and Arctic Terns, its larger size and bolder



Whiskered Tern

Sooty Tern.

White-winged Black Tern

Gull-winged Tern

Black Tern

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THE SANDWICH TERN

style of flight serve to distinguish it. The food, consisting chiefly of sand-eels and other small fishes, is sought for by hovering above the water, and then secured by a sudden downward swoop.

The cry of this bird is harsh and grating, and is especially noticeable when its breeding territory is invaded.

THE ROSEATE TERN.

Sterna dougalli, Montagu.

PLATE 71. (*Frontispiece.*)

This extremely graceful and delicately coloured species was first noticed by Dr. MacDougall of Glasgow, on the Cumbræes, Firth of Clyde, over a hundred years ago, when it appears to have been more numerous than at the present day. A few colonies, however, are still to be found off the English and Welsh coasts, and some pairs are said to nest in Scotland and in Ireland. During summer it is found locally in some parts of Europe, but not apparently beyond 57° north latitude. It frequents the coasts of Africa, Asia, Australia, and America, being migratory in the colder parts of its habitat.

The nest, like that of its allies, is a mere depression in the sand, occasionally surrounded by some dry grass-stalks, and contains two or three eggs, resembling those of the Common Tern.

The habits of this species appear to be the same as those of the latter, although their cries are said to differ, while the slender form and long tail of the Roseate Tern distinguish it from other species when on the wing.

THE COMMON TERN.

Sterna fluvialis, Naumann.

PLATE 71. (*Frontispiece.*)

The Common Tern is a summer visitant to the British Islands, breeding abundantly on many parts of our coasts and sometimes on the shores of inland lakes, but becoming less numerous towards the north of Scotland, where the Arctic Tern predominates. It breeds in favourable localities throughout Europe, from as

BRITISH BIRDS

far north as Norway, also in many parts of temperate Asia, in Northern Africa, and North America, and in winter migrates southwards to warmer climates. The nest consists of a hollow in the sand or shingle, and is often situated on some low-lying island off the shore; it usually contains three eggs, in colour greyish-buff or pale olive, with blotches of brown and purplish-grey.

The Sea-swallow, as this species is sometimes called, is usually seen in parties flitting to and fro over the sea or shallows on sandy shores with an unsteady wavering flight, sometimes hovering and then plunging into the water after the small fish on which it lives. When at rest the birds are fond of basking in the sun on some sloping bed of shingle near the water, and lie with their breasts touching the warm stones.

In autumn, on the shores of the Moray Firth, I have often watched large flocks of Terns before they started on their journey south; in these companies were many young birds, some of which were still fed by their parents as they perched on the tops of posts supporting salmon nets, or waited on the beach. On such occasions it is hardly possible to distinguish the Common from the Arctic Tern, so much are they alike, but the larger and whiter-breasted Sandwich Terns are always easily made out.

THE ARCTIC TERN.

Sterna macrura, Naumann.

PLATE 71. (*Frontispiece*.)

Although colonies of the Arctic and Common Terns are found nesting in the same territory on some parts of our coasts, as on the Farnes, Northumberland, Walney Island, Lancashire, and Isles of Scilly, for instance, yet the breeding range of the first-mentioned species is in general much farther north, extending to the unexplored lands of the Arctic Ocean in both hemispheres, whence the birds migrate in winter to the southern parts of Africa, Asia, and America.

The nest, like that of the Common Tern, is a mere hollow in the sand or shingle, and the eggs of the two species do not differ in colour, though those of the Arctic Tern are, according to Howard Saunders' *Manual*, slightly smaller.

The habits of the two birds are much alike, and, in fact, they are difficult to distinguish except when closely examined. Macgillivray gives as easily observed characteristics of the Arctic Tern, "the bluish colour of the lower parts, the much shorter tarsus, the greater extent of tail beyond the wings, and the uniform deep red

THE ARCTIC TERN

tint of the bill, though the tip is sometimes more or less dusky." Howard Saunders, in his *Manual of British Birds*, already quoted, has shown that there is a difference in the width and colour of the dark line extending along the shaft on the inner webs of the primaries ; this line is wider and darker in the Common Tern.

THE LITTLE TERN.

Sterna minuta, Linnæus.

PLATE 71. (*Frontispiece.*)

This beautiful little bird visits its breeding stations in the British Islands every summer, arriving at the end of April or early in May, and departing in autumn. In Europe it breeds as far north as the Baltic and south to the Mediterranean, also in North Africa, and eastwards in Asia to Northern India, whilst in winter it ranges to Cape Colony and as far south as Java.

The two or three eggs, laid on the sand or shingle, are yellowish-grey in ground-colour, blotched and spotted with dark brown and purplish-grey. The late Lord Lilford, in his work on *British Birds*, refers to the extraordinary tameness of the birds when at their nests, and says they "often remain on the eggs till the intruder is within a few feet, when they usually walk off a few yards distance, or take wing and hover closely around, uttering a short grating note."

The food of the Little Tern consists of small fishes obtained from the water along the sandy shores it frequents.

Macgillivray thus describes its habits: "You may see a pair coming up from a distance, flying at the height of a few yards over the waves, their long wings winnowing the air, and impelling them in starts, as it were, as they wend their way in undulating and wavering movements. Suddenly their flight is arrested over a large pool left on the sands by the retiring tide ; with quick beats of their wings they hover stationary, or but slightly shifting place, and with downward-pointed bill seem intent on something which they perceive in the water. One drops, but not like a stone, dips, but with upraised wings, and rises with a small fish in its bill. The other is similarly successful. Onward they proceed, now and then emitting a shrill cry, and with gentle beats of their wings."

SUBFAMILY *LARINÆ*.

SABINE'S GULL.

Xema sabinii (Joseph Sabine).

PLATE 72.

This rare Arctic Gull occasionally reaches the British Islands, particularly the shores of the eastern counties of England, most of the birds recorded having been in winter plumage. A few adults in summer dress have been obtained from time to time; the example from which the drawing in the plate was taken, showing the dark slaty head bordered by a black line, was purchased in the fishing village of Porthgwarra, Cornwall, from Mr. John Jackson, who informed me it had been shot near the Wolf Rock Lighthouse in September 1894.

Sabine's Gull breeds in the high northern latitudes of the Old and New Worlds, and was first discovered by Captain Sabine, from whom it takes its name. He found the birds, which showed great boldness in defence of their young, breeding on low rocky islands in company with the Arctic Tern. The eggs, placed on the bare ground, were two in number. In ground-colour these are dull brown or olive, with indistinct blotches of darker brown. The food consists of various insects, fish, and crustaceans.

In winter the ear-coverts and nape retain the dark colour, but the rest of the head is then white. Immature birds have the upper parts dull brownish-grey, with lighter edges to the feathers, while the tail has a dark subterminal band.

In this species the tail is distinctly forked.

ROSS'S GULL.

Rhodostethia rosea, Macgillivray.

PLATE 72.

A specimen of this small and very beautiful species, known also as the Wedge-tailed Gull, is said to have been obtained near Tadcaster, Yorkshire, in December 1846, or February 1847. It inhabits the seas of the Polar regions, and nothing appears to have been known of its breeding habits until Mr. S. A. Buturlin dis-

ROSS'S GULL

covered the birds nesting in colonies of from two or three to ten or fifteen pairs, in company with Terns—apparently the Arctic Tern—on the Kolymá Delta, in North-eastern Siberia, during the summer of 1905. A full and most interesting account of the Gulls and their nests has been given by this explorer in a communication to *The Ibis* for January 1906, pp. 131–139, from which I have taken the following extracts and notes :

“The delta of the Kolymá, which is the easternmost of the great rivers of the North Polar basin, lies, roughly speaking, between $68\frac{1}{2}^{\circ}$ and $69\frac{3}{4}^{\circ}$ N. lat. and from 159° to $161\frac{1}{2}^{\circ}$ E. long.

“This vast area, at least 15,000 square kilometres in extent, consists of a liberal admixture of lakes, lagoons, channels, rivulets ('viska'), swamps, moors, and damp ground of every description, with dry places only at intervals. . . . On the morning of May 31st one of my men saw a pair, and during the day I went on the river—where the fathom-thick ice was still quite safe—and came across several dozens. The sun was shining brightly, and in the distance each pair appeared like so many roseate points on the bluish ice of the great stream. I say 'pair,' as from their first arrival the birds were constantly seen in pairs. They had evidently just finished their migration, and were tired after their exertions; for they sat very quietly on the ice, and though all attempts to stalk them were unavailing, they would not fly far, but only shifted from place to place with a lazy and somewhat uneasy motion of their wings, which made me jot down in my note-book on the spur of the moment that the flight was more Fulmar-like than Gull-like.

“Several hours later they had evidently recovered from their fatigues, and then I saw that their flight, far from being Fulmar-like, was really much more Tern-like.” Mr. Buturlin observed the birds hovering over a shallow lake, and noticed that when resting and in pairs the male could always be distinguished, even at a distance, by his brighter colouring.

He mentions that the note of this species is peculiar, “being high and more melodious than that of Gulls in general, and very variable.” The cries he most often heard “resembled” “á-wo, á-wo, á-wo” and “claw, claw, claw” (or “cliaw, cliaw”), but various other notes were uttered.

Some nests were placed “on little mossy swamps almost bare of grass,” others “on wet grassy spots or bogs much nearer to the water, and these nests rose from four to ten inches—generally from five to eight inches—above the surface.” The nest is “composed of dry grass and *Carices*, sometimes with the addition of a few dry *Betula* or *Salix* leaves, while I once saw one made of white reindeer-moss.” The two, or more usually three, eggs are “of a beautiful deep rich olive-green, without any of the greyish or sandy shade so common in eggs of *Sterna* and other

BRITISH BIRDS

members of the Order. They are spotted especially near the larger end with chocolate-brown (not earthy brown)."

Ross's Gull, in immature plumage, has the crown and nape tinged with grey, the wings more or less marked with dull blackish-brown and buff, and the tail with a dark terminal band.

BONAPARTE'S GULL.

Larus philadelphia (Ord).

PLATE 72.

This Gull was first obtained in the British Islands in February 1848, when a specimen was killed near Belfast; another was shot on Loch Lomond in April 1850; while some four or five have since been recorded in England, the last of these in Sussex in 1913.

Bonaparte's Gull breeds in the Arctic regions of America, and migrates south in winter to the warmer parts of that Continent.

Like our Black-headed Gull, it associates in colonies on fresh-water marshes in the breeding season, but usually builds its nest, composed of twigs, moss, etc., on bushes or trees. The eggs, generally three in number, are pale olive-brown, spotted and blotched with blackish-brown.

In winter the bird loses its dark hood.

THE LITTLE GULL.

Larus minutus, Pallas.

PLATE 72.

The Little Gull not infrequently visits our eastern and southern coasts from autumn to spring, occasionally in some numbers. It breeds in Northern Europe, and ranges eastward through Northern Asia to the Sea of Okhotsk, in winter wandering southwards, when it reaches the Mediterranean, North Africa, and sometimes the United States of America.

The nest is placed on wet masses of floating water-weeds, etc., among inland marshes, and contains three or sometimes four eggs, which in ground-colour are greenish or buffish-brown, spotted with dark brown.

This diminutive species, smaller than any other Gull, does not appear to differ from its congeners in its habits.

THE BLACK-HEADED GULL

THE BLACK-HEADED GULL.

Larus ridibundus, Linnæus.

PLATE 72.

This bird is very common, and seems to be increasing throughout the British Islands, in summer breeding in large colonies on the margins of inland lakes and marshes, and in winter haunting the sea shore, estuaries, and rivers. Most of the Gulls which visit London in the latter season appear to be of this species, and they become very tame and fearless owing to the food and protection they receive. The nest, a collection of withered flags and rushes, is built on the ground among marsh vegetation, and usually contains three eggs, olive-green, pale brown, or occasionally bluish in colour, blotched with deep brown.

The loud harsh cry of the Black-headed Gull, which never ceases when their territory is invaded, has given to this species the name of Laughing Gull.

Its food is various, consisting of worms, larvæ, and insects obtained in the fields, or small fish, crustaceans, etc., from the rivers and sea shore.

THE MEDITERRANEAN BLACK-HEADED GULL.

Larus melanocephalus, Natterer.

PLATE 72.

This species, easily distinguished from the Common Black-headed Gull in summer plumage by its jet-black head—which in our bird is not really black but a sooty-brown—only rarely visits the British Islands, where four examples have been recorded at different times. It inhabits the Mediterranean, especially to the east of Italy, and also the Black Sea, while westwards it occurs along the coast of Spain as far as South-western France.

According to Lord Lilford's *Coloured Figures of the Birds of the British Islands*, "the present species nests in small numbers on the western coast of European Turkey and on some of the coast-marshes of the Black Sea. In habits this Black-headed Gull does not appear to differ materially from *Larus ridibundus*, but its cry is much harsher and deeper-toned than that of the latter bird, from which it is to be easily distinguished at all seasons by the greater thickness of its bill and generally more robust form."

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The two or three eggs are laid in a nest made of sea-weed and grasses, and in ground-colour are dull white or pale drab, with streaks and blotches of deep brown.

In winter the head and neck are mostly white, with dark streaks of grey.

THE GREAT BLACK-HEADED GULL.

Larus ichthyaëtus, Pallas.

PLATE 73.

An example of this large Gull, the only one recorded in the British Islands, was shot near the mouth of the Exe, Devonshire, in the end of May or beginning of June 1859. It breeds on the shores and islands of the Caspian Sea and eastwards through Central Asia to Turkestan and Tibet, whilst in winter it wanders southwards to the Eastern Mediterranean, Asia Minor, India, and Ceylon. Little appears to be known about its breeding habits. According to Dresser's *Manual of Palaearctic Birds*, the eggs are "dull stone-drab in ground-colour, streaked and blotched with light and dark umber-brown."

The sketches for the specimen in the plate were taken from a live bird, at one time in the Zoological Gardens of London.

In winter the head is white, with dark streaks.

THE COMMON GULL.

Larus canus, Linnæus.

PLATE 72.

The so-called Common Gull is only plentiful in England during the winter season and in spring, though it has been known to nest on the Farne Islands, Northumberland: it moves northwards to breed on the shores and fresh-water lochs of Scotland, and also nests in some localities in Ireland. After the breeding season, it is generally distributed on the coasts as well as inland throughout the three kingdoms.

The Common Gull has a wide range over Northern Europe and Asia, migrating from the colder parts of its habitat in winter, when its visits extend to the Persian Gulf, Japan, and China.



Phaethon rubricauda (Linn.)
Red-tailed Tropicbird
Little Blue Gull

Phaethon rubricauda (Linn.)
Red-tailed Tropicbird
Little Blue Gull

THE COMMON GULL

The nest, composed of pieces of turf, grass, sea-weed, etc., usually contains three eggs, in ground-colour greenish-brown or yellowish-brown, marked with streaks and spots of blackish-brown and purplish-grey.

According to Macgillivray, "When feeding along with Rooks in pasture ground, they are often found to be less wary than these birds, especially in places where they are not much liable to be molested. They never, I think, molest any other bird, nor are they at all addicted to quarrelling among themselves. Their food consists of small fishes, such as sand-eels and young herrings, which they pick from the water, first hovering with extended and elevated wings, then descending, spreading their tail, and letting down their feet, with which I have often seen them pat the water as if they were running on land. They never plunge so as to be immersed, but merely seize on what comes close to the surface. They also feed upon stranded fishes of large size, asteriæ, mollusca, shrimps, and other small crustacea. Sometimes also they pick up grain in the fields, and in a state of domestication may be partly fed on bread."

In winter the head and neck are streaked with dusky brown.

THE HERRING-GULL.

Larus argentatus, J. F. Gmelin.

PLATE 73.

Abundant on all our coasts and estuaries throughout the year and often seen inland, this species appears to be more numerous than any other of our larger Gulls. It breeds in Northern Europe, where it ranges as far east as the White Sea, and also in Arctic America. In winter it migrates southwards to the Mediterranean, and in the New World to South America.

The Herring-Gull usually breeds on the steep faces of rocky cliffs or on islands, and makes its nest of grass and similar material. The three eggs vary very much in colour and markings, often they are greenish-brown, spotted and blotched with dark brown and purplish-grey, or the ground-colour may be light bluish-green, reddish, or yellowish-grey.

This bird is almost omnivorous, it pursues the shoals of fish, from which it takes its toll, haunts the shores at low-water in search of crabs and other crustaceans, follows in the wake of vessels in order to obtain scraps of food, or robs other species of their eggs. In fishing villages it becomes very tame, and may often be seen perched on chimneys and housetops.

BRITISH BIRDS

Its cry is loud and harsh, and is not unlike a laugh, while, in common with the other large Gulls, it often emits a succession of yelping notes from its widely-opened mouth as it stands erect on some rock or sandbank.

A specimen of the Yellow-legged Herring-Gull, *Larus cachinnans*, Pallas, was obtained on Breydon Water, Norfolk, in November 1886. This species is common in the Mediterranean, and chiefly differs from our bird in having the legs and feet yellow instead of flesh-colour. The habits and nidification of the two species are alike.

THE LESSER BLACK-BACKED GULL.

Larus fuscus, Linnæus.

PLATE 73.

The Lesser Black-backed Gull is a well-known bird along the shores of the British Islands, breeding in large colonies in suitable localities from the Shetlands to the Scilly Islands, though it is not in general so widely distributed in summer as the species last described. It inhabits Norway, Sweden, and Northern Russia as far east as the Dwina, and breeds as far south as the Mediterranean; while in winter it visits the west coast of Africa, the Red Sea, and Persian Gulf.

The majority of the birds found on the Continent of Europe are darker on the mantle than our Gull, which is considered a subspecies by Dr. Percy R. Lowe (*vide* Witherby's *British Birds* (vol. vi. pp. 2-7)).

The Lesser Black-backed Gull, in the breeding season, shows a preference for islands, such as the Farnes, off the coast of Northumberland, or the islets which one finds in Scotland among the waters of an inland loch, although the birds also breed in bogs. The nests, which I have seen on the Scilly Islands, were composed of dry grasses, etc., and were placed in depressions among the lichen-covered rocks.

The eggs, usually three in number, vary in ground-colour from pale greenish-blue to brown, blotched and spotted with purplish-grey and deep brown. The food is similar to that of the Herring-Gull, but the present species appears to be even more destructive to the eggs of game birds and wild fowl than the other. The cries of the two species are much alike, but practised ears can detect a difference.

In winter the head and neck are marked with dusky streaks, while the young more or less resemble those of the Herring-Gull.



Lesser Frigatebird

Lesser Frigatebird

Lesser Frigatebird

Lesser Frigatebird

THE GREAT BLACK-BACKED GULL

THE GREAT BLACK-BACKED GULL.

Larus marinus, Linnæus.

PLATE 74.

This fine species, the largest of our British Gulls, is plentiful on certain parts of our coasts and islands, and may often be seen inland. It breeds in Northern Europe and Siberia, and, according to Howard Saunders' *Manual*, in North-western France.

In winter it wanders south to the Mediterranean, while in the New World its summer quarters are in North America, whence it migrates in the cold season to the southern parts of the Continent.

The Great Black-backed Gull generally chooses for its nesting ground the level grassy top of a high rocky islet in the sea, or some lower situation surrounded by the waters of a loch. The nest is composed of dry grasses, sea-weed, etc., and contains two or three eggs, greenish or greyish-brown in ground-colour, with markings of dark brown and grey. The food is various, comprising fish, the eggs and young of other birds, and offal of all kinds, while the bird often joins the Raven and Hooded Crow when feasting on dead sheep or other carrion on the moors.

The wide stretch of wing, extending over five feet from tip to tip, enhances the grand appearance of this Gull in flight, when its loud cackling laugh can be heard afar. In character it is bold and masterful, but is usually wary and shy in the presence of human beings. The sketch for the drawing in the plate was obtained in the Scilly Isles, through the kindness of Mr. Dorrien-Smith. There the birds are plentiful, haunting not only the inhabited islands, but also the out-lying desolate rocks, where their only companions are the Cormorants, Shags, and Great Grey Seals.

THE GLAUCUS GULL.

Larus glaucus, O. Fabricius.

PLATE 74.

This large white-winged Arctic Gull sometimes visits in numbers the shores of our northern islands and eastern coasts of Great Britain in winter, and often

BRITISH BIRDS

wanders at the same time to Ireland. Breeding as near our coasts as Iceland, where it is found throughout the year, it inhabits the circumpolar seas, whence a good many birds migrate, on the approach of the northern ice, to more southerly regions. It then ranges in Europe as far as the Mediterranean and Black Seas, in Eastern Asia to Japan, and in America to Florida.

The nests have been found situated at low elevations on sandy shores, where they were mere depressions with a lining of sea-weed, at other times they are placed high up on cliffs.

The eggs, usually three in number, are pale greyish-brown, spotted with dark brown and grey.

Predatory in its habits and of a domineering disposition, this Gull had the name of "Burgomaster" applied to it by the old mariners of the Arctic seas, and, like its congeners, it utters loud and harsh cries.

The bird in the plate is shown in winter plumage; in summer the head and neck are pure white. When young, the colour is dull yellowish-white, mottled with shades of brown blended with grey.

THE ICELAND GULL.

Larus leucopterus, Faber.

PLATE 73.

Closely resembling the Glaucus Gull in colour, but smaller and relatively with much more length of wing, this species may occasionally be seen off the English coast in winter, but much more frequently in the Shetlands and on the north-eastern coast of Scotland than in other parts of the British Islands.

Jan Mayen Island, Greenland, and the Arctic regions of America appear to be its chief breeding grounds, whence it wanders to more southerly climes for the winter.

The nest, situated on the ledges of cliffs or on sandy shores, contains from two to three eggs, in ground-colour greenish-drab, marked with blotches of brown.

Mr. Harvie-Brown, as quoted in Dresser's *Birds of Europe*, says: "When flying, the action of the Iceland Gull is more airy and buoyant, less Owl-like, than that of the Glaucus Gull"; and Saxby, in his *Birds of the Shetland Isles*, p. 336,

THE ICELAND GULL

noted that it could be readily recognized at a distance "by its acutely pointed and somewhat long white wings."

The bird in the plate shows the dark streaks on the head and neck denoting winter plumage. In summer these parts are pure white.

THE KITTIWAKE GULL.

Rissa tridactyla (Linnæus).

PLATE 74.

The Kittiwake may be seen along the coast at all times of the year, but is more locally distributed though not less abundant in summer, when it is found breeding in large numbers on the steep rocky cliffs of our shores and islands.

This circumpolar species nests throughout a great part of the Arctic and sub-Arctic regions of the Old and New Worlds, and migrates from the colder portions of its range in winter. The birds breed in colonies, and the nests, rather compactly built of sea-weed and turf, are placed on ledges, sometimes so narrow that there seems scarcely room for the bird to turn. The two to three eggs are pale olive or greenish-white, blotched with dark brown and purplish-grey.

A colony of breeding Kittiwakes, such as that on the precipitous island of Handa, on the west coast of Sutherland, where the birds are seen dotted along the face of the cliffs or wheeling in thousands over the sea far below, like drifting snow-flakes, is a never-to-be-forgotten sight.

Here they can be observed at close quarters from a convenient mass of rock, in company with Puffins, Razorbills, and Guillemots, whilst little can be heard beyond the loud clear cry of the Kittiwake, which has given the bird its name.

The food consists chiefly of fish, which the bird, as Mr. R. J. Howard informs me, not only catches close to the surface of the water, but after which it frequently dives and pursues for a considerable distance.

The late Lord Lilford found that a captive bird only throve on a diet of worms, and actually starved when the supply failed.

In this species the hind toe is wanting or rudimentary.

BRITISH BIRDS

THE IVORY GULL.

Pagophila eburnea (Phipps).

PLATE 74.

This beautiful species is a rare visitor, more often seen off our northern shores than elsewhere in the British Islands, and usually in winter. Inhabiting the icy seas of the Polar regions, where it is abundant, it wanders southwards as the cold increases, when some of the birds find their way to Europe and North America.

The nest, composed of sea-weed, lichen, splinters of drift-wood, and feathers, is placed high up on steep cliffs or on the ground, and contains one or sometimes two eggs, in ground-colour pale greenish-brown, spotted and blotched with dark brown.

These birds not only eat crustaceans and other marine creatures, but eagerly feed on the flesh of dead whales when they get the opportunity.

The drawing of this species in the plate was taken from a sketch of a living specimen in the Zoological Gardens of London.

The plumage of the young bird is spotted with black until it attains maturity.



17th March 1881

Great Black-backed Gull
Common Gull
Black-headed Gull
Grey-headed Gull
White-headed Gull
Speckled Gull

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FAMILY STERCORARIDÆ.

THE GREAT SKUA.

Megalestris catarractes (Linnæus).

PLATE 75.

This predatory species, the largest of our "Robber" Gulls, which in Britain until a few years ago only bred on the Islands of Unst and Foula, has now extended its range in the Shetlands, and owing to careful protection appears to be increasing in numbers. During the winter it wanders far from land, but is occasionally seen off various parts of our coasts.

The breeding stations of the Great Skua in other parts of the world seem to be restricted to Iceland, the Færoes, and, according to Howard Saunders' *Manual of British Birds*, "to some islands to the north of Hudson Strait," though its migrations extend to the Mediterranean and also to American waters.

Known in the Shetlands as the "Bonxie," this species breeds high up on the moors among heather, where a slight hollow on the mossy ground, scantily lined with bents, etc., serves as a nest. This contains two eggs, in colour a pale greenish-brown, marked with deeper brown.

Like other members of this family, the Great Skua obtains a large proportion of its food by chasing the weaker and smaller Gulls and compelling them to disgorge their rightful prey, which is deftly caught by the marauder before reaching the water. This Skua also kills and devours other birds, while food, such as fish stranded on the shore, is not unwelcome.

When their eggs or young are in danger, the parent birds do not hesitate to attack human beings, and a pair have been seen, according to Macgillivray, to beat off an Eagle from their territory.

Their cry is loud and sharp, but sometimes rather plaintive.

BRITISH BIRDS

THE POMATORHINE SKUA.

Stercorarius pomatorhinus (Temminck).

PLATE 75.

The Pomatorhine, or Twist-tailed Skua, visits our shores more or less regularly in autumn, sometimes in large flocks, and appears more often off the eastern coasts than in other parts of Great Britain. In summer it inhabits the Arctic regions of Asia and America, and moves southwards in winter, roving at that time as far as the Mediterranean, South Africa, Australia, and South America.

The two eggs, greenish-brown in ground-colour, and blotched with blackish-brown, are laid in a slight hollow in the mossy ground.

This species, like the Arctic or Richardson's Skua, is dimorphic, exhibiting in both sexes a darker and lighter phase of plumage, as shown in the plate.

It lives by plundering its neighbours, and often hunts down and kills smaller or wounded birds, and also mammals, especially the lemming.

RICHARDSON'S SKUA.

Stercorarius crepidatus (J. F. Gmelin).

PLATE 75.

This bird, also known as the Arctic Skua, is the most abundant of its kind in the British Islands, breeding not only in the Shetlands, Orkneys, and the Hebrides, but on the mainland of Scotland as well. In autumn, during migration, it is dispersed along our coasts, chiefly on the eastern shores of England and Scotland, and on the western side of the latter country.

The nest is situated among grass and heather in wet moorland places, and contains two eggs, in ground-colour a dull olive, blotched with brown.

The birds fiercely attack any intruder on their domain, and, being predatory in their habits, like the other Skuas, they chiefly live by robbing weaker Gulls.

There are two forms of this species, one with the throat and under-parts light, and the other entirely dark, as shown in the picture. Birds are found breeding indiscriminately in both these phases of plumage.



Black-headed Skua
Pomarine Skua

Great Skua
Long-tailed or Bonaparte Skua

THE LONG-TAILED OR BUFFON'S SKUA

THE LONG-TAILED OR BUFFON'S SKUA.

Stercorarius parasiticus (Linnæus).

PLATE 75.

This slender and elegant species, which is the true Arctic Skua, is a rather rare visitor to the coasts of the British Islands, and is chiefly seen in autumn. It breeds in the high northern latitudes of Europe, Asia, and America, while in winter it seeks more southerly regions.

The nest is a mere depression among the moss and lichen of the tundra, and contains two eggs, which, according to Dresser's *Manual of Palæarctic Birds*, are similar in appearance to those of the Arctic Skua, but as a rule greener in tone and subject to considerable variation. The Long-tailed Skua takes after the other Skuas in its marauding habits, and preys largely on lemmings.

Order ALCÆ.

FAMILY ALCIDÆ.

SUBFAMILY ALCINÆ.

THE RAZORBILL.

Alca torda, Linnæus.

PLATE 76.

Common throughout the year in British waters, the Razorbill comes inshore in spring, and breeds in vast numbers on precipitous sea-cliffs on the mainland and islands. It breeds in suitable localities in the North Atlantic Ocean, in Europe, as well as in America, and wanders southwards in winter.

The single egg is laid sometimes on an open ledge of rock, or more often in some sheltered cranny or recess, and in colour and markings it varies less than that of the Guillemot, while it is less pyriform in shape. The usual ground-colours are a pale brownish-buff or dull white, rarely showing any greenish tint, with blotches and various streaks and dashes of umber-brown and black.

Under the guidance of the parent birds, the young somehow manage to reach the water before they can fly, and soon learn to obtain their own food, which consists of fish and crustaceans secured by diving.

The Razorbill occasionally utters a low croaking note, but is otherwise a silent bird. Its flattened knife-like bill and pointed tail suffice to distinguish it from the Guillemot.

THE GREAT AUK.

Alca impennis, Linnæus.

PLATE 76.

A most interesting and concise history of this "much-lamented" bird, exterminated over seventy years ago, has been given by the late Professor Newton in his *Dictionary of Birds* under its old name of Gare-fowl, from which it appears

THE GREAT AUK

that, contrary to a common misapprehension, the Great Auk, with perhaps one doubtful exception, never inhabited the seas within the Arctic Circle, but was found south of that line in the North Atlantic. Though occurring in the Orkneys and St. Kilda, it appears chiefly to have frequented Iceland, the Færoes, South-eastern Greenland, Newfoundland—where it was abundant—and the Labrador coast, and its destruction was ruthlessly carried out, partly in the first instance by fishermen for food and bait, and as the bird became scarcer its extermination was completed to furnish specimens and eggs for collectors and museums. Another circumstance which hastened the end appears to have been the destruction of one of its principal breeding stations off the coast of Iceland by a volcanic eruption. Unfortunately for the bird, it fell an easy prey to its enemies when it arrived at the low-lying rocks which served as nesting places, as, owing to its very diminutive wings, it was quite unable to fly.

An example taken in the Orkneys about 1813 is now in the British Museum, and two are said to have been secured at St. Kilda about 1821 and 1840, whilst a pair, the last of their race, were obtained as late as 1844 on some skerries off the coast of Iceland.

The single egg was apparently laid on the rocks, and the colour of those left to us is usually buffish-white, blotched with dark brown and grey.

According to Howard Saunders' *Manual of British Birds* (2nd ed.), about seventy-two eggs and seventy-nine specimens of the bird appear to exist.

Its food and habits in general seem to have resembled those of the Razorbill.

THE COMMON GUILLEMOT.

Uria troile (Linnæus).

PLATE 76.

This is a common bird on and off the shores of Britain throughout the greater part of the year, coming like the Razorbill, but in greater multitudes, to breed on the cliffs and precipices of our sea-coast and islands.

The Guillemot has a wide range on both sides of the Atlantic, whilst it also inhabits the Pacific Ocean, and migrates southward in winter.

The female lays her single egg on the crowded and narrow ledges of high precipitous cliffs, sometimes in such precarious situations that a sudden movement of the bird or unexpected gust of wind sends it into space, notwithstanding its pear-like shape, which no doubt helps to keep the eggs from straying.

BRITISH BIRDS

The variety of colour, shape, and size of the eggs is wonderful. In ground-colour they range from white to bluish-green or blue, showing many variations of tint, with scribbled lines and blotches of brown and black. Some are of a deep chocolate red, but these are rare, and command a correspondingly high price at Bempton. It has been noticed that each female always produces the same type of colour and markings in her eggs. After the breeding season the Guillemots go out to sea, and, considering their vast numbers, it is difficult to say why comparatively so few are seen during winter. The food, consisting chiefly of fish, is obtained by diving.

A variety of this species, known as the Bridled or Ringed Guillemot, which only differs in having a distinct circle of white around the eye, continued in a straight line backwards, is shown behind the principal figure on the plate. In winter the throat becomes more or less white.

BRÜNNICH'S GUILLEMOT.

Uria bruennichi, E. Sabine.

PLATE 76.

This species is the Arctic representative of the Common Guillemot, and is a rare straggler in winter to our eastern coasts.

It is a larger bird, with a thicker bill, marked with a pale line on the edge of the upper mandible, whilst in summer plumage the head and upper parts are blacker than in those of the Common Guillemot. The figure in the plate is in winter dress.

THE BLACK GUILLEMOT.

Uria grylle (Linnæus).

PLATE 76.

This species, known also as the "Tystie," has a more northern range in our islands than the Common Guillemot, and does not now breed on the English mainland, though in summer a few frequent the Isle of Man for this purpose. It nests in some numbers in the Orkneys and Shetlands, the Hebrides, on the rocky

THE BLACK GUILLEMOT

shores of northern and western Scotland, and also in Ireland, and in winter is chiefly found in the waters around the Scottish and Irish coasts.

It inhabits the coasts of Northern Europe and other localities westwards to the north-eastern side of America.

The Black Guillemot differs in habits from the common species, laying two eggs instead of one, and these are placed in crevices among the rocks or under slabs of stone.

In ground colour they are more or less white, with a tinge of pale blue or green, blotched and spotted with dark brown and shades of purplish-grey.

Macgillivray says: "Their food consists of small fishes and crustacea, in search of which they frequent less the sounds and bays than the open sea. On all the coasts of Scotland, the fry of the Coal-fish is a very common article of food with them, as with many other sea-birds. About most of their breeding-places, I have not observed them to proceed daily to a great distance; but on leaving the rocks with their young they disperse over the ocean, entirely deserting their breeding-places until the next spring. Yet they do not migrate far southward with us, most of them remaining all winter in the north.

This species sits lightly on the water, on which it paddles about in a lively manner. It dives with rapidity, like a shot as it were, opening its wings a little, and under water actually flies, as I have often seen."

The remarkable difference between the summer and winter plumage is shown on the plate.

THE LITTLE AUK.

Mergulus alle (Linnæus).

PLATE 76.

The Little Auk, whose summer home is among the rocks and islands of the Arctic Ocean, as a rule only visits our coasts in winter, where it occasionally appears in large numbers, especially after stormy weather, and at such times is often found far inland.

As an instance of the destruction of bird life by weather conditions, I once counted no less than ninety remains of various species, including three of the Little Auk, during a short afternoon's walk along the shores of the Moray Firth.

This bird is more frequently seen on our northern coast-line than further south in Great Britain. At their breeding stations on Spitsbergen, Novaya Zemlya,

BRITISH BIRDS

and other lands, they congregate in multitudes, nesting within the dark recesses under loose rocks and stones, where they are safe from the depredations of foxes; they are also said to breed on very high cliffs. Only one egg is laid, which, in ground-colour, is pale greenish-blue, sometimes dotted and streaked with pale red.

Birds in full summer plumage are seldom seen in the British Islands; the one represented in the plate was drawn from a specimen kindly lent to me by Lt.-Commander Millais obtained in June 1881 in Monefeith Bay, Forfar.

SUBFAMILY **FRATERCULINÆ.**

THE PUFFIN.

Fratercula arctica (Linnæus).

PLATE 76.

This oceanic bird spends the greater part of its life at sea, and only comes ashore to breed. Vast numbers arrive about the end of March or a little later, and depart in the latter half of August.

Its breeding stations are numerous on the mainland and islands of Scotland, while on the eastern side of England colonies are found on the Farne Islands and Flamborough Head; farther south a few birds nest on the Isle of Wight and in some localities on the south-western coast, becoming numerous again on the Isles of Scilly, Lundy Island, and in Wales. It is also common in Ireland, and inhabits the North Atlantic, ranging from the coasts of Europe to those of Greenland and Labrador.

Steep grassy slopes overhanging the sea or low turf-covered islands are chosen as nurseries, where the birds dig out tunnels by means of their bills, or occupy narrow openings in the rocks or under stones, and sometimes rabbit-holes are chosen.

The single egg when first laid is dull white, faintly spotted with pale brown and grey, later becoming more or less soiled and darkened.

The young, clothed at first in soft fluffy down, used to be much esteemed as food, and the name Puffin, according to Professor Newton (*Dictionary of Birds*, p. 751), was no doubt applied to these owing to their downy covering. He also states that, "In 1345, according to a document from which an extract is given in Heath's *Islands of Scilly* (p. 190), these islands were held of the Crown at a yearly rent of 300 Puffins, or 6s. 8d., being one-sixth of their estimated annual value."

The nestlings are assiduously attended to by the parent birds, who may be seen flying constantly to and fro carrying a supply of small fishes held across the mandibles.

The curiously shaped and vividly coloured bill of this species resembles the fore iron of a plough, hence its name of Coulterneb. After the breeding season the bill

BRITISH BIRDS

is much reduced in size, owing to the shedding of the sheath on the frontal part, and at the same time the blue appendages above and below the eye are also shed.

On the ground the Puffin stands as shown in the plate, differing from the Razor-bill and Guillemot in this respect, while, unlike the other members of this group, it has the claws on the inner toes placed horizontally for some purpose, so far unexplained, but possibly to enable the bird to arrange or disengage the rows of small fishes carried in the bill to feed the young.



Black-bird *Phoebastria immutabilis*
Laysan Albatross
Brown Booby
Laysan Albatross
Laysan Albatross

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Order PYGOPODES.

FAMILY COLYMBIDÆ.

THE GREAT NORTHERN DIVER.

Colymbus glacialis, Linnæus.

PLATE 77.

This large Diver is a winter visitor to the waters of the British coast, and has never been known to nest in our islands, though mated pairs in full breeding plumage are sometimes observed in summer.

It breeds in Iceland, Greenland, and in the colder parts of North America, whence it migrates southwards in winter.

The nest, composed of aquatic plants, is always placed either on the shores or on some small island on fresh-water lakes, so that on the least suspicion of danger the bird can slide stealthily into the water.

The two eggs, varying in ground-colour from greenish to reddish-brown, are spotted with black.

The food consists of fish and crustaceans, often obtained at a great depth, as the bird, like all the members of this family, is a splendid diver, and can remain under water for a considerable time. It has, in common with the other Divers, a habit of sinking its body when swimming, so much so that sometimes little more than its head and neck are visible.

During the breeding season it utters a strange melancholy cry, while at other times it has been heard to emit a low croaking sound, according to Macgillivray.

THE WHITE-BILLED NORTHERN DIVER.

Colymbus adamsi, G. R. Gray.

PLATE 77.

This species differs from the Great Northern Diver in having a heavier and more angular bill of a yellowish ivory colour, while another means of distinguishing

BRITISH BIRDS

them has been pointed out by Howard Saunders (*Manual of British Birds*, 2nd ed. p. 711), viz. that in the present species the upper part of the head and neck have a greenish sheen, changing to purple below, whereas in the others these colours are reversed. The streaks of white on the neck are also fewer in number and broader in the white-billed species.

Some five occurrences have been noted on the coast of England, and one in Argyllshire, Scotland. It breeds in Novaya Zemlya and Northern Asia, and ranges eastwards to the Arctic regions of the New World.

In habits the two species appear to be alike, and in their winter plumage closely resemble each other.

THE BLACK-THROATED DIVER.

Colymbus arcticus, Linnæus.

PLATE 77.

Though breeding regularly in the more northern parts of Scotland, this beautiful bird is not nearly so common off our shores in winter as the Great Northern Diver.

It inhabits the northern parts of Europe, Asia, and America, and in winter migrates to warmer waters, where in Europe it is found as far south as the Mediterranean and the seas of Southern Russia, in Asia ranging to Japan, and in America to the Eastern United States.

In Scotland it usually breeds on some island in a loch, sometimes a large sheet of fresh water, such as Loch Maree, where I have seen the nest, at other times it may be a comparatively small lake.

The two eggs, greenish or reddish-brown in ground-colour, spotted with black or brown, are laid in a slight hollow in a bed of herbage collected by the bird.

Like the other members of this genus, the Black-throated Diver makes its nest just at the water's edge, so that the bird when alarmed can quickly reach a place of safety by sliding to the water.

When watching the only nest of this species I have seen, which contained a broken egg, apparently damaged by Gulls, one of the parent birds could be observed quietly swimming around, and occasionally dipping its bill in the water.

During the breeding season the cry is loud and harsh.

The male and female are alike in colour, and in winter have the upper parts dark greyish-brown, with the chin, throat, and under parts white.



Common Loon (Gavia immer) - Summer Plumage
Common Loon (Gavia immer) - Winter Plumage
Common Loon (Gavia immer) - Young of the Year

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THE RED-THROATED DIVER

THE RED-THROATED DIVER.

Colymbus septentrionalis, Linnæus.

PLATE 77.

The Red-throated Diver is plentiful off the coasts of the British Islands throughout the autumn and winter, and in summer breeds in many localities on the northern mainland of Scotland, as well as in the Orkneys, Shetlands, and Outer Hebrides, while a few birds are said to nest in Ireland. It inhabits Iceland, Spitsbergen, Greenland, and the northern parts of Europe, Asia, and America, and visits more southern regions in winter.

Macgillivray, in his *History of British Birds*, pp. 304-305, describing the habits of this species, says: "In alighting it comes down nearly erect, ploughing up the water for a short way. Its activity in its proper element is astonishing; it swims with extreme speed, keeping deep in the water, and sometimes only allowing its head and neck to emerge. In diving it slips as it were out of sight without noise or flutter, and under water pursues its way with great speed, using its wings as well as its feet. Its food consists of small fishes, especially sprats, young herrings, and codfish, as well as crustacea, and I have usually found numerous pebbles and bits of gravel in its stomach. . . . The nest is placed on an island, or tuft, or among the herbage near the margin, or even on the stony beach, of a lake or pool, and is composed of grass, sedge, and heath, or other easily-procured plants, generally in small quantity, and neatly put together. The eggs, in so far as I am aware, are always two; but it is stated by some that three as frequently occur. . . . They are of a deep or pale olive-brown, or dull greenish-brown, or pale brownish-green colour, spotted and dotted with umber, more densely at the larger end."

In the nesting season, this species, like the other Divers, utters loud and harsh cries.

FAMILY **PODICIPEDIDÆ.**

THE GREAT CRESTED GREBE.

Podiceps cristatus (Linnæus).

PLATE 78.

This beautiful species, the largest of our Grebes, is now not uncommon on many of the large reedy lakes and ponds in the British Islands, and appears to be increasing in numbers and extending its breeding range in various directions. According to the B.O.U. *List of British Birds* (2nd ed. 1915), it nested as far north as Morayshire in 1913. In winter it is often found on the coast and estuaries.

It is resident in Central and Southern Europe, and also inhabits Africa, Asia, Australia, and New Zealand.

The nest of the Great Crested Grebe is a wet and more or less floating mass of sedges and other water plants on the outskirts of beds of reed or bulrush, and on this platform the four or five eggs are laid, which at first have a ground-colour of chalky white, with an underlying tinge of green, but afterwards become stained to a yellowish-brown or buff. On leaving the nest, the parent bird generally covers the eggs with any loose material close at hand.

The food consists of various water insects, fish, reptiles, etc., and, according to Macgillivray, "along with remains of these are usually found in its stomach numerous large curved feathers, which it probably picks up as they float on the water, and which are, no doubt, intended to facilitate digestion." If pursued on the water, the bird generally attempts to escape by swimming and diving, although it can fly swiftly and at some height.

In the breeding season it utters a rather harsh cry. The female is smaller, and has the occipital tufts and ruff less pronounced than those of the male, while in winter both sexes lose these nuptial decorations.

THE RED-NECKED GREBE

THE RED-NECKED GREBE.

Podiceps griseigena (Boddaert).

PLATE 78.

Though never known to have nested in the British Islands, the Red-necked Grebe visits our coasts in winter, chiefly those of the eastern side of Great Britain, where it occasionally occurs in some numbers.

It inhabits various parts of Europe, breeding as far north as Scandinavia and Northern Russia, thence southwards to the Mediterranean countries and the shores of the Black and Caspian Seas. In Asia it is found in Turkestan and Siberia, while in North-eastern Asia and in America it is replaced by a larger race.

The Red-necked Grebe builds a floating nest, composed of the dead stems and the leaves of water-plants, and lays three to four eggs, resembling those of the Great Crested Grebe but smaller, and in its habits the present species is very like its larger congener.

THE SLAVONIAN OR HORNED GREBE.

Podiceps auritus (Linnæus).

PLATE 78.

This Grebe is chiefly known as a winter visitant, when it occurs not only on the sea-coast but also on waters lying inland, and has lately been discovered breeding on lochs in Northern Scotland.

It inhabits the circumpolar regions of the Northern Hemisphere, and in winter migrates southwards to warmer regions in Europe, Asia, and America.

The floating nest of this species, which, like those of its congeners, is made of water-plants, contains from two to four and occasionally five eggs, in ground-colour white, faintly tinged with blue, which, when time permits, are concealed from notice by the parent bird when compelled to leave her treasures.

Proctor, who found this species breeding in Iceland, observed that the mother endeavoured to convey her young to safety by diving under water while she held them under her wings.

In food and habits this species does not differ from the other Grebes.

BRITISH BIRDS

THE BLACK-NECKED OR EARED GREBE.

Podiceps nigricollis, C. L. Brehm.

PLATE 78.

The Black-necked Grebe, apart from its size and colour, differs from the other species in the shape of its bill, which has a slight upward curve. Though usually only known as a winter visitant, this Grebe now breeds annually in Wales, and no doubt has done so in other parts of Great Britain.

It inhabits the countries of Central and Southern Europe, as well as North Africa, and, according to Dresser, has bred as far north as Denmark, while eastwards it ranges across Asia to Japan and China, and in winter migrates southwards to Cape Colony and India.

It breeds on fresh-water lakes, and lays four or five eggs, which do not differ from those of the Slavonian Grebe.

In winter the golden ear-tufts are absent, and the chin and throat become white.

THE LITTLE GREBE.

Podiceps fluviatilis (Tunstall).

PLATE 78.

The Little Grebe or Dabchick is a more or less common species on many of our still-flowing rivers, ponds, and other waters throughout the year, but appears to be less plentiful in the north of Scotland and its islands than in other parts of Britain, whilst in winter it often visits the tidal waters on the coast. It is widely distributed over Europe from Scandinavia to the Mediterranean countries, and through Central Asia as far as Japan.

The nest, consisting of a mass of water-weeds, contains from three to six eggs, which when newly laid are nearly white, and afterwards become stained to a dull buff or brown from contact with the wet material placed over them by the bird whenever she has occasion to leave the nest.

The tiny nestlings are sometimes removed from danger by the mother, who takes them under her wings.

The food consists of water-insects, tadpoles, and small fishes, obtained by diving, and when engaged in feeding the bird goes under very suddenly without any disturbance of the water, and reappears on the surface quite as unexpectedly.

The usual cry is a single rather plaintive note.



Red-throated Grebe. GORDON'S GREBE.
 Sp. 1. GORDON'S GREBE.
 Sp. 2. GORDON'S GREBE.

Order TUBINARES.

FAMILY PROCELLARIIDÆ.

THE STORM-PETREL.

Procellaria pelagica, Linnæus.

PLATE 79.

The Storm-Petrel, our smallest web-footed bird, breeds on many of the Scottish islands, including the Orkneys and Shetlands, the Hebrides, and various rocky islets on the western coast, while southwards it is found in similar situations off the coast of Wales, the Isles of Scilly, and also in Ireland.

In Europe it breeds from as far north as the Lofoten Islands in Norway, south to the Mediterranean, and, after nesting, spends the time at sea, when it roves as far as Cape Colony in Africa and westward to America.

The one egg, which is white, dotted with reddish spots, is laid in a hole in a cliff, at the end of a tunnel on some grassy slope, or under stones, where occasionally a scanty nest is formed of bents and bits of earth.

The Petrels seek their food upon the waters, skimming just above the waves, usually following their curves, while skilfully avoiding the breakers, and often touching the surface with their feet outspread. This habit has presented to the minds of sailors the experience of the Apostle Peter, and hence the name of Petrel.

Known also as Mother Carey's Chickens, they frequently accompany ships on their voyage across the ocean, following in their wake for many miles, no doubt attracted by the various oily substances and other animal matter which may be thrown overboard. They also eat small crustaceans and fishes. The presence of these little birds as they glide around a vessel is supposed by seamen to foretell the approach of stormy weather.

Macgillivray, describing them as seen in the waters around the Hebrides, says: "In the open ocean, they are met with by day as well as by night; but when breeding, they are seen in the neighbourhood of their haunts, that is, to the distance of twenty or more miles around, chiefly in the dusk and dawn, and during the day

BRITISH BIRDS

remain concealed in their holes. Stormy weather does not prevent their coming abroad, nor are they less active during calms." In the breeding season, when underground, they utter, according to Hewitson (*Eggs of British Birds*), "a sort of warbling chatter."

As in all the Petrels, the male and female are alike in colour.

LEACH'S FORK-TAILED PETREL.

Oceanodroma leucorhoa (Vieillot).

PLATE 79.

This species, first discovered by Bullock in 1818 on St. Kilda, is now known to breed on that island as well as in the Flannan Isles and the Outer Hebrides, also on islands off the Irish coast.

In autumn it often approaches the shores of England, and seems even more liable to be driven inland by storms than the Storm-Petrel. It inhabits the northern portions of the Atlantic and Pacific Oceans, breeding as far north as Greenland and Alaska, and wandering south in winter.

Like that species, it follows in the wake of vessels, when it may be distinguished from the other by its forked tail, larger size, and rather lighter colour. It breeds in colonies, and its single egg, which is deposited within a burrow, is pure white in ground-colour, marked with a zone of tiny spots of reddish-brown. Like other members of the family, Leach's Petrel is more or less nocturnal in its habits, becoming active as darkness comes on, when it flits to and fro, incessantly uttering its sharp querulous notes. The food is similar to that of the Storm-Petrel, consisting of floating molluscs, crustaceans, and oily substances on the sea.

MADEIRAN FORK-TAILED PETREL.

Oceanodroma castro (Harcourt).

PLATE 79.

This species, a rare bird in the British Islands, has been thrice recorded, the first at Littlestone, Kent, in December 1895, the second at Hythe, in the same county, in November 1906, and the last at Milford, Hampshire, November 1911.

MADEIRAN FORK-TAILED PETREL

Formerly known as Ridgway's, and now often called Harcourt's Petrel, it nests on the rocky islets of Madeira, the Salvages, Azores, and Cape Verde Islands in the Atlantic, while its breeding range extends as far as the Sandwich and Galapagos Islands in the Pacific Ocean. Like other Petrels, it breeds underground in burrows, and lays a single egg, which is, according to Mr. Ogilvie-Grant (*Ibis*, 1896, p. 54), "white, with an indistinct zone of light red and faint purplish underlying dots round the larger end." In habits this bird does not appear to differ from the other Petrels.

WILSON'S PETREL.

Oceanites oceanicus (Kuhl).

PLATE 79.

Wilson's Petrel is a rare visitor to the British Islands, though it was seen in some numbers near Land's End in May 1838, and about a dozen birds have since been obtained.

It breeds on Kerguelen and in other localities far southwards in the Antarctic regions, and wanders northwards in the cold season, when it ranges far and wide over the Atlantic, Indian, and South Pacific Oceans, visiting the Azores, Canaries, the coasts of France and Spain, and also Labrador.

The one egg, which in ground-colour is white, zoned with small reddish spots, is laid in chinks and crannies under stones or among broken rocks, and was first made known to naturalists by the Rev. A. E. Eaton, who found colonies of this species breeding on Kerguelen.

The food and habits of this long-legged Petrel appear to be very like those of its allies.

THE FRIGATE-PETREL.

Pelagodroma marina (Latham).

PLATE 79.

This rare species has only been taken twice in the British Islands, first on Walney Island, Lancashire, in November 1890, and again on the island of Colonsay, Inner Hebrides, in January 1897.

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It breeds on various islands in the Southern Pacific, and in the Atlantic Ocean as near our coast as the Salvages, north of the Canaries, where Mr. Ogilvie-Grant found the birds nesting abundantly in April 1895. The one egg, in ground-colour white, minutely spotted and zoned with purplish and reddish dots, is laid in a burrow, and from this retreat the bird, being nocturnal in its habits, sallies forth at dark.



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FAMILY PUFFINIDÆ.

THE GREAT SHEARWATER.

Puffinus gravis, O'Reilly.

PLATE 79.

The Great Shearwater visits the British Islands more or less regularly in autumn, when it is sometimes abundant off the southern and western coasts. According to the B.O.U. *List of British Birds*, 2nd ed. p. 287, "The only known breeding station of the Greater Shearwater is Tristan da Cunha, but it probably nests on other islands of the Southern Atlantic. It ranges over the Atlantic Ocean, from Southern Greenland, Iceland, and the Faeroes southwards to the Falkland Islands and the Cape of Good Hope." The late H. E. Dresser states (*Eggs of the Birds of Europe*) that the egg of this species is unknown.

The food consists of small cuttle-fish, etc., and oily animal substances obtained in the sea, over whose waves the Shearwater glides in long undulating curves, and from this peculiar style of flight the bird and its relations have taken their name.

The Mediterranean Great Shearwater, *Puffinus Kuhl*i (Boie), a larger bird than ours, with a yellow bill and lighter in the colour of the upper plumage, and inhabiting the Mediterranean and Atlantic, has occurred once in the British Islands, viz. at Pevensey, Sussex, in December 1906.

The Mediterranean species breeds in crannies and in holes in cliffs, and is said to lay one white egg.

- THE SOOTY SHEARWATER.

Puffinus griseus (J. F. Gmelin).

PLATE 79.

This species is occasionally seen off our coasts in autumn.

During the breeding season it inhabits the Southern Hemisphere, afterwards migrating northwards, when it roams as far as North America and the shores of Europe. It nests in burrows, lays a single white egg, and in its habits does not appear to differ from its near relatives.

BRITISH BIRDS

THE LITTLE DUSKY SHEARWATER.

Puffinus assimilis, Gould.

PLATE 79.

Breeding on the Madeiras, Canaries, Cape Verde, and other islands in the North Atlantic, and also inhabiting the seas of Australia and New Zealand, this small species has occurred some half-a-dozen times on our coasts.

It nests in holes and in cavities between or under rocks, and lays a single white egg. Like its allies, it is nocturnal in its habits, and constantly flits around its breeding stations during the darkness, uttering weird cries.

THE MANX SHEARWATER.

Puffinus anglorum (Temminck).

PLATE 80.

This is a common species in British waters, breeding on various islands off the western coasts of Great Britain and Ireland, as well as in the Orkneys, Shetlands, and Isles of Scilly, and chiefly inhabits the North Sea and the North Atlantic Ocean.

Through the kindness of Mr. Dorrien-Smith, I was able to visit a notable breeding station of this Shearwater on the island of Annet, in the Scilly group, where the turf and sandy soil on the upper and flatter part of the ground were honey-combed with their burrows, so much so that it was difficult to avoid treading on these underground dwellings. If caught in these places the birds seem to be quite dazzled with the light, and flutter along the ground unable to fly, though in the daytime when at sea they are active and wide awake. On leaving the island we encountered a large flock resting on the water, which presented a charming picture as each bird rose, and, rippling the surface with its feet, skimmed for some distance just above the sea. When fairly on the wing they fly with great speed, and follow each other as they sweep onwards in undulating curves.

The Manx Shearwater lays one white egg in a slight nest of withered grass within a burrow, and in the breeding season the birds are very noisy and restless during the night.

THE MANX SHEARWATER

The food is chiefly fish, cuttle-fish, and other animal matter.

The Levantine Shearwater, *Puffinus yelkouanus*, which takes the place of the Manx Shearwater in the Mediterranean, where it is known to the inhabitants as *Âme damnée*, is occasionally seen off the coasts of the British Islands. It scarcely differs from our bird, being only somewhat larger and browner.

THE CAPPED PETREL.

Æstrelata hæsitata (Kuhl).

PLATE 80.

An example of this very rare, if not extinct, species was captured alive near Swaffham, Norfolk, in March or April 1850.

Formerly it inhabited the Lesser Antilles in some numbers, its last known breeding-place having been the island of Dominica, where the birds nested in holes in the ground at some considerable elevation. The egg is apparently unknown.

THE COLLARED PETREL.

Æstrelata brevipes (Peale).

PLATE 80.

About the end of November or beginning of December 1889 a specimen of this Petrel, the only one recorded in the British Islands, was obtained between Borth and Aberystwith in Wales. It breeds in the New Hebrides and Figi Islands in the Western Pacific Ocean, and appears to occur southwards as far as the limits of the Antarctic ice.

The Collared Petrel was found nesting in burrows high up on the mountains on an island of the New Hebrides by John Macgillivray, but no eggs were obtained.

BRITISH BIRDS

SCHLEGEL'S PETREL.

Æstrelata neglecta (Schlegel).

PLATE 80.

An example of Schlegel's or the Kermadec Petrel was discovered lying dead, after stormy weather, near Taporley, Cheshire, in April 1908 (see Witherby's *British Birds*, vol. ii. p. 14). It breeds on islands in the South Pacific Ocean.

Mr. F. DuCane Godman, in his *Monograph of the Petrels*, referring to this species, says: "This Fulmar is remarkable for its variable colour, some examples being for the most part white, while others are entirely grey. These two phases of plumage are so much unlike each other that the birds might very well be taken for different species."

BULWER'S PETREL.

Bulweria bulweri (Jardine and Selby).

PLATE 80.

Bulwer's Petrel has occurred on five occasions in Great Britain, most of these birds being dead when found, the first in Yorkshire in May 1837, and four others in Sussex between 1903 and 1907.

This species breeds on the Desertas, Madeira, and also inhabits islands in the Northern Pacific Ocean. According to Mr. F. DuCane Godman's *Monograph of the Petrels*, "The nest is usually concealed under boulders or in holes in the rocks, where a few old bones or feathers of a Tern frequently supply the place of sticks or grass for the nest. Here the single white egg is laid, though Mr. Fisher relates that on one occasion on Neckar Island two eggs were found in the same hole, possibly belonging to different birds."

"These birds are purely nocturnal in habits, and although very rarely found in flocks like Shearwaters, remain almost constantly at sea, except during the breeding season."



THE FULMAR

THE FULMAR.

Fulmarus glacialis (Linnæus).

PLATE 80.

Inhabiting the North Atlantic Ocean, the Fulmar, which has recently extended its breeding range in the British Islands, nests on a good many of the islands of Northern and North-western Scotland, including the Orkneys, Shetlands, St. Kilda, Outer Hebrides, and others, as well as on the mainland.

The female lays one pure white egg, presenting a chalky surface, and having a decided odour of musk, on some ledge of rock or in a depression among the short turf on the slopes of a cliff. On being handled or disturbed on their nests, the birds eject from their mouths a clear yellowish coloured oil, apparently as a means of defence. Howard Saunders (*A Manual of British Birds*, 2nd ed. p. 752) describes the note as a "low croon." After the breeding season the birds disperse, and are then found roaming far and wide at sea, and often approach fishing boats and whalers, when they feed chiefly on oily matter or offal floating on the surface of the water.

Variations of colour occur in this species; occasionally pure white birds are seen, while an entirely slaty-grey form is not uncommon. Like most, if not all, of the other Petrels, the Fulmar appears to be unable to stand on its feet, and rests when on the ground in a crouching attitude.

FAMILY DIOMEDEIDÆ.

THE BLACK-BROWED ALBATROSS.

Diomedea melanophrys, Boie.

PLATE 80.

A specimen of this Albatross, driven inland and exhausted, was obtained near Linton, Cambridgeshire, in July 1897. It breeds on the Chatham, Campbell Islands, and others, in the Southern Hemisphere, and during its wanderings occasionally appears in the North Atlantic, one having been shot in the Færoes in 1893, where for thirty or forty years it had consorted with the Gannets.

The female usually lays one yellowish-white egg, which is speckled with reddish-brown.

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