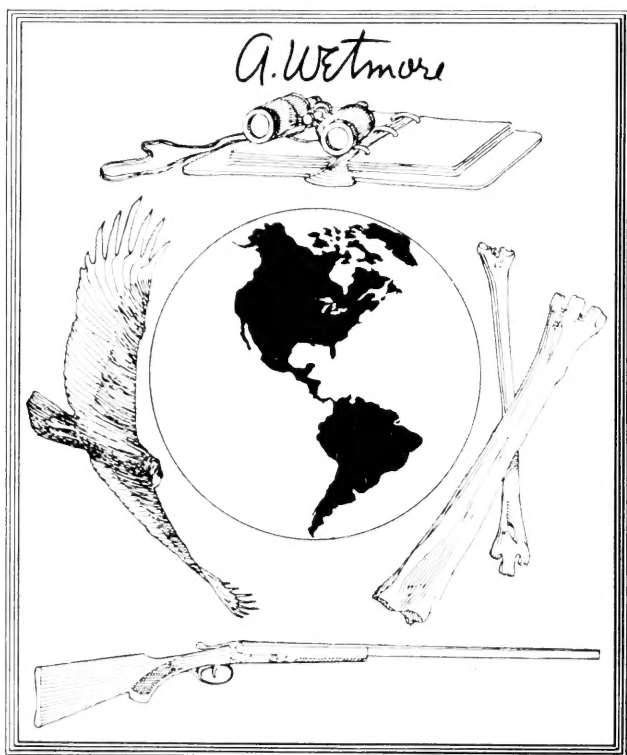


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AMONG THE
BIRDS IN NORTHERN SHIRES







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AMONG THE BIRDS
IN
NORTHERN SHIRES

BY

CHARLES DIXON

Author of "Rural Bird-life" "The Game Birds and Wild Fowl of the British Islands"
"British Sea Birds" "Curiosities of Bird-life"
"The Migration of Birds" "The Migration of British Birds" "Bird-life in a Southern County" &c

*WITH COLOURED FRONTISPIECE AND FORTY OTHER ILLUSTRATIONS
BY CHARLES WHYMPER*



BLACKIE AND SON LIMITED
LONDON GLASGOW AND DUBLIN

1900



PREFACE.

The present volume must be regarded more as a popular introduction to the bird-life of our northern shires than in any way as an exhaustive faunal treatise, although at the same time we believe almost every indigenous species has been included. For twenty years we lived surrounded by these northern birds, so that we may fairly claim to have served our ornithological apprenticeship amongst them. With the birds of South Yorkshire and North Derbyshire we are specially familiar; whilst repeated visits not only to the Lincolnshire, Yorkshire, and Northumbrian littoral, but farther afield into Lancashire, and various parts of the Lowlands and the Highlands of Scotland, have enabled us to acquire much personal information relating to the avifauna of many a northern shire.

The difference between the avifaunæ of the northern and southern shires is strongly marked in many respects. Their study makes a record of avine comparisons of the most intense interest. The important effects produced by latitude and climate upon the bird-life of these widely separated areas make material for fascinating investigation, and have been fully dwelt upon as opportunities were presented. This variation in avine phenomena is not only far too often entirely ignored, but is apt to lead the student of

bird-lore astray; due allowance has to be made in many cases for this difference in latitude, and all that it involves. The present volume, then, to a great extent a study of ornithological comparisons, will, we trust, be of some service to the bird lover or the bird student in his task of making allowances.

Unquestionably these northern shires from an ornithological point of view are much more interesting than the southern, and especially the south-western counties. Their avifauna is richer, and presents far greater variety, notably during the breeding season; whilst the marvellous phenomenon of Migration there unfolds itself each season in a manner that is never remarked elsewhere.

CHARLES DIXON.

PAIGNTON, S. DEVON.

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AMONG THE BIRDS IN NORTHERN SHIRES.

CHAPTER I.

BY UPLAND STREAMS.

THERE are few things more interesting to the lover of bird-life than the comparison of ornithological phenomena as they are presented in various localities, separated, it may be, by but few degrees of latitude. Not only does this apply to the species themselves—for even in our own islands the geographical distribution of birds conforms a good deal to latitude,—but to their migrational movements, their resumption of voice, their seasons of reproduction, their gatherings and movements generally, and finally to not a few habits that appear to be confined within narrow territorial limits. We have already dealt with bird-life in its many aspects in southern haunts with a view to the comparison of avine phenomena with that of more northern localities; we now propose in the present volume to review the most salient ornithological characteristics

of certain favoured northern shires, especially with the object of bringing them out in contrast by their comparative study. The ornithologist with a southern experience, studying bird-life in a northern county—say in Yorkshire, for example—will soon find that the avifauna of the two areas, although it possesses much in common, is in many respects different. Birds that he was wont to find common in southern haunts are rare here; others that were scarce in the south, and which he was apt to regard even as rarities, are quite common. Not a few species are met with that are seldom normally seen in southern haunts, and opportunities are afforded him of studying the nesting economy of species, the breeding areas of which are decidedly boreal. Then, again, the change of latitude involves a change of climate, especially in winter; slight, perhaps, it may be, comparatively speaking, but yet sufficient to influence the habits and movements of birds in quite a different way from those prevailing in the milder atmosphere of southern haunts. Birds that sing all the winter through in these southern shires are silent here at that season; others that are sedentary there are of migratory habits in the wilder and colder north—in obedience to those climatic influences that act upon the food supply, and so on. The farther north he goes the more acute will the contrast in avine phenomena become; and in species common to the

two areas—to northern and southern counties respectively—he will find differences of from one to two months in the ornithological calendar. Lastly, he will meet with a multitude of interesting forms, both in summer and in winter, that are normally strangers to southern localities at one season or the other, or at both seasons.

We will commence our observations by an investigation of the bird-life along the upland streams—not in their lower and quieter reaches, but at some elevation up the hillsides where the waters hurry and tumble along over rocky beds and between more or less precipitous banks fringed with alders, mountain-ashes, bracken, and brambles. The southern counties can boast no such streams; and even in the wilder south-west of England the becks are wanting in that grandeur that characterizes most of these turbulent northern waters. For twenty years or more we lived surrounded by them and within ear of their noisy clamour; whilst the birds upon their banks were our constant companions summer and winter alike. To our mind the ideal upland stream is one of the most picturesque features in the Peak district. They may be grander and wilder farther north, but with experiences of them in the remote Highlands and the Hebrides in mind, for romantic charm and wealth of bird-life these Derbyshire and Yorkshire brooks, in our opinion, remain unequalled. Almost

every valley in the Peak can boast a streamlet of some kind. Some of course are more imposing than others, drain larger areas of upland, and contain a much greater volume of water. Some plough their way across the open moorland, their bed in summer being dry or nearly so; whilst others purl down wooded valleys and along well-timbered bottoms, between the ridges of millstone grit that are such a prominent feature in this particular kind of country. In their higher and wilder reaches such rivers as the Dove, the Wye, and the Derwent—all beloved by the angler for trout and grayling—may be taken as very excellent examples of upland streams. The Rivelin, with its charming branches of Blackbrook and Wyming brook, and itself a tributary of the now polluted and ill-used Don, upon which grimy Sheffield is partly situated, were all favourite streams of ours rich in ornithological associations. So, too, was the Sheaf, with once picturesque Meersbrook, especially in its upper waters between the villages of Dore and Hathersage.

Were we asked to name the most characteristic bird of these upland streams we should unhesitatingly answer, the Dipper. Not that the bird can be regarded as plentiful anywhere; and we know not a few streams where this engaging species has dwindled seriously in numbers during the past twenty years, due partly to the senseless persecution of keepers

and others, and partly to the much greater number of people that wander along the banks nowadays compared with years ago. Be this as it may, the Dipper is still sparingly dispersed along most of the



The Dipper.

streams suited to its requirements. Its exclusive habits tend to characterize it as rarer than it actually is, and its peculiarity of keeping a length of water reserved for itself and its mate creates an impression of absolute scarcity which in many cases does not actually exist. No wonder the old school of naturalists were at a loss to assign a place in their classifications to this curious bird. Brisson included it among

the Sandpipers and called it *Tringa merula aquatica*; but Linnæus, with more discernment, associated it with the Passeres in his genus *Sturnus*, which is now restricted to the typical Starlings. Modern ornithologists have fared little better, and the poor Dipper, even in quite recent years, has been tossed about from one group to another utterly regardless of its true affinities. In some modern books we find it associated with the Thrushes, in others with the Wrens, but with neither group falling naturally. There may be some of its special characteristics, as, for instance, the coat of down that more or less covers the body below the feathers, due to its peculiar habits and economy; but, on the other hand, the very peculiar character of its nest and eggs (which we regard as of some importance in determining its taxonomic position) seems to suggest that the small group of birds of which the Common Dipper is typical, is not very closely allied to any other existing group, and fully to warrant the separation of these birds from other Passeres into a family apart. Small as this family is, the dozen species of which it is composed are scattered over a very large proportion of the earth's surface. Dippers in one form or another are found over the greater part of Europe, Asia, and North Africa; they occur on the upland streams of the Himalayas, and in the mountains of Formosa. Across the Atlantic they inhabit the

hill streams of the Rocky Mountains and the Andes.

Our British Dipper, as probably most readers at all familiar with the bird may be aware, is one of the most sedentary of our indigenous species. Both here and in those parts of continental Europe which the typical species frequents, as well as the slightly different northern form from Scandinavia, the birds keep closely to their native streams summer and winter alike, only wandering from them in the very exceptional event of the torrents becoming frost-bound. Such a peculiarity has resulted in the establishment by variation and isolation of an almost endless number of local races or sub-specific forms. To a slight extent this may be remarked even in our own islands, birds from various localities exhibiting differences of coloration, but when we come to review the Dippers of the entire Palæarctic region the amount of variation amongst them is much more pronounced. The scope of the present little volume forbids a scientific revision of the genus *Cinclus*; but a glimpse of the sprightly little brown and white bird bobbing up and down like a fleck of foam amidst the whirling waters of a northern trout stream suggests a passing allusion to these interesting facts.

The English local names of the Dipper are not without interest. It is somewhat curious to find

that the local name of Water-crow has been applied to this bird not only in Cornwall but almost universally in Scotland. The names Water-ouzel and Dipper are of very ancient application. That of "Dipper" was not "apparently invented in 1804", as Professor Newton suggests in his *Dictionary of Birds* (p. 151), by the author of the letterpress in Bewick's *British Birds* (presumably Beilby); for we find it used many years previously (in 1771) by Tunstall in his *Ornithologia Britannica*, a work which was reprinted by the Willughby Society in 1880 under the editorship of Professor Newton himself! There can be no doubt whatever that the name had been applied much earlier still. The derivation of the words Water-crow and Water-ouzel is not difficult to determine; but that of "Dipper" is open to considerable doubt. To us it seems just as reasonable to presume that the bird received this name from its unique habit of "dipping" in the stream as from its singular dipping or bobbing motion when perched on some stone or rock in the bed of the torrent, as is suggested in Bewick's work on British birds. In some parts of the Highlands the Dipper is known locally as the Kingfisher.

Although we have had not a little experience of the Dipper on the streams of a southern county we are bound to confess that the bird seems somewhat

out of place upon them, possibly because we have been so accustomed to his society amidst wilder surroundings in much more northern shires. We picture him best upon the wild trout streams of Yorkshire and Derbyshire, or as a tenant of the dancing burns of the Highlands and the Western Isles. Here he is one of the most characteristic species of the stream, constantly attached to the turbulent foam-flecked waters, part and parcel of the scenery itself. As a musician the Dipper does not take a very prominent place in the avine chorus, but his music is in full harmony with its wild surroundings, though often overpowered by the noise of the torrent—a low-pitched jerky and uneven carol, not very long-continued if uttered at frequent intervals. Perhaps we might not be strictly accurate in describing the Dipper as a habitual perennial songster like the Robin, nevertheless he warbles now and then during the winter months, and is one of the first birds to resume regular music in the early spring. We are assured that the Dipper sings at intervals during all the rigour of a Scotch winter, proof of his robustness and hardy temperament. In Devonshire his winter song might be naturally expected; for there the Song Thrush and the Skylark are musical enough at that season, although mute, or nearly so, in northern shires. We have listened to his wild uneven music on some of the

Yorkshire streams during winter when icicles a couple of feet in length have draped the rocks, or when the surrounding country-side has been covered deep with snow. Unfortunately, almost everywhere the Dipper somehow has got a bad name—a reputation amongst anglers for destroying the spawn of sporting fishes. Like the poor Owl, and not a few other feathered outcasts, he is universally persecuted for these imaginary misdeeds. But in reality he is one of the actual preservers of the ova he is accused of eating, for his food largely consists of larvæ of certain insects which in that stage of their existence are particularly destructive to the spawn. We have dissected a great many Dippers at one time and another from many different localities, and have always been much impressed with the uniform similarity of the contents of their stomachs—a little grit and the remains of insects and worms. We have, however, known the Dipper in exceptional cases to prey upon small fish, but are convinced, by the experience of a lifetime, that such food is taken so rarely as scarcely to deserve mention at all. Whenever we pause to watch the aquatic gambols of this sprightly bird, we feel less inclined to wonder why a past generation of naturalists included it amongst the water-fowl. The way it enters the quiet pools or the swifter running reaches of the stream, dashing beneath the surface from some water-encircled stone,

and rising again some distance away just to take breath and then again to disappear, is never without a certain element of surprise, accustomed as we are to the habits of this bird. We can recall a northern stream—situated in the Rivelin valley close to Hollow Meadows—specially favourable for watching the actions of the Dipper. In some parts it was confined by lofty banks, upon which we could lie concealed and look right down into the clear water, and here, when the pair of Dippers that frequented the spot were on the feed, we might watch their every movement whilst they were under the surface. This stream is used as a conduit to convey the water from one large reservoir to another, and was consequently often in flood. We have often remarked that the Dippers were exceptionally busy in searching for food on these occasions, doubtless because insects and larvæ were disturbed by the unusual flow of water. Such times, however, were not favourable for observation. We liked best to watch the ways of these charming birds when the stream flowed slower, when the water was clearer, and certain reaches were almost undisturbed by the current. The Kingfisher, as most readers may know, has but one method of feeding, by plunging into the water and returning to the air almost at once. The Dipper, on the other hand, in his quest for sustenance, is as much aquatic as a Grebe or a Moorhen. He is quite

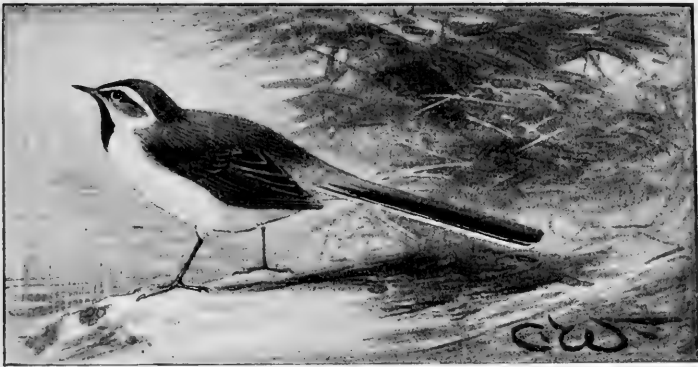
as much at home in the water as in the air or on dry land. Sometimes he walks deliberately from the bank or from a sloping moss-covered stone into the water; at others he takes a short flight over the stream and drops suddenly down into the pool; whilst yet again we have often seen him arrest a long-continued flight—which, by the way, follows every bend of the brook—and, fluttering for a moment, poise and disappear beneath the surface at once. The Dipper only maintains his subaqueous position by much evident exertion of his wings and legs and feet. Generally the wings are kept in motion whilst the bird searches the bed of the stream, but sometimes these may be seen at rest, and the body is kept beneath the water by the feet clutching the big stones and the strands of moss and other aquatic plants. Not only does the bird float buoyantly enough upon the water, but it swims well, often for many yards at a time. Dippers are exceedingly attached to certain reaches of the stream and to favourite nesting sites, using the latter year after year, often in spite of much disturbance. In this special valley we always used to find the nest in one particular spot—wedged under an overhanging rock on the bank of the stream. The nest of this species is a very characteristic one, and cannot readily be mistaken for that of any other British bird. In external appearance it bears some resemblance to that of the Wren,

being of the same globular form, but a cursory examination will soon set any doubt at rest. In a great many—we might almost say the majority of—cases the nest is made outwardly of moss (sphagnum always by preference), amongst which a little dry grass is interwoven, especially round the entrance hole. This mossy globe is lined with grass roots and sometimes fine twigs, and then again lined with an enormous quantity of dead leaves all arranged very neatly layer over layer. There is never any lining of wool or feathers, and the five or six white eggs are almost exactly the same size as those of the Song Thrush. The Dipper is an early breeder even in the northern shires, commencing to build at the end of March or early in April, and rearing several broods during the course of the season. The young birds are most interesting little creatures. We retain many vivid remembrances of the actions of broods of Dippers that we have unexpectedly disturbed. The tiny creatures, when only able to fly or flutter for a few yards at most, will take to the water to escape pursuit just as readily as the chicks of a Grebe or a Moorhen, and are equally as alert and active in that element. We have upon more than one occasion known the four or five youngsters flutter out of the nest one after the other, and at once tumble into the stream below, where all efforts at capture have usually been unavailing. Not only do the nestlings

dive and flutter about the water, but they are adepts at concealing themselves amongst chinks of the rocks or under the moss and herbage growing in the stream. When required for examination, we always found the best way to secure them was with our landing-net. The song of the Dipper declines considerably as spring merges into summer. The cock bird warbles most frequently whilst sitting on some water-encircled stone or rock, but we have known him to perch and sing in the alder-trees growing by the water-side. We always consider him to be in finest voice during March and April—a habit fully in keeping with his robust temperament, and one which instantly puts us in mind of a louder and sweeter singer, the Missel-thrush. The Dipper is the one constant avine dweller on the upland streams, consequently we must in fairness regard him as the most characteristic bird of these localities.

Another and daintier species, however, is almost his equal in this respect, and that is the Gray Wagtail. This bird is more susceptible to the changing seasons, and at the approach of winter deserts the higher streams altogether, or comes down to the lower and more sheltered reaches of others. The Gray Wagtail is a familiar bird along all our Yorkshire and Derbyshire streams and rivers. We look for him quite as a matter of course when we reach

the rocks, and the alder and birch and mountain-ash trees, just as we expect there to find the Dipper. But this is in summer mostly; in winter he becomes far more familiar, and during that season comes much nearer to the busy haunts of men. We have often seen Gray Wagtails in the bed of the grimy Don and Sheaf in the very heart of smoky Sheffield



The Gray Wagtail.

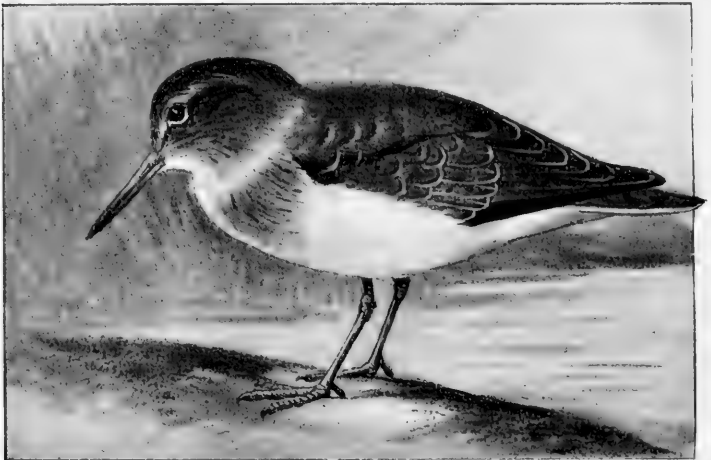
during midwinter; and we know the bird as a winter resident about all the streams and sluices and dams in the series of Endcliffe Woods. The bird seems, however, closely attached to the stream in its upland solitudes, and at the first sign of spring goes back to favourite haunts among the moorlands and hills. We can recall many a romantic reach of the Derwent, the Wye, and the Dove, where the Gray Wagtail, the Dipper, and the Kingfisher might be watched together, the former bird, daintiest and

most charming of its kind, deftly poised on a rock in mid-stream vigorously beating its long tail, looking like a single feather until it was opened as the startled bird took flight; the two latter species flying alarmed away arrow-like, following the winding waters, the one as a particoloured ball, the other as a blue undefined streak of refulgent light. So likewise has the Gray Wagtail oft been our sole bird companion on many a Highland water, both on the mainland and in Skye. We never tire of watching its sylph-like actions, the dainty way it poises on the stones or flits along before us stage after stage in undulating flight uttering its cheery *chiz zit* as it goes, or of admiring the exquisite blending of its showy yet delicately coloured plumage. We have often made his acquaintance upon more southern waters, far away in the remote south-west of England, but somehow he never there evokes the same feelings with which we greet him in northern haunts. The Gray Wagtail visits these upland streams for the purpose of rearing its young. Not every wanderer by the water-side is fortunate enough to get a peep at this bird's domestic arrangements. It has, fortunately perhaps, a happy way of concealing its nest under some large stone or overhanging rock, or in a quiet nook, not necessarily in a secluded spot, but often close by the wayside, where the very audacity of the selection proves a source of safety.

A scrappy little nest it is, dry grass and roots and such-like litter thrown carelessly together, and lined with hair or more rarely a few feathers; artless, yet possessing a rustic beauty if wanting that elaborate finish of more painstaking nest-builders. The five or six eggs are as unassuming as the nest that holds them, grayish-white freckled with brown, and perhaps with here and there a scratch of darker hue. The bird is an early breeder, making its nest in April, although we have remarked that in Scotland it is a little later in its operations. This pretty Wagtail still further endears itself to us by its attachment to a certain breeding-place, returning in many cases year by year to build its nest in one particular spot. Unfortunately the Gray Wagtail can claim but low rank as a songster. None of our British Wagtails are singers of much merit, and all confine their melody to fitful and short snatches of rambling song, almost invariably uttered as the bird hovers and flutters in the air. The Gray Wagtail's charm rests in its pretty dress, its graceful actions, and to some extent in its loneliness, for there are few other small birds to arrest attention in the haunts it loves. It can claim our almost undivided admiration on the streams of the uplands from one extreme corner of Great Britain to the other. Certainly of few other birds can we say so much; although such an extended distribution is entirely

due to physical conditions—to the presence of mountains and uplands throughout that area.

The Dipper and the Gray Wagtail are the two characteristic birds of the upland brook and river side, rarely if ever seen anywhere else under normal



The Common Sandpiper.

circumstances, and, so far as our observations go, their happy lives are passed in much the same manner on the streams of both northern and southern shires, with the one exceptional movement to more sheltered areas on the part of the latter species in boreal localities. There is, however, another charming bird of the mountain streams which we cannot pass unnoticed, and that is the Common Sandpiper, or "Summer Snipe" as it is called in many districts.

But this species is by no means exclusively confined to the banks and waters of the upland streams; neither is it a permanent dweller in such localities. It is a frequenter of our rivers and streams during summer only, the season of their greatest attractiveness; speeding south to Africa like the Swallows when autumn creeps over the uplands. From Cornwall to the Shetlands, wherever there are mountain streams and upland pools we may meet with the Common Sandpiper between the months of May and September, but it is in the northern shires that the bird becomes most abundant, say from the Peak district onwards. Our experience of this engaging bird has been a lifelong one. Each succeeding spring we used to note its arrival in the old accustomed haunts on the banks of the Yorkshire streams and moorland pools towards the end of April. It appears upon our Devonshire and Cornish waters nearly a fortnight earlier, yet farther north, in the Highlands, it is seldom seen before the first or second week in May. The return journey varies in a corresponding manner, August and September marking its southern departure from the north; but in the south it lingers into October, November, and even December—not, however, by the stream side, but on the sea-shore. The persistency with which this Sandpiper returns each year to certain localities, and its habit of nesting in the same spot summer

after summer after a prolonged absence of seven months and a double journey of thousands of miles, are not the least attractive portions of its economy. For more summers than we can now recall, the streams and reservoirs at Hollow Meadows and Red Mires—within an hour or so's walk of Sheffield—were visited by many pairs of Summer Snipes, and their nests came under our observation with unfailing certainty. Two pairs of these birds were remarkably conservative in their nesting grounds, and used to return each summer to one spot of ground no larger than our writing-table, and there make their nests—one pair on the steep banks of a conduit between the reservoirs, the other on a few square yards of gravelly ground beside Wyming brook. We could always depend upon finding the nests of other pairs within a hundred yards of the stream banks on certain lengths of the water. We would hazard the conjecture that descendants of these birds continue to do so to the present day. During summer the Sandpiper was quite as familiar an object along these northern streams as the Dipper or the Gray Wagtail. Many a time have we seen the three species by the water-side together. Farther north, in Scotland, this Sandpiper becomes even more numerous, and in some parts of the Highlands is, or used to be, most unaccountably mixed up with the Dipper. The latter term included both species, the

keepers not distinguishing between them. We have heard the Sandpiper called a "Water-crow" in various parts of Skye especially. Few birds evince more anxiety at the nest, or when their helpless chicks are just abroad. For the newly-laid eggs we cannot recall an instance of this species displaying any concern; but when those eggs are deeply incubated or the young hatched out the behaviour of the female bird especially becomes very different. She will feign a broken wing or lameness, or endeavour to draw all attention upon herself by running just out of reach of any observer foolish enough to give pursuit. But once the young birds have concealed themselves the parent flies away, or circles about in the air, generally being joined by her mate. The four handsome pear-shaped eggs—pale buff, splashed and spotted with rich brown and gray—in their scanty nest, usually made beneath the shelter of a heath tuft or bunch of grass, require no special protection from the parent, for they harmonize so closely in tint with surrounding objects that discovery is difficult in the extreme, even when we know the exact location of their resting-place. Curiously enough the Sandpiper is not aquatic in its habits. It never swims nor dives save when wounded, but obtains its food whilst tripping round the muddy and sandy portions of the water's edge. In early summer, just after their arrival, the cock

birds may frequently be seen running along the tops of walls and fences with outspread drooping wings, or even soaring into the air uttering a shrill note, both actions being connected with courtship and love. The usual note of the Common Sandpiper is a shrill *wcet* uttered several times in succession, and heard most frequently as the bird rises startled from the bank and pursues its way across the water, often so low as to strike the surface with its wings.

There are many other birds, of course, that may be met with by upland streams, but the foregoing are the characteristic species, each in every way adapted to a life in, or by, the side of their turbulent waters. These other species found by the mountain or upland waters may be met with in even greater plenty elsewhere, so that a mere passing mention of them will suffice in the present chapter. The Heron, of course, is a visitor to the side of the upland stream; often flushed from the quiet reaches where the trout and grayling hide under the moss-grown stones. He is, however, just as much at home by the margin of lowland pools and streams, or about the rocky coasts and estuaries, and no exclusive dweller or sojourner in one locality more than another. Then the Mallard, especially in the Highlands, shows a strong preference for these upland burns, especially during the breeding season;

and we can recall instances of flushing the duck of this species with a numerous progeny from these mountain torrents. On one occasion we were tramping the moorlands in Skye in company with a game-keeper friend and a fine retriever. Suddenly we came upon a brood of young Wild Ducks and their mother. The young birds scattered in all directions, and hid themselves in holes and corners by the stream and amongst the tufts of rushes. The old bird, however, would not leave her brood notwithstanding the onslaught of the barking dog. With bill wide open and wings expanded she refused to be driven from the spot; so that, to save her life we were obliged to secure the dog and to leave the spot, where doubtless she soon gathered her brood around her again. Then the Redshank, one of the prettiest and most graceful of our indigenous wading birds, is a by no means unfrequent visitor to the sandy reaches about the eddies in the Highland burns. This we have repeatedly remarked to be the case in Cromartyshire, in the streams that flow into Loch Carron, and in the vicinity of Strome Ferry. But more of all these interesting birds anon. Lower down the hillsides, where the course of the upland streams is marked by a fringe of alder-trees, we have avine visitors in some variety, especially during the autumn and winter months. These trees are a favourite resort of Redpoles, Siskins, and almost all

the British species of Titmice between October and March. The Kingfisher again should claim passing notice in the bird-life of the upland stream. He, like the Heron, may be often met with during a ramble along the banks of these romantic waterways, but inasmuch as he is also a dweller on all descriptions of water from the hills to the flat country, we cannot fairly claim him as a special feature in the bird-life of an upland stream. There are, for instance, many pairs of Kingfishers that habitually nest in the steep banks of the Derwent in its higher reaches among the hills and dales of the Peak; there are others on many of the hill brooks in the vicinity of Sheffield; whilst we have repeatedly seen this gem-like bird on many a Scottish burn. Lastly, we might mention that the cries of Plovers, Curlews, Grouse, and Greenshanks, the song of Ring-ouzel, Twite, and Titlark, the bleating of the Snipe, and the gag of Wild Geese may often be heard mingling with the babble of these upland torrents, and the birds themselves met with on their banks, or within a short distance of their waters; but all these species more correctly belong to other localities, and must be dealt with elsewhere.

CHAPTER II.

ON MOORLANDS AND ROUGHS.¹

IN a previous volume, dealing with bird-life in a southern county, we expressed disappointment not only with the miniature moorlands of Devonshire, but with their lack of feathered inhabitants. Tame these lands must ever seem by comparison with the typical moors, and from an ornithological point of view wanting in interest to persons familiar with the grand expanse of heath and mountain waste in the north. For many years we lived within little more than an hour's walk of the Yorkshire and Derbyshire moors. At one period we used to visit them several times a week in quest of ornithological information, varying our experience by occasional much more extended excursions over them. We know them in the heat and the brightness of spring and summer; in the autumn, when their rolling expanse is aflame with a glow of purple and brazen bloom from the heath and gorse; as well as in winter, when the wind sweeps across them in resistless fury, and the snow covers them with a dazzling pall, level-

¹ "Rough", a local name for wild, uncultivated, rocky lands on the borders of the moors, clothed with coarse herbage, bramble, heath, and a variety of *Vacciniaceæ*, sphagnum, and other plants.

ling the hollows and drifting into fantastic wreaths. We retain vivid memories (supplemented with copious notes) of the constantly changing aspects of bird-life upon them. Farther afield we are well familiar with some of the wildest and grandest of the Highland heaths. Monotonous as these vast wastes may seem, relieved by little or no sylvan variety, a detailed examination will not fail to reveal that the impression gained by a casual scrutiny is an erroneous one. The configuration of their surface is subject to as much diversity as more pastoral or arboreal country. We find lofty eminences, spacious valleys, rolling billowy tracts, extensive plains, hills, and dales—all for the most part devoid of timber, yet presenting considerable variety in the vegetation according to the nature of the soil. The heather (of various kinds) is of course the one predominating shrub, but mingled amongst it are more or less extensive tracts of bilberry and kindred plants, of bracken, bramble, briar, and a host of others, the botanical names of which we need not stay here to specify. This is upon the drier ground; where marshy conditions prevail we find grasses of various kinds, rushes, large patches of sphagnum, variegated here and there with sundew and clumps of bell-heather, the latter easily identified by its large pale-pink blooms. Here and there the monotony of the moors is relieved by lofty crags and ridges of mill-

stone grit, the slopes below them studded with boulders of varying size right down to the stream. In some parts the soil is deep and peaty, almost black; in others it is scanty, and the bed-rocks peep through the stone-strewn ground, where the sturdy ling and wire-like bilberry have a hard struggle to maintain themselves. Roughly speaking, each description of moorland ground has its own peculiar birds. Some species there are, it is true, that distribute themselves more or less universally throughout the moorlands, but others are confined to well-defined limits. Then, again, these moors are inhabited by two very distinct avifaunæ—a limited one which is practically sedentary, and a more extensive one composed entirely of migratory species. As might naturally be expected, the birds that can exist upon these bleak storm-swept moorlands during winter are extremely few; possibly we might reduce the number to a single species, and even this is occasionally partially driven from its heathy haunts by the inclemency of the northern winter. Of the avine visitors that flock to the moors each recurring spring-time, and just as surely depart in autumn, there are close upon thirty species—a goodly list, and which is slightly increased by a few passing migrants. From this it will be seen that these uplands, with their universal reputation for barrenness, are by no means devoid of bird-life, and that in summer espe-

cially they abound with interest to the ornithologist. The lover of birds, however, will in many, if not in most cases, find that his quest for knowledge is hampered by not a few restrictions. Almost everywhere these moors are jealously guarded from the intrusion of strangers, however harmless they may



The Red Grouse.

be. Keepers are ever on the look-out to warn intruders off the sacred breeding grounds of the Red Grouse; the hillsides and plains are systematically swept by the keeper's telescope in quest of trespassers; innumerable notice-boards threaten the innocent wayfarer with all the rigours of the law should he chance to wander from the scarcely discernible footpath or the public highway. To ornithologize in comfort one must make our peace—

—usually purchasable at a certain price— with the custodians of the moors, and then all is plain sailing. There is much to be said both for and against such restrictions. On the one hand the Grouse represent vast sums of money to the owners of the moors, an income in not a few cases to many an otherwise impoverished landlord; considerable expense is incurred in maintaining a staff of keepers and watchers, and there is no small outlay in many other directions. On the other hand, there are those that argue that the public have a legitimate right to wander at will over these noble expanses of heather, that they should be free to all, and that no vested rights should be allowed in such an utterly wild bird as the Red Grouse. Unfortunately there can be little doubt that if the bird were not strictly preserved, and its shooting an expensive luxury, there would soon be no Red Grouse left. Of the two evils we would prefer the former after all, for every naturalist worthy of the name would deeply deplore the extermination of such an interesting species, found as it is in no other part of the world except on the British moorlands. Let us keep the species strong and vigorous and abundant, by whatever means, rather than see it meet the same wretched fate as the Great Auk and scores of other interesting avine forms that have vanished from this world for ever as a direct result of man's crass stupidity and wanton slaughter!

Practically there is but one species confined to the moors all the year round, absolutely indigenous to them, and found in no other localities. This is the famous Red Grouse, a species familiar by name if not by appearance to most people. The abundance of this bird in the game-dealers' shops from the 12th of August onwards to the middle of December renders it familiar enough with the multitude; but comparatively few people know the bird in life amidst its wild and breezy upland haunts. Not that it is a species that takes much finding, or that secretes itself in the remoter parts of its wild home; it is obtrusive enough, by no means shy, and may generally be seen in plenty from the highways. Very frequently half a dozen or more Grouse may be seen sitting upon the top of the rough stone walls that separate the heath from the road; tame enough, too, to allow an observer to approach them within a few paces before they take wing with noisy cries and hide themselves among the brown heath. Or again, the wanderer over the moors who keeps a sharp look-out may detect plenty of Grouse among the heather, craning their necks above the vegetation, ready to fly off to safer quarters if too deeply alarmed. Then, in spring especially, their very peculiar and unmistakable notes never fail to arrest the attention; and not unfrequently the birds will startle one as they rise, calling loudly, from the herbage at our very feet by

the wayside. Or very often the big brown birds may be approached very closely during a fog. In these districts fogs frequently come on with absolutely startling rapidity. Not the yellow soup-like abominations that are so familiar in London and other big cities, but dense shrouds of white vapour that chill one to the very marrow, obscure every landmark, and render the moors practically impassable for the time being. Often have we been so caught in these moorland fogs and been compelled to wait amongst the heath until they cleared. On other occasions they have overtaken us upon the highways across the moors, and then we have remarked the apparent stupidity of the Grouse amongst the mist. We have approached the birds as they sat bewildered in the stunted thorn and birch trees by the wayside, or upon the walls, and often remarked how loth they were to take wing, allowing us to come within a few feet of them without showing the slightest concern. The poacher would make the most of such splendid opportunities, but his fraternity are scarce upon the moors, and the keepers are not much bothered by such gentry. He has perhaps the most to fear from the wandering gypsy—that curious mixture of itinerant tinker, hawker, horse-dealer, and romany, that scours the country-side nomad-like, with a retinue of scraggy horses, dirty children, tilted wagon and tent. This man takes every Grouse egg that he can with

impunity, and every bird that comes in his way. We well remember how one of the most disastrous moorland fires in South Yorkshire was attributed to these gypsies. Some of their number, we believe, had been prosecuted for poaching or egg-stealing, and out of revenge the moors were fired. For days the heather burned in all directions in spite of every effort to subdue it, and vast numbers of Grouse were destroyed in the flames, and their ancient strongholds reduced to a blackened waste. The fire, which we could see from our residence at Heeley, was a most impressive sight by night, and must have cost the owner of the moors a large sum even in the mechanical labour of arresting its progress, to say nothing of the destruction of the long heather which takes years to replace and become suitable cover for Grouse. As some readers may be aware, the heather is systematically fired, usually in spring, so that a supply of tender shoots from the resprouting ling may be furnished as food for the Grouse. Great judgment and care are required, or vast tracts of cover may be ruined for years. We have known farmers so destroy many acres of valuable Grouse cover purely to secure pasturage for sheep. The Grouse loves to frequent this long, well-matured ling; it affords a splendid shelter during winter, whilst the buds and tender tops form favourite food. Next to the Ptarmigan, the Red Grouse is by far the wildest

of British game birds, and the least dependent upon the protection of man. Owing, however, to the ever-increasing value of the bird for sporting purposes (a sovereign per brace shot being considered by no means an exorbitant price), the preservation and propagation of Red Grouse now receive more care and consideration than ever. Grouse breeding is becoming as important in one direction as Pheasant and Partridge breeding is in another. The birds are not kept up to their present numbers, notwithstanding the inroads of the sportsman and the periodical epidemics of disease, without the exercise of great care and skill, not only in the preservation of a necessary amount of breeding stock, but by the improvement of the moors by surface-draining, burning, and so on.

The Red Grouse is much more of a ground bird than the Capercailzie or the Black Grouse, although it may be seen perched in trees from time to time. This is all the more interesting because its near ally, the Willow Grouse—the *Lagopus albus* of ornithologists—is greatly attached to trees, roosting in them, and is chiefly met with amongst birch or willow thickets. Another interesting fact concerning the Red Grouse is its strictly monogamous habits, and, as is almost universally the rule in such cases, the male resembles the female in colour much more closely than in Grouse where polygamous instincts prevail. Marvellously protective in coloration is

the plumage of the Red Grouse in both sexes and at all times of the year. The birds are seen only with the greatest difficulty as they skulk amongst the heath and other moorland vegetation; the sitting bird upon her nest is one of the most impressive object-lessons in protective coloration that we have, whilst the eggs and chicks themselves are tinted in colours that harmonize most beautifully with the objects around them. Very early in spring the crow of the cock Grouse proclaims the approaching breeding season. This, however, varies to some extent, the birds on the highest and most exposed moors being later to nest than those dwelling on more sheltered heaths. Late snow-storms often destroy many nests, even on the English moors; and we have seen nests in April in South Yorkshire buried in snow and the eggs frozen. Farther north, on the Scottish moors, the young birds sometimes suffer considerably from late snow-storms, whilst persistent wet is almost as fatal to them. The nest is scanty enough, and always made upon the ground amongst the ling and heather, being merely a hollow scratched out by the hen bird and lined with a little vegetable refuse, such as bents, withered sprays of heath, and fern fronds. Many nests are made quite close to the highways and footpaths. We have known nests within half a dozen yards of the turnpike road along

which traffic of some kind was continually passing. The number of eggs varies a good deal according to the season, age of the hen bird, and situation of the moor. Few of our British eggs are handsomer, being cream-white in ground colour, thickly marked with brown of varying shades from red and crimson to nearly black. The colour, however, is by no means a "fast" one, and may be easily washed off, so that they require to be taken as soon as laid, and handled and kept for some weeks at least with care, if their beauty is to be preserved in the cabinet. Although the Red Grouse is not polygamous, the cock bird does not assist in the duties of incubation, still he assists the hen in bringing up the brood. During autumn and winter the life of the Red Grouse is by no means a happy one, that is to say in some ways. From the 12th of August to the 10th of December he has to run the gauntlet of the gunner; and now that the deadly practice of "driving" is almost universally resorted to, on the Yorkshire moors at all events, even the wary old birds are shot down practically at will. Then when the shooters are done with him the Grouse has all the hardships of a northern winter to go through. Snow-storms of unusual severity often drive Red Grouse from the moors to the lower and more sheltered valleys, even to the nearest farmyards, where we have known them search for food with the poultry.

During some winters the Grouse have been so hard pressed as to quit the heather in numbers, and we have then known them actually to be taken in the streets of Sheffield! With a moderate winter, however, the birds manage fairly well, snow-storms being always the most fatal to them. Upon the return of spring, given an absence from disease, the birds soon get into prime condition again; most of the weakly ones have been weeded out, and the surviving stock of vigorous birds are ready to propagate their kind.

But we must now leave the Red Grouse crowing so lustily to each other amongst the heather, and devote a portion of our space to the many other feathered dwellers upon the moors and heaths. Perhaps it may be best to clear off the few *Passerine* species first. These are all birds of migratory habits, although some are greater travellers than others. Beginning with those that journey the shortest distance, we may notice first the Meadow Pipit. Although by no means an exclusively moorland bird, the Meadow Pipit is almost universally distributed over these wastes between spring and autumn, wherever the ground is wet. Almost to a bird these Pipits leave the South Yorkshire moors during September and October. We used sometimes to meet with odd birds on the rough grounds below the moors during winter, but, speaking generally, the migrational movement is

pretty complete. Meadow Pipits always give us the impression of being somewhat sad little birds, taking life very seriously, as even human dwellers on these moorland solitudes are apt to do. We may illustrate this by a comparison of the cheery Wren with these Pipits, and then the reader will quite understand our meaning. The melancholy complaining note of the Meadow Pipit is one of the most characteristic small-bird notes on the moors between April and October. Every marshy spot is almost certain to contain a pair or more of them, and their nests are the favourite nursery of the Cuckoo. The song of this species is a pleasing one, uttered as the bird descends from a short flight into the air. All through the genial days of a moorland spring the birds may be watched rising and falling, shuttlecock-like, from the heath and cotton-grass. Then, when the nesting season is past, the young and old join into flocks of varying size and betake themselves to the lower ground, appearing in autumn in large numbers in turnip fields and potato patches. The breeding season of this Pipit varies considerably according to latitude. On the southern uplands, in Devonshire for instance, the nest is made in April; in the Highlands it is from one to two months later. The migrational movements are about the same date in Yorkshire as they are in Devonshire; and the journey extends in both

localities from the high inland moors down to the marshy meadows and saltings of the coast. We have found nests of this Pipit in the Rivelin Valley built absolutely in shallow pools of stagnant water, the moss of the foundation being saturated with moisture. These nests contained the usual complement of eggs and the birds were sitting upon them.

Another characteristic bird of the moors, and one with almost exactly the same migrational movements as the Meadow Pipit, is the Twite. This unassuming species is the one Finch of the wide undulating expanses of heather. It may be readily identified by the merest novice. Like a Linnet in general appearance, but wanting the exquisite carmine flush that adorns the more homely bird, as well as the ruby-coloured patch on the crown, its distinction is its bright-yellow bill. The Twite, most appropriately called in many districts the "Heather Lintie", is but a bird of summer amongst the heather, retiring in autumn to the lowland fields, where we shall meet with it again amidst much more pastoral surroundings. Usually one meets with it sitting on some tall twig of ling, uttering its monotonous note, which the imagination of ornithologists has syllabled as *twa-ite*; hence the bird's trivial name. It will thus sit and call monotonously until our nearer approach disturbs it, and it rises and flits in a drooping manner just above the heather to another perching-place

a little farther on, to repeat its call and again to await our advance, when once more it rises to drop upon some twig and renew its plaint. The Twite gains



The Twite.

an additional interest when we remember how rare a bird it is in the south; we know it as a by no means common winter visitor in Devonshire, notwithstanding the fact that there are many localities where one might expect to find it in summer; whilst even in treeless Cornwall—a wild rugged land enough

—the bird is so rare that Rodd knew of but a single example, and that was obtained near Penzance. Then again the bird is confined during the breeding season exclusively to the British moors, with the exception of the coast districts of Norway. From the midlands of England northwards to the Shetlands, the Twite has its only summer residence with us. We fear that we never appreciated the Twite sufficiently when we lived so close to its haunts and considered him too common for any special notice or admiration. It is only after we have dwelt in districts where he is unknown that we have begun to regard him with exceptional attention; and now, profiting by past experience, we never see him flitting about the heather without giving a thought to his localness. After all, he is a most interesting little bird; and his pretty nest, cunningly concealed amongst the tangled heath, possesses a rustic beauty that well rewards one's patience for the often toilsome search. It is a cup-shaped structure, made externally of grass bents, twigs, and moss, the inside warmly lined with down from willow catkin and cotton-grass, wool from the sheep that graze upon the moors, and feathers. The five or six eggs are very similar to those of the Linnet, pale bluish-green spotted with reddish-brown and gray. The Twite gets back to the moors in April, and its domestic duties, accompanied by its weak little song, are per-

formed in April and May. In the Highlands the birds nest later than in Yorkshire, but not much, for we have seen flocks of young birds strong on the wing in Scotland in June. The moorlands are finally deserted for the winter during September and October—a vertical migration as interesting, if not so extensive, as the Swallows' flight to Africa. A passing glance should also be given at the Wheatear. This bird is by no means confined to the moors, yet it is very characteristic of many parts of them, especially in the far north. In Yorkshire it is by no means uncommon about the old quarries and pits on the moors; farther north it becomes more numerous, although scarcely attached to the heather in the same way as the Twite. Like its congeners it is a dweller among the stones, a trait which has not escaped the notice of the Highland peasants, who call the Wheatear a "Clacharan", a "Stone-clatter", or a "Little Mason". This may possibly be because his note resembles the clicking noise made by two pebbles struck together, as well as from his propensity for the rocks and stones. On the Scottish moorlands we have found this bird specially common about the peat-pits and stacks, and in these latter we have often found its nest—a somewhat untidy structure made of dry grass and sometimes lined with hair and feathers, usually containing five or six pale-blue eggs. The migrations of the Wheatear must be performed very

quickly. In Devonshire we note its arrival towards the end of March, and yet by the first half-dozen days of April it has penetrated even as far as the Orkneys and the Hebrides! Passing mention should here also be made of the Sky-lark and the Stonechat—neither bird strictly a moorland one, yet both found in the locality. The Stonechat, we remember, used to be, and may be now, fairly common on the rough broken ground, not exactly true moorland, in the valley of the Rivelin at Hollow Meadows, half a dozen miles west of Sheffield.

Our last moorland Passere is the Ring-ouzel, a prime favourite with us, and a species with which we have been exceptionally familiar from boyhood's days. This bird always impressed us to a remarkable degree, possibly because it is such a bold and assertive one. With a lifelong experience of this handsome Ouzel—he is known to the country people in South Yorkshire and North Derbyshire as the "Tor Ouzel", *i.e.* Mountain Ouzel—we should unhesitatingly state that it is commonest in the district of the Peak. He breeds upon the Cornish uplands, and in Devonshire upon Dartmoor, as we have repeatedly remarked; then we find him on the uplands of Somerset, and increasingly common over the Welsh mountains northwards to the vast solitudes of the Pennine chain. Farther north in Scotland he is found, but our experience is that the bird is local,

and common nowhere in the latter country. The moors west of Sheffield, for some reason or another, are specially sought by the Ring-ouzel; and nowhere in that district is the bird more abundant than



The Ring-ouzel.

in the Rivelin Valley and between Stanage Edge and Derwent Edge, and on the Bamford and Bradfield moors. South of Sheffield we may meet with this Ouzel in fair numbers about Dore, Owlter Bar, and westwards over the Hathersage uplands.

As most readers may know, the Ring-ouzel is a

spring migrant to the British Islands, and the only migratory Thrush that comes to that area to rear its young. Like some other northern migrants, its passage is by no means a slow one. It arrives in South Devon sometimes as early as the end of March, more usually the beginning of April, and what is rather remarkable, this date is practically coincident with its arrival in South Yorkshire. For many years we paid special attention to the migrational movements of this bird, and should give its date of arrival as the first week in April in that district. This seems to indicate beyond question that Ring-ouzels migrate direct to their breeding areas after landing on our southern coasts. They journey in flocks, often of considerable size, and several seasons we were fortunate enough to observe them in companies numbering several hundreds of birds, on the very day of their appearance in the Rivelin Valley. These flocks soon disband; in a day or so they break up, and the birds scatter themselves in pairs over all the suitable breeding-places. The cock bird is not only a handsome one, but very distinctively marked, easily recognized as far as the eye can reach by his pure white gorget; otherwise he very closely resembles the Blackbird in general appearance. The resemblance does not end here, though, and in its habits and movements generally, as well as in the nest and eggs, we have an equal similarity.

Whilst in flocks the birds are wary and wild enough, but when breeding they become bold and venturesome to an astonishing degree—in these respects exactly resembling their ally, the Missel-thrush. We remark this Ouzel's habit of elevating the tail after alighting, just as the Blackbird does; we also cannot fail to notice its exceeding noisiness just prior to seeking a roosting-place; neither shall we fail to observe its very Blackbird-like way of feeding, ever alert and watchful. Soon after their arrival, but never, so far as we have observed, before the flocks or travelling parties have disbanded, the cock birds regain their vernal music characteristic of the love season. With the resumption of song the bird loses a good deal of its wariness, a fact we may notice in not a few other species. He will sit and warble on the big boulders of granite or millstone grit, or when perched on the top of a rough wall or some bending spray of ling or gorse, just as sweetly as when sitting in the higher branches of some birch or mountain-ash. His music is not of that rich excellence that marks the song of the Blackbird, nor has it the variety so characteristic of the Thrush; yet there is a wild beauty in harmony with the surrounding scene that makes ample recompense for its failings in other ways. Unfortunately the bird continually spoils his music by introducing a series of inharmonious harsh notes. Like that of

the Blackbird the song is all too short, and even lacks the redeeming feature of continuous flute-like melody, short as it is, that saves the Blackbird's from being classed as commonplace. To our mind, the Ring-ouzel always increased in interest during the breeding season. Many scores of nests of this bird have we kept under observation, not a few of them from the time the first twig was laid until the four or five nestlings left them for ever. The birds are much attached to certain spots, and return to nest in them with wonderful pertinacity. Then, again, how often have we remarked their absurd attachment to a nest in the course of building. We have known Ring-ouzels show more concern for a handful of nest material—by no means a finished nest—than scores of other species display over the absolute loss of a nest and eggs. The Ring-ouzel is the Stormcock of the moor—ready to do battle with much noisy clamour the moment its nest is approached. This nest is not always made amongst the ling and heather; numbers are placed in low bushes on the outskirts of the moor, and on the banks of the streams and by the sides of the roughly-formed cart-tracks, especially where the banks are steep. In early autumn Ring-ouzels again become more or less social and gregarious; they then begin to wander off the moors to the nearest fruit gardens, and so gradually work south in parties and flocks.

Gilbert White, whose pleasure at his discovery of the migrating Ring-ouzel across the Sussex Downs may easily be surmised by the reader of his ever-charming letters, tells us that he used to see these Thrushes—more than a hundred years ago—in little parties about Michaelmas, and again in April, and remarked their tameness. The birds are not so common in that area now; times have changed and many species are gone, for in the same letter (No. VII) he tells us that there are Bustards on the wide downs near Brighthelmstone! Perhaps we might here take the opportunity of mentioning that flocks of Snow Buntings sometimes appear on the Highland moors, but our own experience of this charming arctic stranger relates to more southern shires, and where we hope to meet with it again later on in the present work.

The birds of prey that haunt the moors are all more or less migratory in their habits, as might naturally be expected, because the species upon which they depend for food are non-resident too. The Red Grouse, it is true, is sedentary, but no raptorial bird frequents the moors that preys exclusively upon that species, and it chiefly suffers during the breeding season when the young chicks and poults are about. The Merlin is the most deadly enemy of these. It is a spring migrant to the moors, and is not known to breed with certainty

south of Wales. It may just possibly do so on Exmoor, but certainly does not on Dartmoor; in



The Merlin.

fact, to Devonshire it must be regarded as a rare visitor in autumn and winter. We have always

found the Merlin to be fairly common throughout the moors of North Derbyshire and South Yorkshire. It is ruthlessly persecuted by the gamekeeper, and its numbers consequently have declined almost to the vanishing point in not a few districts. We never saw much of the Merlin on the moors between Castleton and Sheffield before April. There are many favourite haunts on these moors in which the bird may be found breeding every summer; and curiously enough, although pair after pair may be destroyed, others come and settle in the district the following season. We are glad to be able to record that the bird has not been so severely hunted down in one or two places, and consequently its numbers seem to be on the increase. The spirited dash of this pretty little Falcon is not exceeded by that of the Peregrine itself. Times without number have we witnessed its fatal chase of the smaller birds of the moor — Twites, Ring-ouzels, Meadow Pipits, and less frequently of Plovers, Grouse, and occasionally Cuckoos. In the higher valley of the Rivelin, we once watched an exciting chase by this bird of a Common Sandpiper, which had been flushed from the heath-clad bank of one of the reservoirs at Hollow Meadows. Pursuer and pursued strove their utmost, the Sandpiper doubling, rising, and turning from side to side, and the relentless Merlin following closely every movement as though each

bird were guided simultaneously by a common impulse. The chase was continued over the large reservoir, and we had a fine uninterrupted view of each bird's powers of wing. The Sandpiper, after the water was crossed, gained a brief respite by hiding amongst the rushes on the opposite bank; but the Falcon, undeterred, hovered above the spot and once more flushed its quarry. The poor little Sandpiper wheeled rapidly round and then flew off across a rough bit of rock and heath-strewn ground, but its strength was exhausted; the Merlin's superior powers of flight and endurance asserted themselves, and the Sandpiper, with a piteous *wcet wcet* of terror, was struck down. But the various birds of the moorlands are by no means the Merlin's only food. Like most, if not all the smaller Falcons, it subsists largely on certain insects. Whether the bird's good offices in this direction counterbalance its tax upon young Grouse we need not stay here to enquire. Perhaps in this case they do not, for the insects caught can do little or no damage in such localities; but on the other hand, we must remember that the Falcon assists in keeping up the Grouse to a strong and vigorous standard by killing off—if amongst others—a certain percentage of weakly and unfit birds. There is some evidence to show that Grouse disease appears in regular cycles on most moors—say every seven years—and competent observers

have attributed it to old birds spreading the contagion. Now, had the larger Raptores not been so ruthlessly exterminated in these localities, surely it is only reasonable to suppose that they would have thinned out many of these birds, not perhaps preventing an epidemic, but thus assisting in rendering it of a milder character than otherwise prevails. Depend upon it, man seldom or never meddles with the delicately-adjusted balance of nature without unfortunate results in some direction. But to return to the Merlin and its economy. Like the Sparrow-hawk and many other raptorial birds, this pretty species selects some spot or spots in its haunts to which it conveys its captures to devour them in peace. The nest is almost invariably made at no great distance from these "dining-tables" or "larders", where the bare and often rock-strewn ground is sprinkled with feathers, bones, pellets, wing-cases and wings of insects, the remains of the Merlin's food. These haunts, as previously remarked, are tenanted yearly with wonderful regularity, and the nest each season is made in much the same locality as in previous years. This nest is of the simplest, and always, so far as we know, upon the ground. "Nests" have been recorded in Scotland in the old nest of some other bird in a tree;¹ whilst in some foreign countries a ledge of a cliff is said to be selected. Our

¹Conf. *Zoologist*, 1878, p. 29.

experience is that it is invariably upon the ground, and generally on a rather bare spot amongst the heather or ling, often on an eminence of some kind. Here in a slight hollow, with no lining as likely as not, the four or five pretty red eggs of the Merlin are laid. They are absolutely indistinguishable from those of the much commoner Kestrel, but their terrestrial resting-place should prevent the novice confusing them *in situ*. In autumn the Merlins quit the moors. It is difficult to say how far these birds indigenous to our own moorlands migrate; there is evidence to suggest that the movement is limited to a trip to the lowlands, extending even to the coast. On the other hand, the bird is certainly a species with a strongly marked and regular passage in most parts of its extra British range. A word as to the plumage of this interesting Falcon. The cock bird, with his slate-gray upper parts, rufous nape, more or less distinctly barred tail, dark wings, and rufous under parts streaked with dark brown, is possibly familiar to most readers. The hen bird, so far as we can determine, is not only slightly bigger than her mate, but much less handsome in colour. She is dark rufous-brown on the upper parts, each feather with a paler margin, the buff nape patch is paler and much less distinctly defined, the tail is browner, and the under parts are dirty white streaked with brown. This plumage closely resembles that

of the young male. During the past quarter of a century we have examined a great many skins of the Merlin, and almost without exception the sexual differences in colour were as described above. There are authorities, however, that maintain that the adult plumage of the female of this Falcon is very similar to that of the male. In this we are disposed to concur, for we have examined an adult female obtained by Dr. Scully in Gilgit (and his sexing of specimens is most reliable, as every naturalist who has had the pleasure of seeing them will agree, the sexual organs being in most cases sketched on the labels attached to the skins), in which the sexual differences of colour were most trifling. It is said that the females are shot off in this country before they can obtain their fully adult dress. In fairness, however, we must state that there is always the possibility of very old females assuming the male plumage, and their apparent rarity may be due to this fact.

Unfortunately the other moorland birds of prey are now rare almost to the verge of extinction; indeed, we regret to say the Merlin itself in not a few localities is fast approaching the same condition. The species that we shall allude to here is the Hen Harrier. This bird, like nearly all the other birds of the moors, is a migratory one, although there is some evidence to suggest that in our islands the movement is to some extent confined to a journey

to the lowlands and the southern counties. Formerly this Harrier was a fairly familiar bird on the moors of the south-western counties, where, however, its local names of "Blue Hawk" and "Furze Kite", indicative of old-time abundance, are nearly all that is left to us. We may remark in connection with this bird that a century ago the male and female (being so much unlike each other in plumage) were almost universally regarded as two distinct species, the latter known as the "Ring-tail" Hawk. Montagu cleared up the confusion by rearing a brood (doubtless from a Devonshire nest), and clearly demonstrated that the two supposed species were in reality the opposite sexes of one. About the South Yorkshire moors the Hen Harrier is practically unknown. Our limited experience of the bird was obtained on the moors of Skye, where we believe it still continues to nest. We have there seen it beating along the hillsides in a slow deliberate manner just above the tall ling, amongst which, in this island, it almost invariably makes its nest, placing it upon the ground. The four or five very pale-blue eggs are often destroyed by sheep; in fact, we were assured by an intelligent keeper in Skye that to this cause alone its diminishing numbers must be attributed. This Harrier reaches the moors in April or early May, and nests during the latter month and the first half of June. The cock is a beautiful bird,

with gray upper parts, darker on the throat and breast, the remainder of the under parts and the upper tail-coverts pure white, the primaries black. The hen is somewhat larger, dark-brown above, paler brown below, streaked with rufous-brown; the upper tail-coverts are, however, nearly white as in the male, which fact seems to suggest that they are a recognition mark (Conf. *Curiosities of Bird Life*, p. 249). The principal food of this Harrier consists of small animals, such as moles, mice; of frogs, lizards, and insects. The bird is also a great egg eater, robbing the nests of other moorland species. Although to some small extent it may prey upon birds, there is nothing in its habits to cause uneasiness to the owner of a Grouse moor; the bird's comparative harmlessness should secure for it greater immunity from gun, trap, and poison than it at present receives. There are one or two other Raptores we may just allude to here as dwellers on or fairly regular visitors to the moorlands. On the South Yorkshire moors the Kestrel is, we are glad to say, still a fairly common bird. It is fond of the outskirts of the moors, the rough grounds often crowned with ridges—ranges of low cliffs—of millstone grit, and in these it habitually nests. Then the Sparrow-hawk is a frequent visitor to the heath-clad wastes, but chiefly to the borderland and in localities where there are plantations of larch and fir,

in which the bird can find seclusion and a suitable nesting haunt. We have often remarked that these moorland Sparrow-hawks quit such areas during winter when small birds are absent. The Rough-legged Buzzard passes over many parts of the South Yorkshire moors on migration, especially in autumn. We have examined many fine examples of this bird, obtained on the Ashopton moors and about Derwent, chiefly birds of the year. The two species of British Eagles must also be mentioned as visitors to the Highland moors, although not exclusively indigenous to them. They are better described as mountain birds, and shall receive more detailed notice in our chapter devoted to the avine characteristics of such localities. (Conf. p. 81.) So also may we remark that the Raven will be dealt with in the same chapter. In Devonshire the Raven is still to be found on Dartmoor—one of the few inland localities that it frequents in England nowadays; but elsewhere on the English moors, so far as our experience goes, the bird is but a casual visitant.

The moorlands, being as they are the least changed districts in the British area, continue to be the resort of a large number of shy birds of the Plover and Sandpiper tribe during the breeding season. In some places no doubt the number of these birds is visibly diminishing, but in the wilder districts there still remain sufficient to constitute a decided

ornithological feature. One of the best known of these is the Lapwing. Fortunately we can still class the Lapwing as a common and even abundant bird in suitable districts, and now that its eggs are



The Lapwing.

protected by law in not a few spots we may hope to see a welcome increase. This beautiful Plover—one of the handsomest of the entire group—is by no means confined to the moors; it is a most adaptive species, and makes itself at home on arable land as readily as in wilder areas, still it is a prominent feature in not a few moorland scenes. Who does

not know the sad mewling cries and the restless uneven flight of this Plover, as it rises startled from the ground and commences its plaintive protest against our intrusion? Large numbers of Lapwings breed on the North Derbyshire and South Yorkshire moorlands, as well as on the rough grounds in their vicinity. We remember on one occasion—we have a note recording the fact—seeing a pair of Lapwings drop quietly to the ground just behind a stone wall that separated the moor from the highway. Creeping carefully up to the spot we looked through a chink in the wall and saw the two old birds with four chicks which could not have been hatched many hours. The scene was a charming one. The downy long-legged little creatures were running about picking here and there, their parents standing guard, alert and watchful, yet totally unconscious of prying human eyes not a dozen feet away from them. After watching this family party for some time we intentionally came into view, when the scene instantly became more interesting than it was before. Both old birds rose into the air and commenced wheeling and rolling about just above our head, the female by far the most venturesome of the two. Then she alighted a yard or so away, and with both her broad wings sweeping the ground dragged herself along for a few paces, striving her hardest to get us to follow. But we confined our

attention for a time to the chicks. All four of these artful youngsters at the first alarm scattered in as many different directions and hid themselves amongst the heath and grass almost with the rapidity of thought. Search as we might we could find but two, although we knew full well the others were concealed on a patch of ground no larger than an ordinary table. These two chicks we pocketed for specimens, but we were so touched by the way the old Lapwings followed us over the moor crying so plaintively that more humane feelings got the better of us, and we returned to the spot and placed both young birds where we had found them. Such little episodes as these go so far, we always think, in making ornithology so very attractive.

Another allied species breeding on most of our northern moors (and in some few instances in the south-western counties) is the Golden Plover. There are few more handsome birds of this order than the Golden Plover in wedding plumage. The upper parts—as they are all the year round—are thickly spotted with golden yellow on a dark-brown ground, the under surface is black as jet. We begin to see these Plovers back upon their moorland breeding-places in March; in April they become more numerous. Like most of the other birds found on these moors in summer they spend the winter upon the lowlands; in this case frequenting the flat coasts and

marshy meadows and saltings near the sea. They love the swampy portions of the moors—the spacious hollows between the hills, where the wet ground is clothed with a dense growth of rushes, cotton-grass, and sphagnum, amongst which the heath and ling in scattered patches mark the drier portions of the ground. At the first alarm the ever-watchful Plovers rise one after the other from all parts of the waste, and then begins a chorus of flute-like whistling cries, bird after bird taking up the chorus and alarming all other and less demonstrative species within hearing. Here and there a Golden Plover may be seen quietly standing upon the spongy ground. But it needs sharp eyes to see them, so closely does their spangled backs harmonize with the golden sphagnum and other vegetation. May is their breeding season, and their four large pear-shaped eggs are deposited in a scantily-lined hollow, often beneath the shade of a tuft of rushes or cotton-grass. These eggs are very much the same in general appearance as those of the Lapwing, but the tints are richer and brighter. Of the Sandpiper or Snipe tribe there are at least half a dozen more or less common species that visit the moors in spring to breed. Most of them are never met with on our south-western uplands at this season, although the Snipe, the Curlew, and the Dunlin are more cosmopolitan in their choice. The two former species are by far the commonest and

most widely dispersed on the Yorkshire moors, the remaining four or five are rarer, more local, or absent altogether. The peculiar drumming or bleating of the Snipe is one of the most characteristic of avine sounds upon these moors in spring; the quavering whistle (uttered always, or nearly so, whilst the bird is upon the ground), or the better known and somewhat mournful *curlee* (heard whilst the bird is careering to and fro in mid-air) of the Curlew is little, if any, less familiar. On the Hebridean moors, as well as on those of Orkney and Shetland, in the neighbourhood of the sea, the Whimbrel breeds sparingly. It is extremely local, but its habits and economy generally are very similar to those of the larger and better known Curlew. It differs, however, in its migrations, and is a summer visitor only to the British Islands, the greater number passing over them to still more northern breeding grounds in the Faroes, Iceland, and elsewhere. The Dunlin, notwithstanding the fact that it nests on some of our south-western uplands, finds its favourite breeding grounds on more northern moors up to the Orkneys and the Shetlands. Here again we have a species donning a jet-black belly for the nuptial season. It also displays a very decided preference for the swampy portions of the moors in which to perform its nesting duties. Then there are the two species of Totani, the one easily distinguished by its orange-

coloured legs (the Redshank), the other by its green legs and slightly upturned bill (the Greenshank). The latter, however, is much rarer than the former, and is only known to breed in the Highlands. The Redshank is fairly common during summer on our northern moors, but this species, like one or two others, is as much at home in more lowland haunts. You may meet with it during summer amongst scenery of a directly opposite character—the fens and broads of the eastern counties. Redshanks are alert and noisy birds, rising from their moorland haunts when alarmed, and keeping up their shrill double note with almost irritating persistency. As numbers often breed in the same district, the din from the frightened birds soon becomes general. The Greenshank visits its breeding grounds in April and May, coming from over the sea like all our strictly summer visitors, and departing in September and October with its young. This bird again is a noisy one when disturbed, and careers about the air in excitement until left in peace. All these birds breed upon the ground, lay four eggs possessing very similar characteristics in colour and shape, and their nests are found with some difficulty, owing to the protective tints of their eggs.

Of the Duck family the Mallard is by far the commonest and most widely dispersed. It loves the pools and streams and marshy spots upon the

moors, but as it breeds as generally in more lowland localities we can scarcely describe it as a typical moorland bird. The same remarks may be said to apply to the Teal, the Wigeon, and some few others. Then in the moorland fastnesses of the Hebrides, and in some parts of the mainland Highlands, the Gray-lag Goose still finds a haunt sufficiently seclusive, although we are assured that its numbers are decreasing. We know from personal experience that it breeds amongst the ling and heather on some of the Outer Hebrides, making a huge nest of branches and twigs, rushes, and other dry vegetation which is finally lined with down. The six to eight eggs are creamy-white in colour. This bird again is by no means a typical moorland one, for it formerly bred in the fens of East Anglia, and would do so to this day had it not been exterminated. Of the Gull tribe, perhaps the most characteristic moorland species are the Skuas, two species of which are summer migrants to certain of our wildest Highland moors. Where the moors extend down to the coast in various northern districts, such birds as Terns, Shelldrakes, and Eider Ducks may be found breeding upon them, but we can scarcely regard such species or such localities to come within the scope of the present chapter.

CHAPTER III.

ON MOUNTAIN AND LOCH.

MOUNTAIN bird-life, if scarce, is not without its charm. That of the loch, taking one season with another, is more varied and abundant; so that combining the two districts together—and they are in most cases inseparably associated—we shall have abundant material to interest us. The mountain bird-life of England—except, perhaps, in the extreme north—is comparatively limited, especially nowadays when persecution has worked such havoc amongst certain species. That of the loch is peculiarly of a Scottish type inasmuch as the present chapter is concerned. The bird-life of these two districts is essentially of a northern type, belonging, like the mountains and lochs themselves, to a wilder and more rugged scenery than any the southern shires can boast. Many of the avine forms belonging to these localities are strictly boreal or even arctic in their distribution, finding a suitable habitat by altitude rather than latitude; many of them are but winter visitors or abnormal wanderers to the south. In some cases these particular localities are the home of representative species that take the

place of more southern types, and afford us a fine series of ornithological comparisons of the deepest interest. The naturalist familiar with bird-life in the southern counties only, will, in investigating the avifauna of mountain and loch, enter upon an entirely novel series of avine phenomena.

From the moorlands to the mountains and lochs is in many localities a transition of an almost imperceptible character. In not a few cases the moors terminate in mountain summits beyond the borderland, where the two species of heather cease to climb, or the most sturdy and tenacious ling that clothes the hillsides for still another thousand feet or more. In a similar manner the lochs are usually situated in hollows among the hills, or penetrate in winding fiords from the sea between towering highlands or heath-clothed wastes that at higher altitudes terminate in bare and wind-swept mountain summits. As with the avifauna of the moors and heaths we shall find that the birds of the mountains are more or less a shifting population. Indeed the similarity is made even more complete by the fact that in both regions—moor and mountain—we find but one sedentary species. Upon the moors we found the practically resident Red Grouse; upon the mountains we shall find the Ptarmigan, a bird that clings to the bleak summits throughout the year. In some respects the Ptarmigan is a more interesting species

than the Red Grouse; there is more variety in its economy, and the bird itself is one of the most beautiful examples of protective coloration that the entire range of organic life can show. Our first acquaintance with the Ptarmigan was made nearly



The Ptarmigan.

twenty years ago, near the summit of the Cuchullin Hills in Skye. Although the time was May, patches of snow were lying in the hollows and a cold piercing wind swept along the hillsides. Lower down the slopes we had lingered to watch the gambols of a pair of Ravens that were haunting the rocks; whilst a Peregrine Falcon had just swept by. Upon a small piece of level ground we flushed several Ptarmigan, one after the other, that had been lying

concealed on the stony face of the mountain. They were readily identified by their white wings. After



The Raven.

the first bird had risen we scanned the ground carefully for others, but none were seen until they rose in noisy flight and sped away. It is interesting to

remark that the Peregrine we had seen a short time before must have flown right over the spot where these Ptarmigan were crouching. Possibly the recent appearance of the Falcon had made them lie closer than usual, and rendered them loth to take wing. With the exception of a few weeks in the very depth of winter, the Ptarmigan is more or less changing in colour throughout the year. In mid-winter, as most readers may know, the bird is pure unsullied white, with the exception of a jet-black patch in front of the eye in the male, and the outermost tail-feathers, which are black in both sexes. In early spring, sometimes it is said by the middle or end of February, the first signs of the coming summer plumage are seen on the neck, and during the three succeeding months the birds undergo a complete transformation, the feathers on the breast, it should be noted, being assumed last of all. It is a significant fact that the parts of the plumage least exposed, such as the flight feathers and the feathers on the belly, present the smallest amount of change from the white winter dress. This is more apparent in the male than in the female, doubtless owing to the fact that the latter is more liable to injury whilst brooding on the nest. Broadly speaking, in the male in summer plumage the upper parts and the breast and flanks are dark-brown, more or less mottled, and barred with gray and buff; whilst in

the female the upper parts are darker, practically black, mottled with gray and rufous, and the under parts are chestnut-buff barred with dark-brown. This plumage prevails during June and July, although subject to some change by sun and abrasion, whilst towards the end of the latter month signs of the autumn livery begin to be apparent. In this dress again the sexes are similar, as we might naturally expect to be the case, now that the breeding season is over, and both male and female are exposed to the same conditions of life. The upper parts, the breast and flanks, are gray, vermiculated with black. By the end of August this autumn dress is fully attained. It is worn for nearly a couple of months, subject of course to some change from abrasion and sun. Then comes the transition to the white winter plumage, which in most cases becomes complete by the middle of November contemporaneously with the snow that lies upon the mountains for the next three months or more. This beautiful arrangement of nature becomes even more impressive by certain comparisons. For instance, the Red Grouse, living as it does amongst the ling and heath, and in a region where snow seldom covers the ground for many days at a time, retains a brown dress throughout the year; in this species also the flight feathers are constantly brown in hue, just as those of the Ptarmigan are white. But the nearest ally of the

Red Grouse, the Willow Grouse (the *Lagopus albus* of ornithologists), inhabiting the tundras of the arctic regions right round the world, assumes a pure white plumage for the winter (readily distinguished, by the way, from the Ptarmigan by the absence of the black patch before the eye), and in this case again the flight feathers are constantly white—a dress that is admirably protective amidst the winter snows of its northern home. Here, then, we have two birds distantly related, like the Ptarmigan and the Willow Grouse, donning white plumage in winter for protection, whilst the Red Grouse, so closely allied to the Willow Grouse, and resembling it in many details of its economy, remains practically the same in appearance summer and winter alike. The retention of the white quills is a very interesting fact. These Grouse moult their flight feathers but once in the year, in autumn; and probably the reason they are constantly white is because this tint is no disadvantage to the species, being always concealed except during flight. As we know, these birds take wing most reluctantly, always endeavouring to elude observation by crouching close to the ground. Similarly, the central tail-feathers of the Willow Grouse and Ptarmigan are the only ones that change in colour with the seasons—varying from white in winter to brown marked with gray and buff in summer, and gray mottled with black in autumn—

the remainder being constantly black, and when the tail is closed of course concealed by the central pair.

Ptarmigan are nothing near such noisy birds as Red Grouse, and their usual note is a hoarse and guttural croak. Otherwise there is much in their economy of general resemblance. They pair in spring, make a scanty nest upon the ground, and their eggs very closely resemble those of the more familiar species, but the markings are larger and not so heavily dispersed—characters that are in perfect harmony with the different nature of the ground upon which they rest. The eggs are generally laid in May. Then again we remark the same tendency to flock in autumn, as in the Red Grouse. As previously remarked, this single species practically exhausts the resident avifauna of the mountain heights. There are a few other species still to be noticed, but none of them are confined to these localities, although they may be met with in them at any season. Some of these birds are migratory, others wander about visiting lower ground, and are therefore in no sense permanently indigenous to the mountain tops, or even to their lower slopes.

Dealing with the resident species first, we have the two species of British Eagles that in spite of persecution have managed to retain their place in our avifauna. They owe their survival most probably to the inaccessibility of their haunts. Time

was when the Golden Eagle frequented the Peak district of Derbyshire, and when the White-tailed Eagle regularly bred in the area of the English Lakes and even in the Isle of Man; whilst farther south still we find records of its nest in Lundy Island and the Isle of Wight. Persecution has succeeded in exterminating these Eagles in all such lowland haunts; even the South of Scotland has proved no safer refuge, and at the present day the mountains of the north are the sole locality in which they are normally found. We can vividly recall our first meeting with the Golden Eagle. We had spent many days amongst the Highlands in fruitless quest of this fine bird, but all that rewarded us were a few heads and feet, time-worn and ancient, nailed here and there to some stable or kennel-door of a game-keeper's premises, and any number of tales told by shepherds and keepers of how the species had been shot and trapped without mercy. At last our search was rewarded by the discovery of an eyrie in a magnificent cliff. We shall never forget how we watched the big black bird soar out of the rocks and circle overhead, and how we stood gazing in admiration as it swept down from the air towards its nest, with its mighty wings held up and expanded to their utmost, just as we had often seen the Kestrel do, or tame Pigeons, to give a more familiar instance. We have seen a good many Eagles—of both species—since

that eventful morning nearly twenty years ago, but never with such excitement as then. We are glad to say that the Golden Eagle in one or two localities seems to be increasing. This is specially the case in certain deer forests, where the bird is held (and justly so) to be harmless. There is, however, plenty of room left for the preservation of this fine bird, and we should like to see the placing of poisoned meat made illegal. The White-tailed Eagle is perhaps the most familiar species of the two, but this bird loves the hills near the sea, and its favourite resorts at the present time are amongst the grand mountain scenery of the Hebrides, the Orkneys and Shetland. We have often watched the magnificent aerial movements of this Eagle from the mountain tops in the haunt of the Ptarmigan and the blue hare. Like the larger Gulls and the Vultures, it will remain in the highest air for long periods, sailing round and round in spacious circles, ever and anon gliding obliquely down, then resuming its ordinary flight. We often used to meet with it high up the hills in Skye, a district which we believe still continues famous for this Eagle, and we knew of several nests or eyries scattered over the island. Both these eagles breed very early in the year, long before the ordinary stream of tourists flows northwards; but this, we regret to say, does not prevent many an eyrie being robbed of its eggs by shepherds and others, in the pay of the

collector or dealer from the south. The last pair of Scotch Golden Eagles' eggs that we examined had been forwarded unblown from the Highlands, roughly packed in a tin box, and both were broken. One of these eggs, we believe, is now in the Weston Park Museum at Sheffield. Eagles are somewhat sluggish birds, resembling Buzzards in disposition, and exhibit none of that dash and activity characteristic of the Falcons, or even of the short-winged Hawks. They are also very unclean feeders, being little better than Vultures in this respect. Of the two the White-tailed Eagle is the worst; he is a regular scavenger of the shore, and in not a few cases we have known him lured to his doom with a mass of stinking offal, a putrid lamb, or decaying fish. Healthy vigorous birds or animals are seldom attacked by this Eagle; it confines its attentions to the weakly and the wounded creatures that cannot move fast or offer any serious resistance. The Golden Eagle is a trifle more fastidious in its selection of food, and frequently captures living and healthy creatures, such as Grouse and hares, but even he does not refuse to make a meal on carrion. When we take into consideration the food and the sluggish habits of these Eagles, we are at a still greater loss to understand the ruthless war of extermination that has been waged against them for so long. As birds of prey go they are comparatively harmless, and should be left in peace.

We have heard a good deal about the destruction of newly-dropped lambs by these Eagles, but there is much to be said on the other side. Lambs at this early age are liable to many fatalities, and it is scarcely fair to attribute their disappearance to the Eagles. Many lambs are drowned or killed by storms, and by accidental falls over rocks and cliffs: their bodies offer a welcome meal to the Eagles. Some of these fatalities are due to the carelessness of shepherds and keepers, who take good care that the sheep farmer shall be made to believe that Eagles are responsible for them. Many years ago we were up the hills with a keeper and his dog. The latter—a wild unruly brute of a retriever—chased a lamb, and knocked it over a steep bank into a mountain loch. We recovered the body, and then the keeper with a sly look informed me that he should tell so and so that the loss of this lamb was due to an Eagle! It is the tale of the lowland coverts over again. There a scarcity of game is attributed to poachers or vermin, whilst in reality a dishonest keeper has disposed of it to an equally dishonest dealer. In the Highlands the loss of Grouse and lambs and deer calves is too often laid to the Eagles' charge, but let us hope that such a custom will cease, and that these beautiful birds will duly profit by the circumstance.

Another raptorial bird by no means unfrequently met with on the mountains is the Peregrine. In

some parts of the Highlands this Falcon may be found breeding on the face of some towering storr rock amongst the frowning hills. We had an interesting experience of such a nest on the lofty storr at Talisker, in Skye. This charming little spot nestles in a hollow in the hills, is surrounded by trees of goodly growth and a wealth of other vegetation—literally an oasis among bare mountains and upland moors. We used to sit out in the garden and grounds there and watch the Peregrines about their nest, which was situated in a gaping fissure perhaps two-thirds of the distance up the face of the cliff. A pair of Ravens also had their nest in the same rock, together with numbers of Jackdaws and Starlings. Whether the Peregrines respected the lives of their more weakly neighbours we cannot say, but the Ravens oft resented the near approach of these Falcons, sallying out from the cliffs and buffeting them in mid-air. Time after time we watched these Falcons dart down from the higher air with both wings closed and enter the fissure which contained their nest. The late Mr. Cameron, then residing at Talisker, informed me that these Peregrines had frequented the rocks here for many years, notwithstanding the fact that their eggs or young were taken every season. At such a vast height the Peregrines looked no bigger than Jackdaws, whilst the latter birds resembled Starlings

flying to an fro before the rugged cliff. The Raven, we are glad to say, is a familiar bird still among the mountains of the north. The time has gone for ever when we could number this fine species as a denizen of the mountains of the Peak and some other English uplands, although we have heard that it still nests amongst the hills of the Lake district. The hoarse croak of the Raven is one of the most familiar bird-notes heard among the Highlands. Notwithstanding gun, trap, and poison, the bird somehow or another still maintains its position; possibly its excessive cunning and wariness are the chief means of its salvation. This bird is one of the few species indigenous to both the north and south of England that is still commonest in some of the southern shires. In Devonshire, especially, it is by no means uncommon, both on the central plateau of Dartmoor as well as along the rock-bound coasts. Indeed, until within the past few years it used to breed within a mile or so of Torquay. We own to a special weakness for the Raven notwithstanding his questionable means of getting a livelihood. He has been our sole companion in many a rocky glen, and cheered us by his wicked croaking on many a lonely ramble over the wild hills of the north. We specially recall his lively ways at St. Kilda, when of an evening we used to wander up the heights of Connacher to watch the Fulmars and admire the

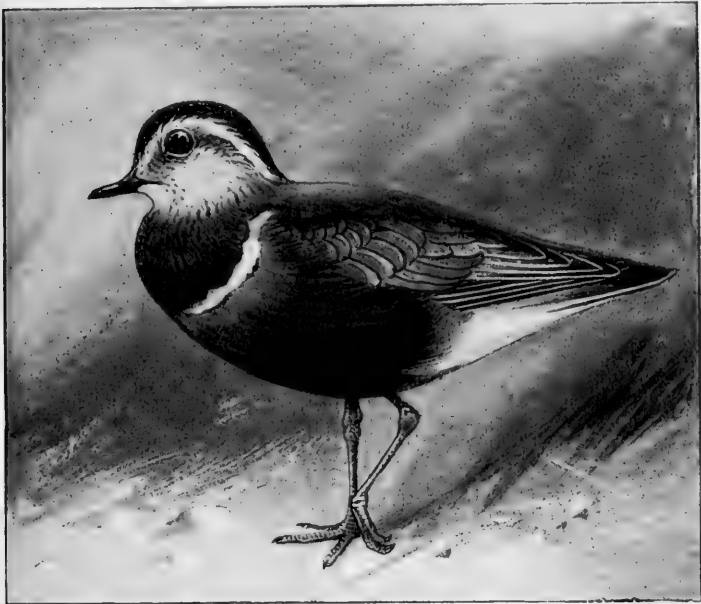
glorious sunsets that canopied the lonely Atlantic. We can also remember how we were cheered by his croak when wandering, lost and hungry and tired out, across the mountain heaths enshrouded in a dense mist between Sligachan and Talisker, just as night was falling, and when, after making up our mind for a night on the hills, we had the good fortune to meet with a shepherd and obtain from him our bearings. For a northern bird the Raven is another early breeder; and it is interesting to remark that there is very little difference between the date of nesting in the extreme south of England and the Highlands, March being the month in both areas. In the Highlands, Ravens' nests are invariably destroyed whenever they are accessible; but fortunately the wily birds, in not a few localities, select fissures and rock ledges quite inaccessible save to a winged enemy. A dead sheep or other animal will almost without fail attract Ravens from a large area, and we have on one occasion counted no less than seven on such a carcass, sharing the prize with the Hooded Crow. A keeper friend of ours informed us of a much larger congregation at the body of a dead horse, the birds in time picking the bones of every scrap of flesh. Speaking of Ravens brings us of course to a passing notice of the Hooded Crow. In England we have plenty of Hooded Crows during autumn and winter, especially

in the eastern counties, but they do not breed in the country (if we except possibly the Isle of Man). In the Highlands, however, the bird is a resident pest—like the poor, always with us, and, sad to relate, as little welcome. Amongst the mountains of the north, especially in the littoral districts, the Hooded Crow is certainly the commonest bird of the Crow tribe. He practically replaces the Carrion Crow, the familiar species of the southern shires. These Hooded Crows are wary birds; they need to be, or their race would soon be exterminated in Scotland. But for downright impudence and cunning commend us to the Hooded Crows of St. Kilda. These gray-coated rascals would allow us repeatedly to approach them within a few paces; indeed, they would sometimes allow us almost to kick them out of our way, as the saying goes; but this was only as long as we did not carry a gun. Had we such a weapon with us the crafty fellows would invariably keep at a safe distance. This was all the more remarkable, for at the time of our visit and stay on St. Kilda, in 1884, there was not a gun on the island except the one we carried, so that the birds could not have been taught to shun such an object by experience. We might attempt an explanation of the fact by suggesting that the birds became suspicious when they saw a person carrying an unfamiliar object; but against this we have the behaviour

of birds in other localities where guns are common, being no more wary than these unsophisticated crows of St. Kilda. The St. Kildans detest them, and with good cause, for they commit sad havoc amongst their fields and gardens, and are as keen "collectors" of eggs as the men themselves. The Hooded Crow is a far more sociable bird than the Carrion Crow, and we have remarked them gregarious at all times of the year. In winter, of course, they become most so, and nowhere is this trait more apparent than in the low-lying English counties. We shall have occasion to meet with this interesting bird in a future chapter (conf. p. 276). This brief list practically exhausts the typical land birds and Passeres of the mountains, with the sole exception of the charming little Snow Bunting. In not a few northern English shires this species is a fairly well-known winter migrant, but it breeds sparingly on some of the Scottish mountains, a few pairs finding an arctic climate by vertical instead of latitudinal migration, but most of its kindred journey far beyond our limits to rear their young.

Our last mountain bird is the Dotterel. But this is a bird of passage from the south, resorting only to the northern heights during summer. Unfortunately, the species is not so common on our English mountains as was formerly the case; its eggs are eagerly sought by collectors; the bird itself is in great re-

quest for its feathers, which are used to make trout and salmon flies. Although becoming rarer, it still breeds on some of the mountains of Cumberland;



The Dotterel.

whilst across the Border it is more numerous, and we believe regularly nests on the Grampians and in a few other places. It is late to arrive on these mountains in spring, as might naturally be inferred, when we bear in mind their bleak and barren character, reaching them in May, and quitting them in September. We have seen eggs of the Dotterel that had been taken on the Cumberland mountains

in June. It would seem that the birds do not retire to the elevated nesting-grounds directly they arrive, but frequent the more lowland fields for a week or so ere ascending to them. The summer home of the Dotterel is shared, in some instances at least, with that still more mountain bird, the Ptarmigan. The Dotterel is one of the very few species in which the hen bird is larger and more brightly coloured than the cock, and the latter consequently incubates the eggs and takes the greater share in the task of rearing the young. The hen is even said to take the initiative in courtship, but we have yet to learn that the "new woman" has quoted the fact in support of her advanced opinions! But then the Dotterel is widely known by the accompanying and preceding epithet of "foolish", and its English name is said to be the diminutive of "Dolt"; whilst its Latin name of *morinellus* is said by some to have been derived from *morus*, a fool—facts which those interested in so-called "sex problems" will also do well to bear in mind.

Now a few words respecting the bird-life of the lochs. These lochs, so far as the present chapter is concerned, may be divided into two distinct classes. First, we have the mountain pools—sheets of water of varying size, often at considerable elevations, situated in hollows among the hills, and an especial feature of many districts in the Highlands. Second,

we have at sea-level the marine lochs or fiords, another almost exclusive Scottish feature, the nearest approach to them, so far as our experience extends, being some of the charming land-locked rivers or fiords in the south-west of England. Some few of the birds that we meet with on or about these lochs may be seen in many a southern shire at one season or another, but on the other hand there is a predominating number of species that stamps the avifauna of these northern localities with distinctness. Many of these lochs are grandly picturesque, surrounded as they are with lofty mountains and rolling uplands; their solitude in not a few cases is intense. No wonder that some of our shyest birds resort to them, especially as they present the additional attraction of abundance of food. Upon the shores of some of them we have come across the rare Greenshank; on others in the Hebrides the Red-necked Phalarope (gentlest and most trustful of all wading birds) lives in colonies during the summer. From time to time the various Plovers and Sandpipers resort to their shallow margin, coming there to feed from nesting-places on the moors. Now and then in certain favoured spots the shadow of the Osprey—rarest, perhaps, of all our indigenous birds of prey—is reflected in the calm unruffled water as the bird soars over, and perhaps drops down upon some surface-floating fish. Our first introduction to the

Osprey took place nearly twenty years ago in Ross-shire, at the head of Loch Carron. We had been kept rain-bound for a couple of days in the hotel at Strome Ferry, and a most miserable and depressing time we had of it, the surrounding hills hidden by clouds and the surface of the loch churned into foam by the incessant downpour. The second evening the weather cleared, and we started off for a long ramble along the loch-side; the sun shone out brilliantly, and began to dispel the caps of clouds hanging on the hills. The most abundant bird on the loch was the Common Gull, respecting which we shall have more to say on a future page. We saw several pairs of Redshanks near the swollen streams, many Plovers in the distance, a few Dippers, Common Sandpipers, and Mergansers. But the bird that interested us most was an Osprey, flying slowly over the loch about thirty feet above the water. It was hovering with quivering wings, the head almost hidden as the bird peered down in quest of prey. Every few moments the bird flapped its long wings as if to steady itself and gain fresh momentum for its flight. For some time we watched it hovering above the shallow water close inshore, and then it poised for a moment and dropped like a stone into the loch, the noise of its plunge being distinctly audible more than a quarter of a mile away. It rose in a few seconds, and then, after hovering a short time, went

off in a slow laboured flight to a clump of trees, and we saw it no more. As we previously stated, the Osprey is one of our rarest raptorial birds. A hundred years ago it is recorded as breeding in the English Lake district, whilst at a still more distant date it is known to have nested on the south coast of England. Although more than once thought by competent observers to have become absolutely extinct as a breeding species in the British Islands, the bird still lingers on and returns to nest in one or two places in Scotland, the exact location of which its best friends will desire to remain unpublished. Unfortunately, the Osprey is a summer migrant to our area, and the poor birds in travelling to and from their Highland haunts are exposed to much persecution. A favourite situation for the eyrie of this bird is an island in some secluded loch amongst the mountains, and in some cases a ruin of some ancient chieftain's stronghold supports the nest. There is no more harmless bird of prey in Scotland, for its food is composed exclusively of fish.

The birds of these mountain lochs are all migratory, visiting them chiefly in summer for the purpose of rearing their young; whilst a few, chiefly Ducks, may be met with in their vicinity during open weather in winter. Of course these remarks apply only to the fresh-water lochs amongst the hills; the sea-water lochs have a perennial supply of birds, because

they are never completely ice-bound in our islands, and furnish an abundance of food all the year round. Among the most characteristic of the birds of these hill lochs we may mention the Divers. Of these there are two species that breed near them, one of



1. The Red-breasted Merganser.

2. The Black-throated Diver.

them, however, the Red-throated Diver, being much commoner than the other, the Black-throated Diver. These birds are more or less migratory, and are only to be found upon fresh-water lochs during summer. In winter they retire to the coasts, where the open sea ensures a constant food supply, and then wander far south of their breeding area. Possibly there are few other districts in the world more depressing

in continued wet weather than the Hebrides—a wild savage land of rock and loch and ling surrounded by stormy seas, and only too often shrouded in gray mist. During such weather the cries of the Divers from the upland lochs sound more uncanny and melancholy than ever—oft-repeated wails or screams, compared with which we should describe the nocturnal lament of a tom-cat musical; and even more impressive and unearthly do they become when uttered during the few hours of darkness that characterize the night in summer in these northern lands. These cries have irritated us too often for us to say that we love them; still, they are not without a certain charm, imbuing as they often do with life scenes where solitude otherwise reigns supreme. Both these Divers rarely visit the land except to breed; they are clumsy birds out of the water, but in that element are as much at home as the fish themselves. They fly well and rapidly, and are perhaps more frequently seen in the air than standing on the ground. Both species may be found nesting on the lochs of the Outer Hebrides. The nests are never made far from the water; in fact, we have seen the eggs so close to the margin of the loch that the least rise in the water—a frequent occurrence in such wet districts—must have washed them away. In these cases there can be little doubt that the birds removed them to a safer distance when

they were threatened with such a danger. A favourite locality is on some small islet in the loch. In some cases little or no nest is made, but in others a substantial structure of grass, weeds, and stalks of plants is formed. Very often the nest may be discovered by the path the old birds make in going to and from the water. The two eggs are much like those of a Gull in colour, but are very elongated. There can be little doubt that both these Divers consume a vast number of trout in the course of a summer. But the supply of fish is almost inexhaustible; we know lochs that literally teem with trout. The fish, however, are very small and scarcely worthy of the angler's attention.

The Mallard or Wild Duck is another very common bird on these mountain lochs during summer, especially on those that contain islands. Some of these latter are clothed with a dense growth of heath and gorse, and in such localities we have known several nests within a radius of a few yards. But the Wild Duck is one of the most cosmopolitan of our indigenous birds, breeding almost as commonly in the extreme south of England amidst pastoral surroundings, as in the Highlands where its solitude is seldom disturbed save by a wandering keeper or shepherd. Its nest, however, varies considerably; neither is water essential to its location. We have seen its nest amongst the bracken, far

from water, in the open parts of Sherwood Forest, we have taken it from the rushes near a stagnant lowland pool, as well as from the knee-deep ling, the bare ground on the hillsides, and the bramble-covered banks of river and stream. Some nests are made of little else than down from the female's body, others are much more elaborately constructed of almost any kind of vegetation growing near. We may also mention that this Duck breeds in some numbers near most of the tarns and pools of the moorlands from the Peak district northwards. Here and there in the more remote Highlands—Caithness, Sutherlandshire, and Ross-shire—a few pairs of Scoters frequent the mountain lochs. The Teal, on the other hand, is a much commoner species in these localities, whilst the Red-breasted Merganser is even of wider distribution still throughout the Highlands. We cannot well leave these fresh-water lochs without a passing glance at the Red-necked Phalarope. This again is a migratory species which arrives at the mountain pools in May. Its favourite haunts are the clear tarns surrounded with rushes and sphagnum on the moors, at no great distance from the sea. So far as we know, this Phalarope nests on no part of the British mainland now; its summer resorts are in the Outer Hebrides, in Orkney and Shetland. To these pools the birds return each summer with unfailing regularity. Their gregarious habits very largely increase their

charm and interest. We know of few, if any, birds more trustful and tame. When their breeding-place is approached the pretty little birds either run or fly to the neighbouring pool and there swim about in the most unsuspecting and confiding manner, utterly regardless of danger. They make their slight nests on the banks of the water, and lay four very pretty eggs, olive or buff in ground colour, heavily marked with dark brown, paler brown, and gray. Here again we have another instance in which the hen Phalarope is more brilliant in colour than the cock bird, and not only takes the initiative in courtship, but leaves the care of the eggs and young chiefly to him. Possibly the females of these birds and Dotterels hold strongly advanced views on the question of sex and its rights and privileges; anyway, they must be ranked amongst the very few female creatures that have partially succeeded in emancipating themselves from the ordinary duties of their sex. Perhaps in the remote future the principle will universally apply to civilized man himself, for there are not wanting signs of this sexual evolution towards such emancipation.

We will bring the present chapter to a close with a brief notice of the bird-life to be met with on the sea-lochs. Many a charming essay on ornithology is reflected in their clear waters; many a page from the story of our native birds is graven along their rocky shores. We have had the good fortune to

explore not a few of these charming Highland fiords, to dwell beside them for weeks at a time, and thus become familiar with the birds upon them and with their most engaging ways. One of the most familiar birds of these Highland lochs is the Red-breasted Merganser, known throughout these localities as the "Sawbill" (conf. p. 96). The drake is a very pretty bird, the duck more soberly arrayed, yet both easily identified by their long narrow bill. They are generally met with in pairs during summer, and their actions in the water furnish us with many an hour's amusement. This Merganser is a most expert diver, and every few moments either one or the other of the pair disappears in quest of food. Rarely or never do both birds dive at the same time, one always keeping on the surface as if on the look-out. Sometimes, however, the birds will suddenly commence to chase each other through the water in sportive play, and then both may dive, churning the water into foam. When fishing, the birds frequently, after diving, stand erect in the water and flap their wings vigorously for a few moments. These birds are very regular in their movements, especially on tidal water, and we have frequently remarked how they would visit certain spots to feed at low water, flying up at great speed from different parts of the loch, their wings making a peculiar whistling sound as they hurried along. Sometimes they may be seen standing on

some low, sea-surrounded rock basking in the sun and digesting their meal. Each pair of birds seem attached to a certain locality, and may be found in it from day to day right through the breeding season. We have taken many nests of this Merganser, and invariably found them made on islands in the lochs. In not a few instances the first eggs are laid on the bare earth, usually under the shelter of a rock, or in a hollow amongst the gorse or ling close to the water's edge. These eggs eventually become surrounded with down plucked from the female's body, but before this is arranged, when there are but one or two laid, they are left bare and uncovered. The much rarer Goosander may occasionally be met with on these Highland sea-lochs, especially in the Outer Hebrides. Other birds of the Duck tribe that frequent these lochs and the islands in them are the Sheldrake and the Eider.

Needless to remark, these lochs are favourite haunts of Gulls and Terns. Of the former the most interesting, perhaps, is the Common Gull, a species that has no English breeding-place, yet in some of these northern fiords it nests in abundance. In this case again islands are invariably selected if any are to be had. This Gull we found nesting in large numbers in Loch Follart in Skye, but owing to the relentless way in which its eggs were taken we should presume that it has now become much scarcer. Then on the

islands again we may meet with colonies of Arctic Terns. These graceful birds are quite a summer feature of the lochs, their airy movements as they fish just off the shore being highly interesting. The Common Tern is much more local, and yet there are not a few colonies scattered up and down these lochs amongst the Hebrides, at least as far north as Skye. Of the Terns we shall have more to say in a later chapter (conf. p. 221). Where the cliffs are steep by the loch-side, in not a few of these northern waters, we shall be sure to find the Black Guillemot, a bird, as its name indicates, almost uniform black in colour (during summer), with white wing-bars and coral-red legs and bill. This bird is never seen in such numbers together as the better-known and larger Common Guillemot; rather is it found in scattered pairs, fishing close inshore where the rocks fall sheer down into deep water. Its habits, however, are very similar; it dives with the same agility, feeds on fry, crustaceans, and small shell-fish, and is just as thoroughly marine in its tastes. We must note, however, one important difference, and that concerning its nesting economy. Like the Razor-bill, it breeds in holes and fissures of the rocks, makes no nest, and its eggs are very similar to those of the latter species but much smaller, and two in number. As most readers may be aware, the Guillemot and the Razor-bill are content to lay one only. Both

these latter birds may be met with swimming about the marine lochs, and there are many colonies of them scattered about the Hebrides. These we hope to notice in greater detail in our chapter devoted to the bird-life of the ocean cliffs (conf. p. 240). Of the wading birds that haunt these lochs mention may be made of the Oyster-catcher and the Ringed Plover. The former bird is one of the noisiest to be found in such localities, especially when its nesting-places are invaded by man. It loves the stretches of shingly beach, laying its three eggs just above high-water mark on the line of drifted weed and rubbish that marks the limits of spring-tide. Its so-called "nest" is worthy of special examination, the shells and pebbles often being arranged very systematically round the eggs. Other nest there is none, but in most cases a number of sham or empty "nests" or hollows in the shingle will be found close to the one that contains the eggs. Many of these birds wander far southwards from these northern lochs during winter, and at that season are found in localities which they just as regularly leave as spring returns.

CHAPTER IV.

ON HEATHS AND MARSHES.

THE title of the present chapter, to some readers, may seem rather a misnomer, especially the first portion of it. We have already made a brief survey of bird-life among the heather, but then a moor is not exactly a heath. For the purpose of the present volume the definition of the word "heath" must be taken to be a small area of uncultivated ground, covered with bracken, brambles, gorse, and briars, with patches of heather here and there, studded with stunted trees and bushes, and in not a few cases surrounded with woods, arable lands, and pastures. There are many such delightful bits of waste ground in the northern shires, not only inland, but at no great distance from the sea. Of the bogs and marshes we may claim a fair share, although drainage and reclamation have reduced their area considerably in not a few cases, or removed others entirely. The fens of the low-lying eastern counties—of Norfolk and Suffolk—scarcely come within our limits, whilst those of Lincolnshire exist almost only in name. The bird-life of these heaths and marshes is characteristic and interesting, although

perhaps there is greater similarity between the species and those of more southern localities than we have hitherto found to be the case.

Heaths have always been favourite places of ours. They are never of such barren and forbidding aspect as the moorlands, even in mid-winter; vegetation is more generous; trees, in which we delight, are not altogether absent; and most important attraction of all, bird-life in considerable variety may be found upon and near them throughout the year. Although many bits of heath known to us have been cleared and brought into cultivation, there are not a few still left where birds of various species linger unmolested. For instance (to indicate but a few), there are such areas in the Sherwood Forest district; here and there in north Lincolnshire, in north Derbyshire, and in south Yorkshire, especially in the vicinity of Wharncliffe Crag, a few miles north-west of Sheffield. One of the most interesting birds found upon these heaths is the Nightjar, or perhaps even better known by the name of Goatsucker. Like most birds possessing some peculiarity in note or appearance easily remarked by the multitude, the present species has many aliases, some of which at any rate are as undeserved as they are disastrous. Thus, that of "Night-hawk" brings the bird into evil repute with gamekeepers, and it is shot down in many localities under the firm belief that it preys upon young

Pheasants and Partridges! That of "Goatsucker" is even more widely prevailing, not only in our own country, but it has an equivalent in almost every European language, in some cases dating from a



The Nightjar.

very remote antiquity. Needless to say that this appellation has proved even more fatal, and has caused the poor bird needless persecution in many other countries than ours, owing to the absurd superstition it describes and fosters of the Nightjar's utterly fictitious habit of sucking the teats of cows

and goats! Lastly, it has been the long-suffering possessor of the names of "Fern Owl" or "Churn Owl", one relating to its haunts, the other to its singular note, and both suggestive of birds that have been sorely persecuted by man, in most cases for purely imaginary offences. Anything flying under the name of "Owl", whether with "fern", or "wood", or "barn", or "horned" attached, is considered harmful, and fair food for powder and shot, so that the poor Nightjar has suffered with the rest. To his habits and appearance most, if not all, his misfortunes are due. He flies about at dusk and during the night-time, and has a way of flitting round the cattle in the meadows close to the heath in quest of moths and cockchafers; his plumage is soft and pencilled and Owl-like, whilst his enormous mouth, to the ignorant countryman, seems capable of swallowing anything! And yet there is no more harmless bird in the British Islands than the Nightjar. It preys upon no single creature that man might covet (if perhaps we except the entomologist, who does not like to see rare moths and beetles disappear like magic in the evening gloom), but, on the other hand, rids the fields and groves of countless numbers of injurious insect pests. Apart from any concrete injury that it may be thought to do, it also falls under the ban of the superstitious, its weird and curious notes, together with its crepuscular habits,

being very apt to inspire dread in the credulous countryfolk, who are firm believers in omens, prognostics, and the like, notwithstanding the unprecedented extent to which the schoolmaster has been abroad during the past twenty years or more. We ought also to mention another name bestowed upon the Nightjar, and which, like most of the others, has caused the poor bird not a little senseless persecution. This is "Puckeridge", a term also applied to a fatal distemper which often attacks weanling calves. The Nightjar was thought by the ignorant countryman to convey this disorder to the calves whilst flitting about them. Poor little Nightjar! The wonder is that there are any of its species left to struggle under such an overwhelming burden of bad names begotten of superstition and ignorance. In some districts this bird is known as the "Eve-jar" or "Evening-jar", and in others as the "Wheel-bird"—names innocent enough, suggestive of no ill deeds, but eminently expressive of its habits and its notes combined. In Devonshire it is known locally as the "Dor-hawk", from its habit of catching dor-beetles or cockchafers; also as the "Night-crow", possibly the least applicable in the entire series, unless we interpret it as being derived from the bird's habit of calling (crowing) at night. It is possibly a fortunate thing for the Nightjar that it only spends a few months out of the twelve in Europe, amongst such

a crowd of civilized enemies of all countries and creeds, finding fewer, if any, human persecutors amidst the dusky heathen races of Africa, whither it retires after visiting us. It is one of our latest birds of passage, not even reaching the southern parts of England before the end of April or early May—a date which is not quite coincident with its arrival in the northern shires, which it does not reach much before the middle of the latter month. The life-history of this pretty and much-maligned bird is packed full of interest. Unfortunately the Nightjar is only abroad of its own choice during hours when darkness renders observation difficult; we must perforce crowd most of our scrutiny into the twilight hour, and just before the rising of the sun. The bird, like the bat and the Owl, sleeps during the daytime, either crouched flat upon the ground under the bracken or underwood, or seated lengthwise on some broad flat branch of a tree where dense foliage gives the shade and gloom it seeks, and where its beautifully mottled and vermiculated plumage harmonizes most closely with surrounding tints. It is said that the Nightjar sometimes comes abroad during mid-day, and that it even calls at that time, but such has never been our experience of this species, and we should be inclined to think that when seen out and about at such a time it had been disturbed from its diurnal resting-place. At the approach of even-

ing, however, the sleepy bird rouses itself, and, hungry and alert and active enough, leaves its daytime haunt and commences its evening peregrinations in quest of food and enjoyment. As the sun sinks lower behind the western hills and the shadows intensify, the Nightjars become more lively. The most impressive thing about them is their curious music. It is a song that appeals to the most casual listener, compelling recognition by its very singularity. Whilst on the wing circling to and fro the note is an oft-repeated cry, resembling the syllables *co-ic*, *co-ic*, *co-ic*; but when the bird drops lightly down on to some wall or fence or gate, another and still more curious sound is produced. This is the familiar "churring" or vibrating noise, long continued, and putting one in mind of the monotonous reel of the Grasshopper Warbler, so far as its pertinacity is concerned. This latter noise is never heard unless the bird is sitting. The bird also makes another sound whilst in the air, produced by striking its wings smartly together; otherwise the flight of this species is remarkably silent and Owl-like. It is by no means shy, and will hawk for insects round our head, dart to and fro on noiseless pinions, or circle about in chasing and toying with its mate, with little show of fear. The wings of the male bird are marked with three white spots, one on each of the first three primaries, and these are very conspicuous

during flight, as are also the white tips to the outermost tail-feathers. This even applies to young males in their first plumage, although the spots are buff instead of white. It is possible that these markings are sexual recognition marks, enabling the female to follow or discover the whereabouts of her mate in the gloom. The Nightjar breeds in May or June, a little later in the north than in the south. It makes no nest, but the hen bird lays her two curiously oval eggs on the bare ground, sometimes beneath a spray of bracken or a furze bush, less frequently on the flat low branch of a convenient tree. These eggs are very beautiful, and he who finds them cannot confuse them with those of any other species that breeds in our islands. They are generally white and glossy, the surface mottled, blotched, streaked and veined with various shades of brown and gray. The young are covered with down—in this respect showing affinity with the Owls—but are otherwise helpless, being fed by their parents not only during infancy, but for some time after they can fly. The old birds show great solicitude for them should they be disturbed, fluttering round the intruder's head, and seeking to attract all attention to themselves. The Nightjar leaves the northern shires in September for its winter quarters in Africa, although it is by no means uncommonly observed quite a month later in the extreme south

and south-west of England. It is said, by the way, that the Nightjar captures cockchafers with its feet, and that its serrated middle claw is for this purpose. But this we have never noticed, although we have had a life's experience with the bird, and it seems more than doubtful when we bear in mind the extremely short legs and comparatively weak feet of this species—so unlike those of the Kestrel, which we know frequently catches these insects with its feet. But we have lingered too long already with the Nightjar, and must pass on to a notice of other birds upon the heath. The unusual interest attaching to it must be our sole excuse.

Another very interesting little bird not unfrequently met with upon the heaths, especially those where the soil is sandy and trees are numerous around them, is the Wood-lark. Unfortunately the bird-catcher has literally exterminated this species in not a few localities, the bird's lovely song being the attraction. Here we have a species that becomes rarer and more local in the northern shires than it is farther south. The Wood-lark is not only a most industrious and persistent singer, but is almost a perennial one. That is to say, in the south; up here amongst the northern shires it seldom warbles during winter, unless tempted into voice by exceptionally mild weather. Its regular breeding song is not resumed so early in the year up here, and we

should say there is a month or more between the nesting season in north and south respectively. We have known of Devonshire nests as early as March, of Nottingham ones as late as May. Possibly this Lark is only double-brooded in the more southern portions of its British range. The birds seem much attached to certain spots, and, like the Tree Pipit, seldom wander far from their nesting grounds throughout the breeding season. Unlike the Sky-lark, which very exceptionally indeed perches upon a bush or a tree, the Wood-lark may be constantly seen high up the branches. Indeed, like the Tree Pipit, the cock bird selects some favourite branch, and here early and late he sits, and ever and anon flies out and upwards to warble his rich and joyous song. There are those who maintain that the song of the Wood-lark is even superior to that of the Sky-lark. It may be to some extent a matter of taste, and possibly they are right; but on the other hand the song of the Sky-lark is far better known, more popular with the multitude, and we always think it seems more cheerful, as it certainly is somewhat louder. The Wood-lark has more flute-like music in his voice, more melody, and even more continuity. There are not a few persons that confuse the two birds together, although the Wood-lark may be readily distinguished by its short tail, more rounded wing, and its habit of perching in trees. One has only to

watch the aerial songster long enough to notice the latter peculiarity without fail. When once the bird has been surely identified, the difference between the songs of the two species will soon be impressed upon the listener, even though the species until then had been unfamiliar to him. The bird will also warble just as sweetly and just as continuously not only whilst sitting on the branches, but when standing on the ground. We may also mention that the Wood-lark is not so aerial as the commoner species, never ascending to such vast elevations during the course of its song. This Lark becomes gregarious in autumn like most, if not all, its congeners, and then wanders more or less from its native heath. It builds an unassuming little nest upon the ground, usually under the shadow of some bush or inequality of the turf, composed of dry grass and lined with hair. In this it lays four or five eggs, the markings on them being more distinct and scattered than is the case with those of the Sky-lark. The latter species is by no means an uncommon one upon the heaths, but after what we have already said there need be no confusion between the two.

There are various other Passerine birds to be found in these localities, due attention being given to the predominant vegetation. The silvery-throated White-throat is a regular visitor each spring-time to

the thickets of briar and bramble; the Grasshopper Warbler may be heard where the vegetation is most tangled, reeling off his seemingly interminable chirping song, if in reality it is worthy of such a name in the company of so many more sweet-voiced choristers. The Stonechat, gay in his black-and-white and chestnut livery, perches on the topmost sprays of the cruel-thorned gorse and eyes us suspiciously, with a flicking tail and a harsh tac of welcome or resentment. The equally beautiful Linnet, with swollen carmine breast, bears him company amongst the gorse; whilst the Yellow Bunting may not unfrequently be noticed crying his few monotonous notes time after time, and as often answered by some rival near at hand, both of them perched as high as possible on the stunted thorns or the silver-barked birches. All through the early summer the cheery notes of the Cuckoo (not a Passere, by the way) are a familiar sound on or near these heaths, and now and then the blue-gray bird himself, looking all wings and tail, may be seen skimming across to the distant belt of trees, or his mate may be watched poking about the thickets in a suspicious sort of way seeking some unprotected nest in which to drop her alien egg. One bird, however, we miss from these northern heaths in particular, and that is the Dartford Warbler. He seldom penetrates as far north as

Yorkshire, although we have taken his nest in a gorse covert within a few miles of Sheffield. But that was long ago, and, truth to tell, we failed to recognize the importance of our discovery for years afterwards, and when nest and eggs had been lost. This Warbler is said to breed in Derbyshire, but we have had no experience of it in that county. It is interesting to remark that the species appears first to have been made known to science from a pair that were shot on a Kentish heath near Dartford, a century and a quarter ago. Few other British birds have, therefore, a more unassailable right to their trivial name.

That curious bird the Stone Curlew, perhaps equally as well known as the "Thick-knee", is to be found on certain heaths as far northwards as Yorkshire. It becomes more numerous possibly in Lincolnshire, and thence it is generally dispersed over Norfolk and Suffolk and most of the "home counties". Owing to drainage, the haunts of this bird have become much more restricted than formerly, and in not a few localities it has been exterminated completely. It loves the more open and bare heathlands, especially such as are interspersed with stony and chalky ground and free from trees and brushwood, for cover is in no way essential to its requirements. It derives safety in another way. Its plumage of mottled brown is eminently protective

on these chalky heaths, and when alarmed, if it does not take wing, it quietly crouches flat to the ground, extending its neck and head, which are also pressed



The Stone Curlew.

close to the soil, and there, perfectly motionless, it awaits until danger is past, or until it is almost trodden under foot, when it is reluctantly compelled to disclose itself. The Stone Curlew is known by various local names, all more or less expressive of some of its characteristics or relating to the

haunts it affects. That of Stone Curlew probably refers to the stony haunt and the very Curlew-like appearance of the bird itself; whilst those of Norfolk Plover and Stone Plover are indicative of a favourite resort of the species in England and a more correct determination of its affinities, for there can be no doubt that the bird is more closely allied to the Charadriinæ than to the Scolopacinæ. Less happily the bird has been called the "Thick-knee" because of the peculiar enlargement of the tibio-tarsal joint, but this is not the "knee" in an anatomical sense, but analogous to the ankle-joint in man. With more propriety, therefore, if with less euphony, the bird should be termed a "Thick-ankle", or a "Thick-heel". Lastly, it is known to some as the "Thick-kneed Plover" or "Thick-kneed Bustard". In this latter case popular judgment is to some extent supported by anatomical facts, for the Stone Curlew is by no means distantly related to the Bustards, certainly more nearly than to the Curlews. It is rather a remarkable fact that the Stone Curlew is a migratory bird, when we bear in mind that on both shores of the Mediterranean it is a sedentary species, and that its food—worms, snails, beetles, frogs, and mice—might be obtained in sufficient abundance in England throughout the winter. In fact, there are many instances on record of this bird passing the winter in England, although we should scarcely

feel disposed to class these individuals as indigenous to our country, but rather as lost and wandering birds from continental localities. Be all this as it may, the Stone Curlew visits us in spring to breed, arriving in April, and returns south in autumn, leaving in October. Its large eyes (bright yellow in colour) betoken it to be a nocturnal bird, and during the night it obtains most of its food. It then often wanders far from its dry parched native heath, and visits more marshy spots, especially arable lands and wet meadows; sometimes lingering, both in going and returning, to fly about the air uttering its loud and plaintive cry. The Stone Curlew seems to be fully alive to the fact that the safest hiding-place is often the most conspicuous and open one. In this matter it resembles the Missel-thrush, which often builds in safety its bulky nest in such an exposed spot that we marvel afterwards (when the young are fledged and gone) how it could have escaped notice. Acting on this principle the Stone Curlew, in May or June, lays its two eggs side by side upon the barest of ground, and where their tints and markings so closely resemble the yellow stones and pebbles scattered around them that discovery is extremely difficult. The sitting bird renders the deception more complete by running from the eggs at the least alarm and leaving them to that almost perfect safety that

their protective colours ensure. These eggs are buff in ground colour, blotched, spotted, or streaked with brown and gray of various shades. We ought also to mention, by the way, that the artful bird selects, as a rule, some little eminence for its breeding-place, where it can command a good view of approaching danger and slip quietly away. We have heard countrymen insist that the Stone Curlew will remove its eggs if it becomes aware that they have been discovered, but we cannot vouch for the accuracy of the statement.

We occasionally meet with three of our most familiar Game Birds upon the heaths; perhaps we might add a fourth, as we include Lincolnshire in our area of the northern shires, for there is some evidence to suggest that the alien Red-legged Partridge is invading the latter county. On many heaths the English Partridge lives at the present time, and the harsh crow of the Pheasant is by no means an unfamiliar sound in these localities, especially when they adjoin covers. This latter bird is a confirmed wanderer, given to straying far from its usual haunts. We have repeatedly noticed fine old cock birds on the moors, miles from coverts. Whether these wanderers ever interbreed with the Grouse we cannot say, and we are not aware that hybrids between these species have ever been obtained or recorded. Lastly, the Black Grouse has a weakness for the heaths, especially in localities where a belt of timber

adjoins them. Strange as it may seem, we must include the Mallard as a heath bird. To mention one locality only where this bird breeds regularly upon heaths we may name the Sherwood Forest area. We have taken nests here far from water or wet ground of any description, made amongst dead bracken; and what is also worthy of remark, these nests were by far the handsomest we have ever seen of this Duck. They were composed principally of down from the female's body, intermixed with fronds of bracken, and were raised from eight to ten inches above the surrounding ground. Here again we had another instance of nests being most difficult to see in the barest localities. Some were made where the bracken had been cut, amongst scattered green stems of the new growth and upon green turf; and yet we can remember how we had to look long and closely before we saw them, as they were actually pointed out to us by a keeper acquaintance. In one instance—and that where the nest was the most exposed of all—we could not see the nest, and did not, until the big brown duck went lumbering off. Of course when the nests were discovered they seemed conspicuous in the highest degree, and we could do nothing but wonder how ever it was possible to overlook them.

One more bird deserves notice ere we bring our survey of avine life upon the heaths to a conclusion, and that is the Short-eared Owl. This bird is quite

cosmopolitan in its choice of a haunt. It is as much a fen or a marsh, a gorse covert or a moor bird as it is a heath one, apparently as much at home in one locality as another. We shall have more to say



The Short-eared Owl.

about this species, especially its migrations, when we come to deal with bird-life on the coast. But as this Owl breeds upon the heaths, amongst other places, we may as well take this opportunity of a peep at its domestic arrangements, and one or two other characteristics, distinct from its migrational movements.

Owls are popularly supposed to be exclusive birds of darkness—crepuscular and nocturnal; but the Short-eared Owl is a regular day-flier, and may often be seen beating about in its own peculiar unsteady erratic way during bright sunshine without any visible sign of inconvenience. Neither does it seem ever dazed by the brilliant gleam of lighthouses, but takes advantage of the glare to catch birds more susceptible to the artificial light. During the autumn months especially we may meet with this species in the most unlikely spots, amongst the sand dunes, in turnip-fields, in wet meadows and saltings. The birds that breed on the heaths, however—especially in the English shires—seem to be sedentary. Although this Owl unquestionably feeds upon birds, say up to the size of a Missel-thrush, as its diurnal habits apparently suggest, there can be no doubt of its great usefulness to man in killing off voles, mice, reptiles, beetles, and such-like destructive pests. We need only point to the extraordinary numbers of this Owl that congregated in Scotland some few years ago during the plague of voles, and the way in which they preyed upon them, for an object-lesson of this bird's usefulness to man. In the matter of its nesting the Short-eared Owl presents us with another anomaly. Fully in keeping with its love for open country and its partiality for daylight, it nests upon the bare ground, and in this respect differs from all

the other British species. We say "nests", but in reality there is little or no provision made for the eggs, beyond a mere hollow in which a few scraps of withered herbage are strewn. The half-dozen creamy-white eggs are, therefore, conspicuous enough in many places, though better concealed in others when they are laid under bracken or amongst heath. The sitting bird, however, crouches close over them, and shields them from observation by her own protective-coloured plumage. These eggs are usually laid in May in the northern shires, several weeks earlier in more southern localities.

With a passing glimpse at some of the more interesting phases of bird-life in the northern marshes we will bring the present chapter to a close. The Bittern, formerly a dweller in them, has long been banished from the bogs and mires not only of the northern shires, but everywhere else in our islands, and exists now as a tradition only—that is to say, as a breeding species. The Marsh Harrier—a name sufficiently suggestive of the haunts it formerly affected—has similarly disappeared from the two northern shires (Yorkshire and Lancashire), where it formerly bred. One of the most widely-dispersed birds in these marshy situations is the Water Rail—a species that is, perhaps, more overlooked, owing to its secretive habits, than any other found in our islands. It is astonishing what a small bit of marsh

or bog will content a Water Rail, provided there is a sufficiency of cover. Like our old friend the Moorhen, it may also often be met with wandering from its usual boggy retreats into such unlikely places as gardens and farmyards. Although it is flushed with difficulty, it is by no means uncommonly seen on open spots or even in the branches of trees. In not a few heaths it is an almost unknown and unsuspected dweller in the marshy drains and round the rushes that fringe the shallow pools where peat or turf has been cut; indeed, we have met with it almost within hail of some of our busiest towns. Its rather bulky nest, made of a varied collection of dead and decaying herbage and aquatic plants, is always placed upon the ground in some quiet nook in its haunts, and its half-dozen or so eggs are buff in ground colour, spotted with reddish-brown and gray. Though far more local than the preceding, the Spotted Crake must also be included in our review of northern bird-life. Unlike the Water Rail, however, it is a summer migrant to the British Islands. Some individuals, however, appear to winter with us in the southern counties. The migrants appear in April in the south, several weeks later in the north. The habits of the two species are similar in many respects. The Lapwing, the Redshank, and the Common Snipe may also be met with in these situations, the Redshank in summer only, when it retires

to them to breed, seeking the coasts in autumn; the others at all seasons. Amongst the Passerine birds of the marshes we may instance the Sedge Warbler—one of the most widely distributed of British species—the varied chattering music of which is a very characteristic marsh sound during the summer. At a few localities in Yorkshire and Lancashire the Reed Warbler may be met with, a migratory species like the last, but not penetrating to Scotland. Then the Reed Bunting is a familiar bird on many a marshy waste, so too is the Sky-lark and the Meadow Pipit; whilst in winter-time these places are often made lively by large congregations of Lapwings, Starlings, Rooks and Redwings, and scattered Jack Snipes from far northern haunts.

We may conclude our brief notice of marsh bird-life by a glimpse at the Black-headed Gull. This charming bird visits many a swampy piece of ground far from the sea during spring and summer to rear its young. In Lincolnshire there is an extensive gullery near Brigg—at Twigmoor—from which we have had many eggs during our long residence in South Yorkshire. There is another in South Yorkshire near Thorne; a third at Cockerham Moss in Lancashire. As we proceed northwards the colonies of this Gull increase in number, and in Scotland they are still more frequent. Many of these gulleries are situated on islands in pools in the marshes and on

the heaths. Not a few of them are almost surrounded by trees of various kinds, and at the North Lincolnshire settlement nests are not unfrequently made in the branches. We have already described the colonies of the Black-headed Gull in previous



The Black-headed Gull.

works, so that but few details are needed here. In Lincolnshire the birds wander far and wide from their station near Brigg, and parties of them may be met with on the fields many miles from home. The Gulls are as regular in their habits as Rooks, with which we have often seen them fraternizing, flying out to feed on the wet meadows, and following the plough until evening, returning home in straggling streams just like their sable companions. As we get near Brigg the birds become more abun-

dant in the fields; we remember, on one occasion, to have seen a ploughed field black and white with Rooks and Gulls, many of which when disturbed flew up from the furrows into the nearest trees; and very curious the white Gulls looked—birds that we associate with the water so closely—as they sat in the branches side by side with cawing Rooks. Early in the year, and before the birds leave the coast, the sooty-brown hood characteristic of the breeding season and of both sexes begins to be assumed. In Devonshire this takes place nearly a month earlier than in the north. In March they congregate at the old familiar stations which have been in use from time immemorial, and nest-building commences almost at once. The nests are ready for eggs by the first or second week in April. These are generally made upon the spongy ground of the marshy islands or on the marshes themselves, and in many cases are little more than hollows lined with a little dry grass. Other nests are bulkier, and these, we have often remarked, are nearest to the water, or even in the shallow pools. The three eggs are subject to much variation, but the ordinary type is brown or olive-green in ground colour, spotted and blotched with darker brown and gray. In many localities the eggs of the first laying are gathered by the tenant or proprietor of the gullery, as they are sold in vast numbers for food. Many, we know, are

passed off as Plovers' eggs, but the fraud we should say would never be successful with anyone acquainted with the latter delicacy. The scene at the nests when the place is invaded by man is a very charming one, the Gulls rising in clouds into the air and wheeling about in bewildering confusion, uttering their noisy cries of remonstrance. Even more animated does the scene become when the young are hatched, for then the old birds show much greater solicitude. An inland gullery always seems to strike us as a trifle incongruous, for we are always apt to associate a Gull with the sea; yet here, miles away from the salt water, often surrounded by rural scenes, are Gulls in thousands as happy and contented as though they had never been near a coast in their lives. When the young are able to fly, however, the instinct of the sea apparently returns to them, and back they go to the salt water to wander far and wide, and lead a life of errantry until love brings them inland again in the following spring.

CHAPTER V.

IN FOREST AND COPSE.

PERHAPS the avifauna of the woods and coppices, in northern and southern shires alike, is more similar in its general aspects than that of any other special localities with the same difference of latitude between them. Nevertheless there are southern species absent from these northern woodlands, and others common enough up here that are not seen in the counties of the south. Then again some species become rarer or commoner in the north, as the case may be, or exactly the reverse; or we shall find not a little difference in the habits of some of these woodland birds, as compared with those of southern haunts, and also in many cases considerable variation in the date of the arrival or departure of migratory species.

We confess at the beginning of this chapter to a very decided partiality for well-timbered districts, for woods and shrubberies, grand old forests and more youthful coppices; for, apart from the natural beauty of these sylvan spots, they are such favourite haunts of birds. For many years we lived almost surrounded by woodlands, and in some directions could

wander for half a score miles or more amongst little else but trees—hence our affection for these places, which we got to know by heart, and in doing so became familiar with the rich array of bird-life that dwelt in their shady depths. We also retain many a vivid memory of wanderings in fir and pine wood farther north in quest of ornithological information; whilst grand old Sherwood Forest on one side of Sheffield, and equally attractive Wharncliffe Woods on the other, were the scene of many an exploration after knowledge relating to the bird-life of such localities. Then in other directions we had the noble woodlands at Eccleshall, Beauchief, and Topley, and along the Rivelin Valley—all of them nearer home, and all of them well favoured with bird-life in great variety. These extensive woods, however, are not favourite haunts of the smaller Passeres; rather are they the home of Hawks, Magpies, Crows, Jays, Doves, Woodpeckers, Pheasants, and so on; the coppices, plantations, smaller woods, and well-timbered bottoms, together with extensive shrubberies and tree-filled parks—these are the grand haunts of hosts of little birds of many species, the varied habits of which were to us a constant source of keenest delight. There is one charm about woodlands that scarcely any other description of scenery can claim constantly, and that is, summer and winter alike birds are plentiful amongst them. The moors and the

sea crags, the shore and the stream, the marsh and the heath, have their times of avine abundance, in summer or in winter, and then they are more or less deserted, but the woods and shrubberies, the coppices and timbered parks, are a haunt in summer and a refuge in winter of a vast and varied bird population as well as an aviary of almost perennial song!

These splendid woods ought to be the haunt of not a few raptorial birds, but unfortunately they are not, as persecution has done its disastrous work, and Kites and Buzzards and Hobbys have been practically exterminated by the gamekeeper. Now the Kestrel and the Sparrow-hawk are the only two that are left, at least in the localities we have specified above. In some of the Scottish woods the Buzzard still continues to breed; the Kite is restricted to one or two spots in Wales and Scotland; whilst the Hobby, though still a nesting species in Yorkshire and Derbyshire, is so rare that few observers will have the good fortune to meet with it. Once more we would urge our plea on behalf of these three species, all of them practically harmless and inoffensive birds, yet threatened with absolute extermination if the landed proprietors will not come to their assistance. An appeal to powerful land-owners—the owners of vast areas of woodlands—is possibly more effective than protective legislation, for in their hands lies all the machinery for the effectual protec-

tion of such species. Peremptory and strict orders to keepers should do all that is necessary; we have a lifelong experience of such men, and can therefore testify to their usual obedience to instructions, whether for good or evil, as regards the so-called feathered vermin dwelling in their preserves. We are therefore firmly convinced that the winning over of the land-owner to the side of those who seek to preserve our avifauna intact would be of more real benefit than any half-dozen acts of parliament so long as it is nobody's business to enforce them.

Of the three raptorial birds mentioned above the Common Buzzard (what irony of fate for such a species to possess so misleading a name!) is the only one of which we can record any personal experience within the woodlands of Notts, North Derbyshire, and South Yorkshire, specified above. This happened many years ago, notwithstanding which we retain a very vivid remembrance of all the circumstances. We had spent the day with an old poacher, who not unfrequently allowed us to accompany him on his illegal wanderings (and we flatter ourselves on that subtle if youthful diplomacy that enabled us to stand well with both gamekeepers and poachers alike), fishing in prohibited waters, and were returning homewards through a large wood, known locally as "the Rawlinson". This wood stands just on the border-line of Derbyshire and Yorkshire; in fact,

the trout stream that flows through it we believe actually divides the two counties. It used to contain many grand oaks, and was always a favourite



The Common Buzzard.

cover for Pheasants because of the many clumps of holly-trees within it. In one of these oaks we spied a huge nest of sticks, and our poacher companion, when this was pointed out to him, volunteered the

information that it was a "Big Hawk's" nest. Tired and weary as we were, but incited by the possibility of finding some hitherto unknown eggs, we set to work to climb the mast-like trunk for some sixty feet. We can recall even now our frequent pauses for breath as we slowly approached the spot; how the nest seemed to get larger and larger as each succeeding branch was passed; and then how the big brown bird slipped off with a flutter that made our heart beat fast with anticipation; and how finally we reached the forking limbs where the nest was built, and placed our arm over the rim of sticks and felt the three warm eggs lying on the smooth lining. We climbed no higher, but transferring the precious eggs to our hat, and encouraged by the old rascal below—who would not have climbed so high for all the eggs in Christendom—we got safely down. There was some outcry afterwards from the keepers respecting the robbing of this nest, for they had intended to trap the old birds, but we kept discreetly silent. During a long residence in the neighbourhood we never saw or heard of another nest of this Buzzard.

Notwithstanding persecution, the Kestrel and the Sparrow-hawk happily can still be regarded as fairly common birds in all these woodlands. Trapping and shooting do their best each year to hasten on their extermination, but fortunately both birds breed

in localities where their nests are not so very easy to discover. The Kestrel is especially fortunate in this respect, for it breeds in the deserted nests of Crows, Stock Doves, and Magpies, or in the old drey of a squirrel, and a good many of these nests may be searched without finding the one selected; not only so, but the trees are generally in full foliage before the eggs are laid or the young hatched, and this fact conduces greatly to the concealment of many a nest. We can recall many occasions when we have climbed to a score or more deserted nests in a single day, amongst these grand old woods, on the off-chance of discovering Kestrels' or Long-eared Owls' eggs, and considered ourselves well rewarded if we found one or two at most occupied by these second tenants. On the other hand, many have been the times when we have seen keepers shoot into these old nests, as well as fire and kill the brooding Hawk as she sat upon her eggs or sheltered her downy young, in spite of all remonstrance upon our part. The Sparrow-hawk breeds a little earlier. We have had a long and varied experience with the domestic economy of this plucky little bird, and we have invariably found that it not only builds its own nest, but makes a new one every season. Indeed, in not a few cases we have noticed that when its eggs have been taken from one nest it has built another in the vicinity in which to lay a new clutch. The

larch woods in the Rivelin Valley—around Hollow Meadows—are, or used to be, a very favourite resort of this Hawk, possibly because keepers were somewhat lax, or never visited some of the coppices from one year to another. In these larch and spruce-fir woods, many old nests of the Sparrow-hawk might be seen, the deserted tenements of years and years. It was also rather remarkable that most of these nests were in trees within a stone's-throw of the artillery volunteers' target, and all around them were larches and spruces snapped and splintered, and the ground and rocks scored by the conical cannon-balls which lay in dozens all over the place. From one nest in this wood we obtained, by careful management, never quite emptying it, no less than fourteen eggs during a single spring. Curiously enough upon more than one occasion we have found a nest of the Goldcrest in the same spruce-fir as the nest of the Sparrow-hawk.

Nowhere else in our experience were the Magpies allowed to live in such peace as they enjoyed in this romantic valley. On the south side, from Bell Hagg onwards to Hollow Meadows, was almost one continuous woodland, coppice succeeding coppice, until they terminated in the larch and spruce woods, where the Sparrow-hawks bred, and through which Wyming Brook bored its way under a perfect archway of trees from its source on the Bamford Moors near

Redmires. Within this few miles of timber we have frequently known as many as a dozen nests of the Magpie all occupied. In not a few cases the old nest was returned to each spring, renovated and used again. Some of these nests were made high up in the oak and alder trees, others were placed in birch-trees, and less frequently in a stunted white-thorn growing amidst the briars and brambles and bracken and boulders of millstone grit on the open rough land. Not a few were placed in the alder-trees that fringed the streams between the reservoirs. The Jay, on the other hand, was a scarce bird here, for the woods had little or no undergrowth, in which that bird specially delights. In most other woods of our acquaintance the Magpie was a sorely-persecuted species, and every bird and every nest were destroyed that the keepers could discover. Several times during the course of the spring many keepers hold a grand "vermin battue". A keeper will gather round him half a dozen village loafers, and then the precious party will proceed to hunt the covers, killing every Magpie, Jay, or Hawk that comes in their way, and pulling out every nest they can discover. We know the ways of these gentry only too well, for years ago we often accompanied such a party, helpless to save, yet glad to increase our knowledge of woodland bird-life. Not a few nests have we seen on these occasions and held our peace, or visited

others containing young Hawks and Magpies which we have saved by a fictitious report to the expectant keeper and his murdering band below. In any case the slaughter at the close of the day was sad enough; and as the capacious game-bags were emptied, and the Jays and Magpies and Hawks, with perhaps an odd Nightjar or an Owl—beautiful creatures each one of them, and some of the fairest avine ornaments our woodlands can boast—were turned out into a heap by the kennel door, we ceased to wonder why such species in not a few localities exist as names or traditions only. Apart from any utilitarian motive that should prompt their preservation—and mind, some of these birds are perfectly harmless or of downright service to man—surely on æsthetic grounds a universal plea should be raised for their protection, and such brutal slaughter staid once and for ever.

As we previously remarked, the Jay is not so universally distributed as the Magpie; it loves cover, and delights in such woods where the undergrowth of hazel is dense and where clumps of holly-trees abound. It is also fond of the large shrubberies and copses, especially such as adjoin parks and well-timbered farm lands. We had Jays nesting more or less commonly close to our residence, in the shrubbery attached to Meersbrook Park—a famous spot for birds five-and-twenty years ago, before the

builder appeared upon the scene and before it became one of the public parks of Sheffield. Here was established a fine rookery, and the densely wooded grounds round what is now the Ruskin Museum were the favourite haunts of Thrushes and Blackbirds, of Redwings and Bramblings during winter, of Greenfinches, Bullfinches, Titmice, seclusion-loving Warblers, Flycatchers, Robins, Wrens, and other birds. For many years this half-wood half-shrubbery was our constant resort. The wary Rooks got to know us most intimately, and never left the treetops or made any unusual noise or disturbance as we wandered under the nests. But let a stranger venture near and all was commotion and uproar at once. The sable fellows would not allow me a companion; and whenever I walked beneath the nest-trees accompanied by a friend the birds would be sure to raise a prolonged chorus of protesting cries. We never knew a spot where more birds came at nightfall during winter to roost amongst the evergreens. For years we used to conceal ourselves in some favourite spot and watch the interesting ways and doings of these mixed avine hosts as they settled themselves to rest. In spring and summer it was equally favoured as a nesting-place. Fortunately all bird-life here was respected; every species was safe and welcome within this fair domain; it was a sanctuary, a place

of refuge for all birds irrespective of their ill-deeds, their bad or shady characters. No gun was ever fired within the sacred fences, and the birds could live their happy lives in peace. Small wonder then that the Jay took kindly to such a haven of safety and seclusion; and it was always a source of delight to watch the troops of young birds and their parents, that in summer-time used to troop about the underwood, patches of gaudy colour amongst the green, and noisy and impudent as is ever their wont. In the earlier years of our experience an odd Pheasant or two dwelt in this spot and added to its interest; their disappearance was a sign of that coming change that was to find its culmination in the more or less complete banishment of bird-life from this chosen spot.

Sherwood Forest, especially in the Dukeries and round about Edwinstowe, was also another favourite woodland haunt of ours. Here, however, the conditions were somewhat different. Game reigned supreme; the deity of the woods was the Pheasant, and less favoured birds were harassed and persecuted by the keepers. Notwithstanding this there is a good deal of bird-life in the forest of surpassing interest to the ornithologist. For instance, one of the most interesting colonies of Jackdaws in our islands is established there. The birds have taken possession of the hollow and ancient oak-trees—

many of them mere shells of bark, yet outwardly presenting a green and vigorous appearance and bearing their heavy crops of acorns in the autumn—which for a thousand years or more have stood in sunshine and storm upon ground made classic by Robin Hood. Indeed, it requires little stretch of the imagination to repeople these forest glades with the sturdy outlaws that tradition says dwelt amongst them once upon a time, in open defiance of the authorities, and fed sumptuously upon the deer and other game with which the Forest abounded. Then the oak trees were in their prime; now they are gnarled and knotted and wrinkled, loaded with dead branches, and full of hollows and crevices, the result of countless storms and tempests. The adaptive Jackdaw has not been slow to seize upon such an advantageous spot, and has multiplied apace. Many hundreds of nests may be counted in one comparatively small area of the forest, and some of the tree-trunks are literally choked with sticks from root to summit, the accumulation of more years than any of us can remember. Scattered amongst these Jackdaws is an almost equally extensive colony of Starlings, many of these latter birds nesting in the same holes as them. We have repeatedly found that some of the largest piles of sticks contained no nest at the top—as if the original owners had finally succumbed to old age, yet not before they had

hoarded and left as a monument to their many years of industry a cart-load or more of nest materials. We have noticed the same thing in Rooks' nests, piles of sticks a yard high or more, yet never occupied season after season, until blown out by winter gales or filched by other members of the community. The grand old timber here is also attractive to the Stock Dove; and whilst we are examining the homes of the Jackdaws and the Starlings, a Stock Dove every now and then dashes with impetuous haste out of the holes and crannies. Rarest of all, we may sometimes stumble across the home of the Tawny Owl. The keeper in this particular part of the forest takes good care that Owls shall not live in it in peace, nevertheless a fair number contrive to elude him. He had also tales to tell of Hawks (possibly Hobbys and Buzzards) that formerly bred round about his special beats, but "none of late years". More interested was he in the Wild Ducks and Woodcocks that nested up and down the forest, and much information he was disposed to impart concerning the latter birds (about which he had several theories of his own) as we used to sit in his wood-surrounded cottage and quaff his home-brewed ale, which he was never tired of assuring us would never produce any evil or intoxicating effects. Then after our chat and refreshment he would be prevailed upon to wander out into the woodlands, after first

carefully taking down from its pegs the scrupulously clean pin-fire breech-loader, and whistling to his favourite dog, and conduct us by paths only known to himself to many a secluded spot where shy birds were nesting. Here it might be a Pheasant's nest



The Woodcock.

he would allow us cautiously to approach, and peer down at the brown-mottled back of the hen bird as she quietly brooded over her numerous eggs; there a Wild Duck's nest out amongst the bracken would be pointed out; whilst on rare occasions he would wander farther abroad into the most secluded woodlands, and take us to inspect the home of the Woodcock placed snugly under the bracken and brambles.

Unfortunately, like all his class, he was dead set against "vermin" of every kind, furred and feathered, even including the squirrels that leapt about in the branches overhead. Against these he had a particular aversion, for he said they were "pestering varmints" that sucked every egg they could find. In the more open parts of the forest, where the birch-trees are abundant, we often used to find a nest of the Missel-thrush; not that there was anything specially remarkable in this, but we never saw a nest of this Thrush in Sherwood Forest without thinking of the tradition that so inseparably connects the mistletoe with it. There is no other district in our islands known to us where this parasitic plant is so plentiful; it grows in huge bushes on the poplar trees, a conspicuous object for miles across the country in the Dukeries, and the white-thorns in some spots are thickly studded with it, best seen, of course, during winter. And yet we have never noticed Missel-thrushes in any exceptional numbers in this district, nor have we ever seen them feeding upon the berries. Talking of the nest of this bird brings to mind a fact we have remarked in at least two widely different localities, and that is the number of nests that are sometimes built quite close together. Along the streams in the Rivelin Valley they used to be found in the alder-trees, perhaps half a dozen within a hundred yards

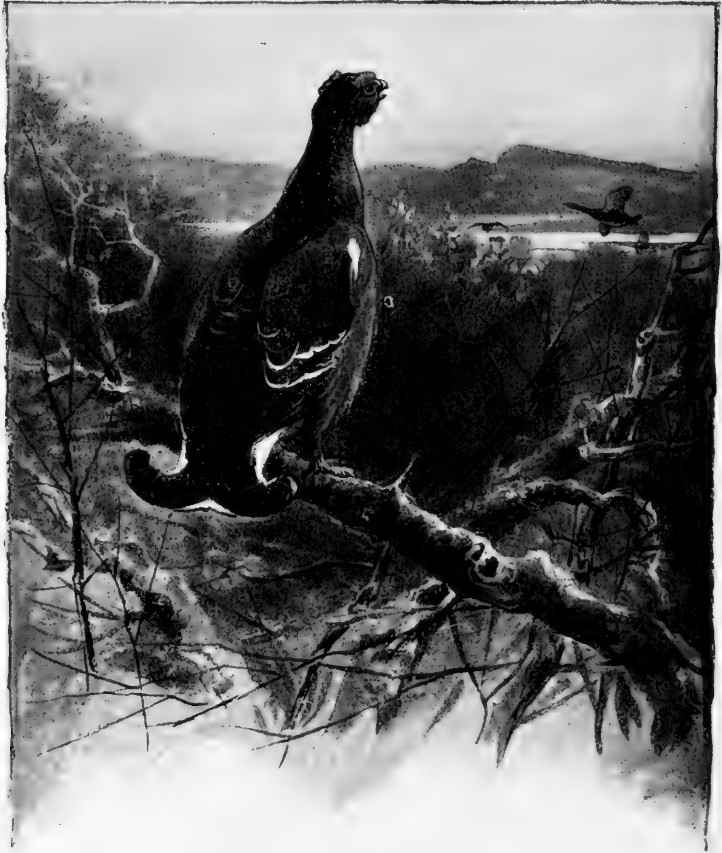
or so; whilst in the swampy corner of a wood at Norton we have remarked several nests in adjoining trees. The prettiest nests of this Thrush we have ever seen were from the Rivelin Valley, and composed externally almost completely of sphagnum moss, amongst which a few slender birch twigs were interwoven. We never found more than four eggs in the nest of the Missel-thrush, and always consider that this is the normal number, never less and never more. Indeed, the bird is as regular in this respect as the Snipes, and more so, perhaps, than any other Passerine species. The Carrion Crow, we are glad to say, still manages to maintain a place in these northern woodlands, but in not a few places he is yearly becoming scarcer. He is without doubt a sad thief and a plundering rascal, yet in spite of all his dark deeds we should be sorry to see him banished. His bulky well-made nest, to which he returns, when left unmolested, year by year, is generally placed far up one of the tallest trees in the wood. It is interesting to remark, however, that he is a much later breeder in these northern woods than in the southern shires. In Devonshire we have known the Carrion Crow commence building in March, but in South Yorkshire the eggs are not usually laid before the end of April or even in May. Farther north, as readers may be aware, this species is gradually and almost entirely replaced by the Hooded Crow a bird that

we have already noticed. Birds of the Pigeon tribe are common in most of these northern woods. Of these the Ring Dove is by far the most numerous—too numerous for the farmers in not a few localities. Until we came south we had scarcely any idea of how tame and trustful this species is when left unmolested. We always knew it as one of the shyest and wariest of birds, never allowing us to approach it within gunshot unless it thought itself unseen, and best shot from an ambuscade in the woods or during the evening when it came to certain favourite spots to roost. Gamekeepers shoot a great many of these birds from the rough platforms in the woods erected to scatter food upon for the Pheasants. The Stock Dove is not so common, but this is perhaps because it is not so conservative in choice of a haunt, and is therefore scattered over a much wider area. In some parts of South Yorkshire and North Derbyshire it is known as the “Rockier”. We have few other birds that adapt themselves to such a diversity of haunt, from the dense woods to the bare warrens, quarries, and ocean cliffs. Both these birds are breeding right through the spring and summer, well into the autumn. On the other hand, the Turtle Dove is a summer visitor only to the woods; but it is a local and somewhat scarce bird so far north as South Yorkshire. We know it breeds regularly in the well-timbered country about

Bawtry; we have seen it in the Wharnccliffe Woods, and occasionally in suitable spots in North Derbyshire. It rarely reaches this northern fringe of its British habitat before May, but in Devonshire it may frequently be seen at the end of April. Its migrations, however, are somewhat rapid, for there is not much difference between the date of arrival in northern and southern counties alike. This Dove, like the Jay, loves woods with plenty of undergrowth and fields that are surrounded with tall uncut hedges full of trees. Its noisy love-cry in early summer we always think is one of the most pleasing sounds of the green woods, but unfortunately one that is not very frequent in our northern shires. Its migration south begins in September.

Of the Game Birds of the woodlands we shall have little to say. The Pheasant, of course, is the most familiar of all; comparatively few observers are fortunate enough to meet with the magnificent Capercailzie, and the Black Grouse is scarcely common enough to be classed as a well-known one. We often think it would have been better had the Romans left the Pheasant to its continental home, for indirectly its introduction to our islands has caused many a beautiful indigenous bird to suffer persecution. The Pheasant is by no means a harmless bird; it works a good deal of mischief amongst the crops, as many a poor struggling farmer knows; it

would probably become extinct in a few years were it not strictly preserved and its numbers increased



The Black Grouse.

by artificial means; whilst it has been the cause of more ill-feeling, crime, and absolute human bloodshed than any other bird in the British Islands.

The price we pay to maintain this alien amongst our avifauna is a high one; its presence is purchased at the cost of countless numbers of indigenous birds of greater and more effective beauty; its protection is made an excuse for the incessant butchery of some of our most interesting species. The introduction of exotic species into any country is sure, sooner or later, to affect some portion of the native fauna in a disastrous way; and yet there are writers—deeming themselves naturalists—who urge the introduction of various gaudy exotic birds, as if our woods and fields were not ornamented sufficiently by what is normally there, and which surely have the right to live—all Game Birds notwithstanding. We hear of no crusade against Hawks, and Owls, and Crows, and such like species in wild uncivilized countries, and yet winged game is always abundant—at least until man and his breech-loader comes upon the scene; and we maintain that our indigenous Game Birds would well hold their own if all vermin were left in peace, and would be the healthier and stronger for it. The alien Pheasant we are not quite so certain about; but if not able to maintain itself against such enemies, then these islands would be all the better without it.

More interesting to the naturalist in these woods of the northern shires are the Woodpeckers. All three British species are represented in them, but the Green Woodpecker, the largest and showiest of

all, is decidedly the least common. Curiously enough the exact reverse is the case in many a southern shire; in Devonshire, for instance, we may see more Green Woodpeckers in a week than we might see in a year in not a few of our northern woods. The two Spotted Woodpeckers are none the less interesting, however, although unfortunately they are much more difficult to discover, and apt to be thought much rarer than they really are. The Lesser Spotted Woodpecker is by far the most restricted in its distribution; indeed, we doubt if it is found at all north of Yorkshire. The Greater Spotted Woodpecker ranges a little farther north, but we are very near its normal limits in this direction in Yorkshire. It is somewhat remarkable that the forests of Scotland are devoid of Woodpeckers; whilst Ireland is equally unfortunate, none of the three species being known to breed there. This seems all the more extraordinary when we know that all three species breed up to much higher latitudes on the Continent, the two Spotted species going up to or beyond the Arctic circle, the Green species to a higher degree than the Shetlands. We have met with the Lesser Spotted Woodpecker in very small copses, and even in gardens and parks. During winter both species may be met with amongst timber, which they never frequent during the breeding season; in fact, they are given to wandering, and may be detected during the cold

months in almost every description of well-timbered country. The habits of these birds are very similar, and they all breed in holes, and lay shining white eggs. Rarer and more local still is the curious



The Greater Spotted Woodpecker.

Wryneck, a summer visitor only to our islands, and finding no habitation at all in Ireland. Its arrival in most places is usually coincident with that of the Cuckoo—hence in not a few localities it is known as the “Cuckoo’s Mate”. Here again we have a bird that is much overlooked, its chaste and sober colouring (yet exquisitely beautiful in detail) and its shy and

retiring ways and love for the timber all assisting in its concealment. The Wryneck is something of an anomaly. Internally it resembles the Woodpeckers (the Wrynecks form a sub-family of the Picidæ); its plumage is mottled and dusted and pencilled like that of a Nightjar; its tail-feathers are soft and flexible; it rarely, if ever, climbs the timber, and hops about the slender branches like the typical Passeres. These external characteristics are, however, quite in harmony with its ways of life.

Among the more familiar Passerine birds of the woodlands we may first allude to the Titmice. They are the special small birds of the trees, and every British species—if we exclude the abnormal Bearded Titmouse—is found amongst them. Not only so, but the northern woods in certain parts of Scotland are the exclusive home of the Crested Tit—a bird that we saw on one occasion near Sheffield. Few woods in our experience more abounded with Titmice than the birch and alder coppices along the Rivelin Valley, especially in autumn, and invariably mingled with them at that season were flights of migrant Goldcrests. Allied to the Titmice we also have the soberly arrayed little Creeper, and the more showy plumaged Nuthatch. The latter, however, is exceedingly local in our Yorkshire woods, and we are not aware that it breeds to the north of the county, or that it is found at all in Ireland. The

Nightingale penetrates as far north as the Plain of York, perhaps exceptionally beyond, but it is rare enough in the neighbourhood of Sheffield, and we never had the good fortune to meet with it there during a residence of nearly twenty years, although we know the Sedge Warbler has not unfrequently been mistaken for it. A member of one of the allied genera, however, is common enough, we mean the gay and lively Redstart—the showiest, perhaps, of all the migrant band. In the coppice just above Bell Hagg the Redstart was very common. The Wheatear bred in the quarries there, but the Redstart loved the range of rocks that ran bulwark-like along the valley above the copse. We used to find its nest in the crevices of these rocks, as well as in holes among the birch-trees. We remember one nest in a decayed birch that contained eight eggs ranged neatly round in rows; another beneath the rock, at the top of Blackbrook, that bears an inscription to the effect that upon it Elliott the “corn-law rhymer” used to sit and write his poetry. Both Redstart and Wheatear are only birds of summer in our islands, the latter arriving perhaps a week before the former, in April. The three species of Willow Wren must also be included in this brief résumé of bird-life in the northern woods. Commonest of this charming trio we must class the Willow Wren. Our northern woods from April

onwards are a specially chosen haunt of this delicate-looking little bird. It abounds in most, from the borders of the moors right up to the suburbs of the grimy northern manufacturing towns, and its sweet little refrain is one of the most familiar songs of the spring. Next, perhaps, in order of abundance we should place the Wood Wren, the largest, and at the same time the showiest of the three species. It is interesting to know that for more than two hundred years we have records of the Wood Wren in what are now the western suburbs of Sheffield. Francis Jessop of Sheffield sent an example of the Wood Wren to Willughby, and Ray published a description of it in his *Ornithologia*, one of the earliest works dealing with British birds. The Wood Wren is the most attached to the woods of all the three species, and its peculiar shivering "song" is a familiar sound from the tree-tops throughout the spring and summer. Lastly, we have the Chiffchaff, certainly the rarest and most local of all. In the south-west of England the reverse is the case, and there its monotonous cry may be heard from the close of March onwards to September. It does not, however, reach the northern shires until the first or second week in April, although we have a Sherwood Forest record for March. All these birds build more or less domed nests, usually on the ground, and often in woods (the Chiffchaff some-

times makes its nest some distance from the ground), the Willow Wren and the Chiffchaff lining theirs with feathers, but the Wood Wren contents itself with fine grass and hair. The Wood Wren is the latest to arrive towards the end of April, and departs the earliest in autumn; the Willow Wren leaves us in September, the Chiffchaff not unfrequently lingering on into October. It should be remarked that not only the Willow Wren but the Chiffchaff are not by any means confined to woods, but are equally common in gardens, orchards, hedgerows, and thickets.

CHAPTER VI.

IN FARM AND GARDEN.

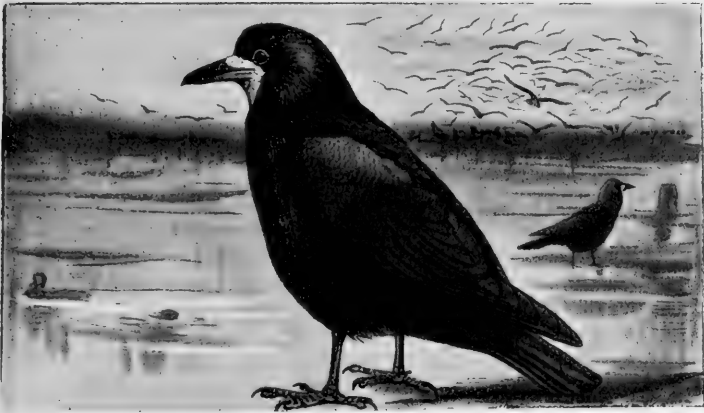
ONE of the greatest charms about bird-life of the farm and garden is its great variety. Any person who cares to go the right way to work can acquire a very fair ornithological education in such places, a large percentage of our best-known birds being found in them at one time of the year or another. It was our good fortune for a great many years to ornithologize upon several hundreds of acres of farm land of the most diversified character; whilst an additional advantage was the fact that we had to contend with no high-farming, the greater portion of it being worked on the good old slovenly plan—weedy corners, long stubbles, uncut hedges, and general untidiness—so attractive to birds. Almost every possible description of cover could be found. We had high ground, sheltered valleys, wooded bottoms, plenty of timber in field and hedge-row, trout streams and sunk fences, patches of bog, and great thickets of briar and bramble in unused corners; large stackyards, plenty of old sheds and buildings, some of them covered with ivy, and an abundance of evergreens round about the homesteads,

which were in some cases surrounded by orchards and old-fashioned gardens. We have only to add that large woods adjoined here and there, together with smaller plantations and shrubberies in some of which rookeries were established, and also that gamekeepers were absent and much of the surrounding property was unpreserved as regards game, to complete the brief description of an ideal haunt for wild birds. Unfortunately we lived long enough near this avine paradise to see much of it destroyed, turned over to the builder, and bird-life banished. Those who remember the quaint old village of Heeley (now, alas! a suburb of Sheffield) in the days before the railway, when the mail-coach passed through twice a day and caused the only commotion, when the old flour-mill driven by water, with its tree-surrounded dam, stood where the railway-station does now, may perhaps recall the matchless sylvan beauty of Meersbrook, the Banks, and the old hall at Norton Lees. Much of it now has been transformed into a wilderness of bricks and mortar. There are many other similar spots about the northern shires in which the annual cycle of bird-life is much the same—at least we have found it so—and in the present chapter we propose to outline some of its most salient features.

Perhaps the most familiar birds of the open fields, especially in spring, are the Rooks. They may be

found on every kind of field in turn. They visit the grass-lands, especially when manure is being spread; they are constant companions of the ploughman's team, and search furrow after furrow as the bright share turns over the brown earth; whilst all the newly-sown patches are sought for any seed that may chance to be within reach. In seed-time Rooks are certainly troublesome, and usually one or two of the marauders have to be shot and hung up from stakes on the scene of their misdeeds as a warning to the rest before the pilfering ceases. And yet happy is the farmer that has a rookery within easy distance of his land. The birds will increase its value and fertility by ridding pasture and arable land of countless insect pests, and for nine or ten months out of the twelve wage a never-ending war upon the real enemies of his crops. Many farmers we have known will admit that the Rook is of service; others have been converted into staunch friends of the bird after we have satisfied them by ocular demonstration of the number of wire-worms a healthy hearty Rook will devour in the course of a morning. Very beautiful these birds look in their purple-black plumage, almost as polished as bright steel, in the sunlight as they walk about the ploughed fields and pastures. And then their home in the cluster of elm-trees yonder is a place fraught with interest if full of noise. Towards the close of

February, or, if the weather be still inclement, not until the beginning of March, and at least a fortnight or three weeks later than in Devonshire, the Rooks begin to tidy up their big nests in the slender branches at the tree-tops. Others, less fortunate,



The Rook.

commence to build entirely new nests. But this building is by no means universal for a week or more; the mania for collecting sticks and turf has not yet spread through the entire colony, and numbers of birds may be seen looking on with indifference at the efforts of more industrious neighbours. What a noisy animated scene the old rookery is for the next month, until the eggs are laid in the big massive nests; then there is comparative quietness until the young are hatched, when the noisy clamour begins again with greater volume until nestlings

and parents get on to the adjoining fields. They return in many cases to the nest trees to roost, and then each evening the din is deafening as troop after troop of tired birds come straggling in from all directions and caw themselves hoarse before dropping off to sleep in the tall trees.

Another familiar bird of the farm is the Starling—a species that does not reveal its beauty unless examined minutely. There are few birds in this country more gorgeously arrayed with metallic sheen than a fine old cock Starling in the full flush and vigour of spring plumage. His lemon-yellow bill at this season also increases the effect. As harmless as it is useful, it keeps close company with the Rooks, although it shows little inclination to follow those birds on to the arable land; it loves the grass fields and manure heaps, being somewhat of an unclean feeder. Then it always selects a covered site of some kind for nesting purposes, being most adaptive in this respect. We used to place boxes for its accommodation in the trees; and we have known a disused pigeon-cot fastened to a high wall packed to its utmost capacity with nests. Few birds are more attached to their breeding-place. For many years a pair of Starlings bred in a hole in a tall elm-tree in one of the fields. From this nest we actually obtained forty eggs in a season, and sometimes for a couple of years in succession

the birds did not succeed in raising a brood. Every summer the Starlings of the entire district gathered into one or two large flocks, and these came evening by evening to roost in a cluster of whitethorns until the late autumn, when they changed their quarters to the evergreens close by. Another thing that endears the Starling to us is its perennial song. Few other song-birds make so much fuss over their music as the Starling. Action of some kind seems always essential to vocal effort; and the way he erects almost every feather, or sways about or stands in some grotesque attitude, during his periods of song is most entertaining. The House Sparrow is another familiar bird of the farm and garden. Unfortunately he is far too common for most farmers, especially in the vicinity of large towns and villages; and the way these pilfering birds will thresh out a field of wheat or oats is literally surprising. Friends of the Sparrow, usually utterly ignorant of its habits and the serious mischief it can do, cannot understand the farmers' indignation, and are always protesting against its wanton slaughter. But then there is reason in all things, and in grain-growing districts the bird should be kept down. The boy with his clappers amongst the corn may, if he conscientiously sticks to his work (and this rarely happens), keep the vast flocks of Sparrows on the move, but the birds will gorge themselves with grain mean-

time; whilst shooting round the fields is little more effective, for the feathered thieves soon desert the hedge-sides and settle in the centre of the crops, where it is next to impossible to dislodge them, or to alarm them by repeated discharges of the gun. The Sparrow nuisance is philosophically endured by many farmers, and regarded, like the weather, as beyond their control. In some cases we have known farmers absolutely cease growing corn at all because the birds take such a large proportion of the crop! Here the usefulness of the Sparrow-hawk becomes only too apparent, but the keepers shoot that bird down—every one they can reach—and the Sparrows have things all their own way.

There are many other birds of the Finch tribe frequenting farm and garden. The Chaffinch, one of the handsomest of all, is also one of the commonest, and his sprightly song is one of the most cheering harbingers of spring the fields can boast. The resumption of song by the Chaffinch offers an interesting contrast between the habits of individuals of the same species in northern and southern shires respectively. In Yorkshire the music of this bird is seldom or never heard before the first week in March; in Devonshire it is familiar enough in the early days of February, and may sometimes be detected towards the close of January—a remarkable instance of the effect of climate upon avine song.

Another thing we have remarked in this species, and that is its much handsomer nests in Yorkshire than in Devonshire. We never found much garniture of paper, lichen, and cocoons on nests in the latter county; in fact, the faculty of mimicry does



The Brambling.

not seem so pronounced in these southern individuals. During winter the northern shires are invaded by vast flocks of Chaffinches, presumably from continental areas. Upon their first appearance in November these flocks are almost entirely composed of males; the females arrive later, and before the winter is over the sexes are more or less intermixed. The Brambling, of course, we have as a winter visitor only. We have repeatedly remarked the

regularity with which this bird returns to certain winter quarters. For years and years we have known flocks to arrive in November—practically about the same time as the migratory Chaffinches—and take up their quarters in certain woods and shrubberies, where they used nightly to roost throughout the winter, spending the day on the surrounding open fields. Redwings also frequented the same places in similar large companies, the natural inference being that all these birds were from the same continental localities, and followed the same route inland from the coast, although the latter birds were always the first to appear towards the end of October. The Bullfinch we have always with us, but in small and apparently decreasing numbers. For this the rascally bird-catcher is largely to blame. To the naturalist there are few more irritating persons than a bird-catcher. We would sooner tolerate a shooter, for he at least kills the bird and has done with it, and the discharge of his gun at intervals makes the birds alert and wary. But the bird-catcher by his sly insinuating methods will carry off a dozen birds where a gunner might not get more than one. He is at his nefarious business early and late in a certain spot so long as he knows a single bird worth catching remains in it. His nets close upon all birds alike—birds he prizes and birds he cares nothing about, cocks and hens and young

indiscriminately; all are caged and carried off, to a worse fate by far, in most instances, than sudden dissolution from a shot-gun. It is true the bird-catcher must ply his wretched business with due regard to an all too brief close time; but this in not a few cases he ignores, and thus still further constitutes himself the scourge of the fields and hedgerows. We invariably remarked that Bullfinches retired to the cover of shrubberies and gardens to breed. During the remainder of the year they kept to the hedgerows, especially such as contained plenty of weeds beside them, almost invariably in pairs, one bird trooping in undulating flight after the other, and both made very conspicuous by the white rump. The Hawfinch was much rarer. This shy bird loves the small plantations, but in fruit time comes into the gardens near its usual haunts. We should class it as perhaps the most local of the Finches (with the possible exception of the Siskin) in the northern shires of England, whilst north of these it seems almost everywhere to be a winter visitor only. During winter flocks of Crossbills are occasionally met with, but they are no common feature of the bird-life of farm and garden in Yorkshire or Derbyshire. The Tree Sparrow is another very local and uncommon species, and especially during the breeding season. We have records of odd nests made in holes in trees on some of the farms, but we find it

more frequent in wilder localities. In winter it sometimes visits the farmyards, and we have noticed it mingled with flocks of Lesser Redpoles on the stubbles and clover fields in late autumn. The Linnet, with its close allies the Twite and the Lesser Redpole, are familiar winter visitors to the fields, wandering about in flocks, each usually composed of a single species. As we have already seen, the Twite is a common bird in summer upon the moors; in autumn it leaves them in companies for the fields. In its habits the Linnet is very similar. All the winter through large flocks—sometimes numbering many hundreds of birds—resort to certain weed-grown pastures and stubbles, where they spend most of the day upon the ground in never-ending quest of tiny seeds. If alarmed, they rise somewhat in straggling order, but quickly bunch together and resort to some tree-top, from which they again descend in scattered numbers. Their twittering chorus whilst in the trees is very remarkable, and the observer will note that this becomes much more musical and prolonged as the spring approaches. The birds then quit the fields and retire to the higher ground gorse coverts and roughs near the moors where they breed. The Lesser Redpole, to our mind, is the most charming of the three. It is, of course, most numerous on our Yorkshire and Derbyshire farms during winter, when it

congregates upon them in flocks that frequent much the same localities as the Linnets and Twites. But it is not exclusively confined to these spots, as we shall see in a later chapter (conf. p. 189). Many odd pairs of Redpoles linger behind on these northern farms to breed, making their exquisite little cup-shaped nest in the hedges towards the end of May. This pretty nest, combined with the short pleasing song of the male bird, and the utter trustfulness of both sexes, summer and winter alike, endear the Redpole to us in a way that few other species do. It is decidedly a bird of the northern shires, becoming rarer and more local through the midlands, and only breeding here and there farther south. Both Goldfinch and Greenfinch also require passing notice. The former bird is another that has been almost exterminated by the rascally bird-catcher; still, it is observed in sufficient numbers to render it familiar in many a garden and hedgerow. Perhaps they are most frequently remarked during winter, when, in pairs, they love to haunt the weed-grown wastes and the sides of the fields where thistles and docks are abundant. The Greenfinch is much more common, but here again we remark a change of habitat with the season, the birds quitting the open fields for shrubberies and gardens as the breeding season approaches. Notwithstanding this, however, a good many nests are made in the hedges in the fields, in

the whitethorn by preference. We have also found many nests of this Finch placed at high elevations in elm-trees, especially about the farm lands. Occasionally a Siskin may be remarked in company with Redpoles on the stubbles and wild weed-grown pastures, but as a rule this engaging little species confines itself to the trees along the river-side during its winter sojourn in Yorkshire, and there we shall meet with it in the following chapter. Some of these Finches, those that breed within the limits of farm and garden, betake themselves to the fields of mowing grass in June, the House Sparrow especially; and then when the hay is cut or the wheat and oats are sufficiently forward they pass on to the corn-fields to renew their depredations.

From the Finches to the Buntings is not a very great stride in avine classification, and the latter birds are common enough upon the farm. That is to say, a single species only, during summer, namely, the Yellow Bunting. The Cirl Bunting is absent from the northern shires, and the Common Bunting is far more local than his name suggests, occurring most frequently in the maritime localities. In winter we have the Snow Buntings in localized flocks upon the fields, very capricious in their appearance, and sometimes not being seen for several years in succession. We can recall a very large flock of these Buntings that frequented some pasture fields at End-

cliffe, quite close to grimy Sheffield, but unfortunately they were sadly reduced in numbers by local gunners during the winter of their stay. The Reed Bunting also visits the farm during this season, and we have from time to time detected them amongst the ricks with Sparrows and other hard-billed birds in severe weather. The Yellow Bunting, however, is the one familiar Bunting of the farm in most parts of Yorkshire and Derbyshire. It is one of our showiest native birds, and, as is usually the case, what it gains in colour it loses in melody. There are few bird-songs of the field and hedgerows more monotonous than that of the "Yoldring", as the Yorkshire lads call him, and yet the oft-repeated refrain has a genuine ring of spring about it. This song usually commences about the beginning of March in the north of England, but in the southern counties it is not unfrequent in February, another instance of climatic influence. We all of us know the yellow-crowned musician, sitting on the top of the hedge or in some wayside tree, trilling his simple lay; we most of us know his rustic nest on the bank of the hedgerow, and his mate's four or five curiously-scrawled eggs—a peculiarity which has gained for him the local name of "Writing Lark" in not a few country places. There are also many birds of the Thrush tribe to be met with in farm and garden—indeed every British species might be included, if we except the Ring-ouzel; but

even that one is occasionally seen on the meadows and about the fruit-gardens on its way to and from the moors where it breeds. Song Thrush and Missel-thrush and Blackbird frequent almost every hedge and field at one time of the year or another, nesting commonly in these places, the Stormcock showing the only partiality for the trees. Then in autumn—in October—comes the Redwing from Scandinavian fell and forest, followed in November (sometimes as early as mid October) by the Fieldfare from the same far northern lands, both species frequenting farm and garden alike, the former delighting in the wet meadows and grass-lands, the latter showing a stronger preference for the hawthorns, holly-bushes, and other berry-bearing trees. By the end of September the Missel-thrush has gathered into flocks of considerable size. But this gregariousness is continued for scarcely three months, and for the remainder of the winter the birds live in pairs or small parties, or attach themselves to companies of Fieldfares. We find a marked difference in the duration of the melody of the Song Thrush between birds inhabiting the northern and southern shires. In Devonshire, for example, this Thrush warbles throughout the year, except during the moult; in Yorkshire it may be heard to sing in September (chiefly young birds), and occasionally in October, but during the three succeeding months it

remains mute, resuming its song the following February. It is interesting to remark that the Blackbird in both northern and southern shires does not regain its song after the moult until the following February, and even then, in both latitudes, it is by no means a regular or a constant singer before March. Indeed the Song Thrush is to a very great extent migratory in the northern shires, its place being partially taken by the Redwing. In South Yorkshire, as I remarked twenty years ago, the birds are almost all gone early in November. They return, sometimes in companies, by the end of January or the beginning of February. There is also a very marked decrease in the number of Blackbirds in the late autumn, the birds reappearing early in February. Possibly some of the Song Thrushes migrate into the south-western counties, and to this fact is due the exceptional abundance of this species in Devonshire during winter.

Leaving the hedgerows and the trees for a time we shall find the hay-meadows contain several interesting birds. One of the most easily recognized of these is the Whinchat, a bird that is somewhat rare and local in the south-western counties, but widely and commonly dispersed over the northern shires of England; in Scotland it again becomes somewhat local. We usually detect it clinging to some tall dock plant, meadow-sweet, or stem of cow-

parsley, where it sits and utters a sharp double note, resembling the syllables *x-tx.* at intervals, jerking its tail meanwhile. Its mate may be seen sitting in



The Sparrow.

a similar manner on another stem not far away, and when disturbed they flit from stalk to stalk about the field. These birds are only seen in England during summer: they arrive in the southern counties about the middle of April, but do not reach the south

Yorkshire hay-meadows before the end of the month or even the first week in May. Their pretty nest is snugly hidden amongst the long meadow grass, a simple structure of dry grass, lined with a few horse-hairs, and the half-dozen eggs are turquoise-blue, with just the faintest indication of a zone of pale-brown spots round the end. Incidentally we may remark that the Whinchat is also a frequenter of the gorse coverts and the moorlands. In the late summer, when the brood and parents are about the fields, they resort to the corn, and even feed upon it; but the farmer need not be alarmed at their visits to the grain, for they destroy a countless number of injurious insects during their stay in the fields as an ample recompense. A Whinchat we once dissected, shot on the 29th of April, was crammed with small beetles, ants, larvæ of the drake-fly, and several centipedes. In July and August the Whinchat is moulting, and by the third week in September it has departed with its young to the south, although it prolongs its stay into October in Devonshire. These smiling meadows and grain-fields are also the summer home of the Tree Pipit, from April onwards to September. This species also rears its young in a slight nest amongst the grass, the cock bird spending most of his time before the eggs are hatched in a series of song flights from some favourite tree. We knew a Tree Pipit to return for many years in succes-

sion to a sapling oak growing in a hedgerow, and to use one special branch from which to soar and sing throughout the early summer. These birds also frequent the corn-fields, and eat the soft milky grain, but their usual food consists of insects, worms, and grubs.

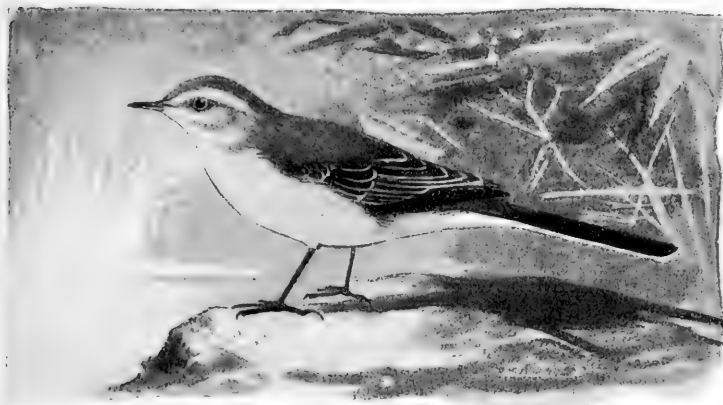
Another well-known summer visitor to the meadows and corn-lands is the Landrail, known almost as generally as the Corncrake. Few persons there are that do not know the rasping, monotonous double cry of this bird, and yet few people ever see a Corncrake all their lives, and still fewer, perhaps, could describe or identify it. Its note is almost as familiar as that of the Cuckoo, and equally characteristic of spring and early summer. There is something romantic about this rasping cry, that sounds almost all night long from the meadow grass. The bird itself is rarely seen; it runs through the dense herbage with astonishing rapidity, and should it by chance disclose itself to our scrutiny, it is seldom imprudent enough to repeat the action. And yet the Corncrake is not quite such a skulking bird as some would make him. When all is quiet he not unfrequently wanders out of the hay-meadow through the hedge into the barer pasture beyond, sometimes running a score of yards into the open field; but at the least alarm he is off back again and soon concealed amongst the weeds and long grass in the bottom of

the hedge. Rarely indeed is he flushed even by the aid of dogs; we have known him perch on the top of a thick low hedge when put up by a collie. He flies slowly and in a somewhat laboured way, with his long legs dangling down, and all his efforts seem directed into reaching cover of some kind. The hay harvest in July is a cause of much disturbance to the Corncrake. As the mowers or the more modern mowing-machine lay swathe after swathe of tall grass its haunts become more and more restricted; the brooding Crake at last slips quietly off her nest alarmed at the approaching scythes or rattle of the machine, until at last her home with its numerous eggs is left bare and desolate. We have known her to remove her eggs in the course of a night and place them amongst still standing grass, but the end eventually was just the same. Probably this destruction of nests during hay harvest is responsible for the diminishing numbers of this species in not a few districts. But if the cutting of the grass brings ruin to some birds it also brings an abundance of food to others. These are the Thrushes and Starlings that may then be seen on the shorn fields busily in quest of snails and worms. The Corncrake calls no longer; perhaps the old birds retire to the clover, the standing corn, or even to the turnip and potato fields, and about these places they skulk for the remainder of their stay, and then return broodless to

the south. No wonder their return in spring seems to be in fewer and fewer numbers. The Sky-lark is more fortunate. It breeds in much the same localities as the Corncrake, but nests earlier, so that the young are generally able to fly before the mowers enter the fields. Speaking of Sky-larks we may mention that large flocks of this bird appear upon certain suitable fields in the late autumn, remaining throughout the winter. These birds are from the Continent, and come to our isles in that vast tide of migration that sets westwards across Europe from the far East in October and November. The birds always prefer high ground, and we have remarked this choice in the southern counties as well, and seldom wander far from a district during their stay, except under the pressure of continued snow-storms. They invariably return to the usual haunts when the ground is clear again.

At least two species of Wagtails are common birds upon the fields and pastures of the northern shires. The Pied Wagtail is perhaps the most familiar, although both this bird and the Yellow Wagtail are more or less migratory. Perhaps these birds are most interesting when they congregate in large numbers upon the ploughed fields in March, and run to and fro with dainty steps about the heels of the ploughman and his team. We knew an old farmer who had a special liking for these pretty birds. He

knew they lived entirely on insects, worms, and such-like creatures, without professing any knowledge of ornithology. Indeed, we well remember when the old boy heard that we had just published our first book on bird-life, *Rural Bird-life: being Essays on*



The Yellow Wagtail.

Ornithology, how he paused one day at his work in the fields and solemnly put the question: "Charley, what is this 'Ornithology'; is it a new religion?" We confess to feeling fairly nonplussed at such a remark, and did our best to tell him, with as serious a look as we could command, the proper meaning of the awful word. Poor old White, at a ripe age, has been gathered to his fathers. He was one of the most tolerant and philosophic farmers that we ever met, and we dwell thus affectionately upon his memory; for we were always welcome, boy and man,

to wander about his land at all times and seasons without let or hindrance, and study the birds upon it to our heart's content. But to return to the Wagtails. The Yellow Wagtail is the most closely attached to the fields and pastures of the two; it may often be seen running amongst the cattle, and is a numerous visitor to the fallows in March. Both in spring and autumn Wagtails gather into flocks and migrate thus together. The Pied Wagtail is very fond of nesting in a hole in the wall of some outbuilding, and will tenant one spot with great regularity season after season. The Yellow Wagtail is perhaps the least aquatic in its habits, as the Gray Wagtail is the most. Both Magpies and Jays are also very frequently observed upon the fields searching for worms and grubs; whilst the fleet-winged Swallows and Martins during their summer sojourn fly over many times every acre of the farm, and, as most readers know, are extremely fond of rearing their broods in or on the buildings attached thereto. We never met a farmer who would allow these birds to be molested. Happy birds! They at least are secure in the farmers' friendship, and not even the gamekeeper can say a word against them. The Cuckoo is much less fortunate in this respect; the farmer, we honestly believe, has a genuine love for the bird, and delights to hear its loud and happy voice across his fields, for it tells him that winter is passed, and that better

times are approaching both for man and beast. The gamekeeper knocks it over with an oath, and fills its tuneful yellow bill with blood, because it not only looks like a Hawk, but he is "sartin sure" that it turns into one for the winter!

The turnip fields in autumn are always a favourite resort of birds. They are not only the last of the cover left upon the farm, but they abound with food for various species especially. They are the one spot where the migrant Pipits, Thrushes, and even Warblers can always be certain of a meal, to say nothing of an odd Woodcock now and then and the last lingering coveys of Partridges. Even in winter the birds are fond of such a retreat. On many farms the turnips are left in the ground—especially the white variety—until they are wanted for the cattle; the ground is soft and moist, and abounds with food the small birds desire, whilst the broad leaves are a shelter.

Then in late autumn the Jack Snipe once more appears upon the few square yards of bog beside the pond where the cattle drink, or in the sunk fences which usually become rills during the wetter portions of the year. This little bird, we know, breeds upon the Scandinavian fells, and yet it will return winter after winter to the very centre of England to some square yard of bog on a South Yorkshire farm, coming and going so quietly that no man may say exactly

when it arrives or departs, and living here for months in this warm corner in the fields, in solitary state, a recluse waxing fat in its solitude. Then winter comes round once more. All the summer birds of farm and garden are far beyond the seas; new birds are here from other and sterner lands. The snow-storms come, and the birds congregate in rich variety about the ricks and farmsteads; flocks of Lapwings cross over the fields bewildered and forlorn; the Moorhen leaves the frozen pond and fraternizes with the poultry; the Larks disappear from the snow-drifted high lands; the Fieldfares congregate in the hawthorns, the Redwings starve. At night the scene becomes even more interesting as half-frozen birds seek roosting-places in the ricks and amongst the ivy; yet amidst frost and snow the Robin and the Wren, and perhaps the Hedge Accentor, carol forth an evening song. The snow melts; the once green pastures are brown and withered; scarcely a fleck of green relieves field or hedgerow, the birds scatter on to the open ground again, and so the northern winter runs its course. How different in the warmer southern county, where all is green, and the visit of winter so light that it is scarcely felt by bird or beast!

Garden bird-life is too familiar to require much detailed notice here. The garden hedge we know is always sure to contain one of the first Hedge

Accentors' nests of the year; whilst the Wren is as certain to select the ivy on the wall in which to construct her ball-like abode. The Robin as surely returns each spring to rear its young in some hole in the wall itself. Amongst the fruit trees the Titmice and Flycatchers have their favourite nooks and crannies, and the Redstart has returned as long as we can remember to the hole in the old pear-tree. One bird, however, that frequents the gardens of the northern shires is specially interesting to South Yorkshire naturalists. This is the Garden Warbler; and its exceptional interest centres in the fact that the bird was first described from an example obtained near Sheffield—possibly in the immediate neighbourhood of Broom Hall—and sent by Francis Jessop to Willughby, the co-worker with Ray nearly a century and a half ago, the latter naturalist describing it in his *Ornithologia*. It is the “Pettichaps” of Latham, a name, according to Professor Newton, that had not become obsolete in 1873 in the vicinity of Sheffield, although we never heard of it being applied to this species during a residence there of some twenty years. It is a late migrant, seldom reaching its Yorkshire haunts before the beginning of May, and, as its name implies, is very partial to large gardens. Its habits somewhat closely resemble those of the Blackcap; and of all the Warbler band its song is only inferior to that of

this species. Its nest is frequently made in a currant or gooseberry bush, a flimsy little structure enough, made of dry grass stalks and roots and lined with horse-hair. The eggs are very similar to those of the Blackcap, and four or five in number. During fruit time this Warbler is often to be met with in the garden feeding upon currants and other berries. It is most secretive in its habits, usually betraying its whereabouts by its sharp call-note of *tec* or *tac*. Its food consists of insects, larvæ, and most kinds of soft fruit and berries. It leaves Yorkshire in September. There are many other birds that visit the gardens in the northern shires for fruit or vegetable food. In cherry time the Blackbird and the Starling are troublesome enough; the Ring-ouzel visits the gardens near the moors for a similar purpose. Then the Hawfinch and the Jay have a great weakness for green peas; whilst the small Finches play havoc amongst the newly-sown beds. Kestrel and Sparrow-hawk, however, often visit such localities too, the former for mice, the latter for birds.

Before finally leaving the farmstead we ought to give a passing word to the Barn Owl. This bird is not so abundant now in many places as was formerly the case, but it must still be regarded as common in most parts of the northern shires. There are not a few farmers, we are glad to say,

who fully recognize the merits of this useful bird, worth more than half a dozen cats in any farmstead, and requiring no keep whatever. These birds are specially fond of the tall-roofed barns where nothing intervenes between the rafters and the slates or tiles, where little daylight ever enters, and where ready means of getting out and in are presented. There are farms where the Owl is quite an institution, where no one ever thinks of molesting it, and where its peculiar noises and nightly wanderings create not the least curiosity. In fact, the bird is regarded as part and parcel of the barns, a useful adjunct to the cats and village rat-catcher, and a good many times more effective in ridding buildings and land of some of their most annoying pests. We need scarcely state that the Swift is a well-known summer visitor to farm and farmstead. We shall have occasion to allude to this bird again in a future chapter (conf. p. 271).

CHAPTER VII.

BY RIVER AND POOL.

BROADLY speaking, the northern shires are remarkably well-watered; not only by a network of rivers, but by an almost endless succession of pools and lakes, canals and dams, the latter to some extent being due to the necessities of the vast and busy centres of manufacture and commerce. Bird-life in great variety and of exceptional interest is to be found upon these rivers and pools and along their banks and margins, and again presenting us with not a little room for comparison with that frequenting similar localities in more southern counties. Here again we miss some birds that are familiar farther south; we find others that are rarer, or less known there. Unfortunately too many of these northern waters are polluted, especially in their lower reaches and in the immediate neighbourhood of towns, by drainage and factory refuse of various kinds. Rivers that run in their higher reaches over moss-grown stones and sandy beds, clear as crystal, and fringed on either bank with brushwood and timber, become little more than open sewers as they pass the big centres of manufacturing life. The

waters are stained as with ochre from the filthy "wheel swarf", and poisoned with refuse from dyes and sundry chemicals. Yet even in these forbidding places bird-life is not altogether absent, and from time to time Wagtails, Pipits, and such-like species may be remarked on passage even in the centre of so grimy a place as Sheffield. Above the towns where the water still runs clear, and some miles below them where the sediment has settled and the water again become more purified, these canals and rivers are favourite haunts of birds. Then far away amidst rural scenes there are many meres and clear pools where Nature is still undefiled by man; in some of the suburban areas there are clear still mill-dams, which drive the grinding wheels, and which are yet so pure that trout live in them in abundance.

Now, even about such a prosaic spot as a mill-dam there is usually not a little to interest the lover of birds. That refulgent avine gem, the Kingfisher, is a frequent haunter of the shuttles, and the dyke just above and below the sluice. We have seen this bird perch on a branch sticking out of the shallow water at the far end of a mill-dam and plunge again and again into the pool in chase of minnows, and not fifty yards away a dozen sturdy Sheffield grinders were hard at work astride their stones in the hull which resounded with the fitful deafening roar and

screech as the metal met the grindstones so familiar to such a spot. Where the horsetail reeds grow up in a dense forest of dark-green from out the



The Kingfisher.

shallow parts of the mill-dam, the Moorhen is often common enough, and rears its young from a floating nest some distance from the bank where only boats can reach it. This latter species is much more familiar than the Kingfisher, and it is astonish-

ing how the Moorhen will continue to haunt such a spot long after the entire aspect of it has been changed. We know of dams, once surrounded by gardens and fields, now almost hidden by houses and workshops, where this bird still lingers and breeds every year, amidst a never-ceasing din from water-driven tilts and forges. The series of dams in the Endcliffe Valley, one following the other through a succession of picturesque woods, and united by a broad stream, all situated in the western suburbs of Sheffield, were a very favoured haunt of birds. There can be little doubt that a century and a half ago Francis Jessop used to search this valley for ornithological information; from that day to this not a few of the birds that are intimately associated with his name continue to frequent the place. Here may the Kingfisher be watched, gliding like a spot of blue across the water and up the wooded stream, which is a favourite resort of the Gray Wagtail. Then the fringe of alders by many of these Yorkshire pools and rivers is a favourite resort of Titmice, Redpoles, and Siskins. Nowhere in the northern shires does the alder flourish better than here; its wood is used to make the clogs—or wooden-soled shoes—so universally worn by the mill hands, colliers, and poorer classes of Lancashire and Yorkshire. During its growth, here by the river-side, its seeds are a great attraction to these little birds. The

Siskin is one of the most interesting of them. We often met with it in company with Redpoles, espe-



Titmice.

cially in many parts of South Yorkshire, which locality it visits during winter. We never found a

nest in the county, although we believe the Siskin has been known to breed therein, as well as in many other counties farther south. As previously remarked, the favourite summer home of the Siskin is the pine-woods of Scotland. Very engaging these birds are in the alder-trees, as they cling in almost every possible attitude and pick out the seeds. They also visit the birch-trees in the same localities, and here they are sometimes joined by a company of Bramblings. These larger and heavier-looking birds are equally at home amongst the long slender twigs, hanging head downwards like a Tit or a Goldcrest, and swaying to and fro like animated pendulums, all the time keeping up a chorus of twittering notes. Possibly the Brambling is a life-paired species, for we have often witnessed various little marks of affection between the sexes during winter. The Titmice are equally engaging. Five out of the half-dozen British species may be met with singly in parties or in mixed companies amongst the alders and birches along the river-side, each one with its characteristic note and all with the acrobat-like ways that ever make them so amusing. These remarks more specially relate to autumn and winter; in spring they scatter far and wide to less riparian haunts to rear their young in spots that fancy or necessity requires.

In autumn many of these mill-dams are recognized

gathering-places of birds of the Swallow tribe. In August and September Swallows and Martins in countless hosts congregate over them, flitting to and fro in a mazy throng the livelong day, preying upon the swarms of gnats and midges hovering above the surface. These birds are thus foraging where they have been wont to do for many previous autumns previous to starting off to a winter haunt in Africa. Then in winter not a few shy and rarer birds are attracted to these open sheets of water, Ducks and Geese and even Wild Swans paying them visits as they roam about the country. There is a fine example of Bewick's Swan in the Weston Park Museum at Sheffield, which was shot from a mill-dam close to the town, an exceptionally favoured spot, for Ducks and various other strange fowl are by no means rare visitors during the winter months. Our sombre little friend, the Sand Martin, loves these dams and reservoirs, and delights to tunnel into the steep banks to make its nest. Numbers of Sand Martins so do at the reservoirs at Hollow Meadows, for instance. The Pied Wagtail delights in such spots, tripping daintily round the water's edge in quest of insects, and building its nest in some hole in a wall or about the hulls. We have seen the nest of this species in a crevice of the masonry supporting the heavy cumbersome water-wheel, and not many inches from it, with its continuous splash

and roar. Now and then such an unusual bird as a Stormy Petrel or a Gull visits them; whilst during migration time in spring and autumn the Ringed Plover, the Dunlin, the Wigeon, the Teal, and the Pochard are all known to alight occasionally near or upon the dams and reservoirs of South Yorkshire. Coots, Water Rails, and Spotted Crakes either frequent some of them all the year round or visit them from time to time.

The bird-life along our canal banks if somewhat sparse is by no means uninteresting. In rural districts one of the most familiar species is the Reed-bunting—not inaptly named by some observers a “Riverside Bunting”. We can recall how very common this bird was along the water-side and about the towing-paths of the canal just outside Walton Park, once the famous seat of Charles Waterton, the old-time Yorkshire naturalist. The bird is by no means a shy or a timid one. It will sit and await your approach, watching you with uneasy flicks of its tail as it clings to some willow twig or reed stem, then start off in dipping flight for a little way to wait again. Finally, as likely as not, it returns to its original haunt, flitting just above the surface. The cock bird is readily identified by the black head and throat, and white cheeks: in the hen these parts are reddish-brown streaked with darker brown. Its song is very similar to that of the better-

known Yellow Bunting, consisting of a double note several times repeated and finishing up with a short spluttering trill. In Yorkshire this song commences early in April, sometimes at the end of March, and continues into the late summer, when the moult arrests it. During winter this Bunting often wanders from the water-side, and then we have seen it in the stackyards, but at no time of the year is it ever so gregarious as the Yellow or Cirl Buntings. Flocks of this bird have been recorded from Red-car towards the end of September, and there is other evidence to suggest that our resident individuals are increased in numbers by migrants from the Continent. The first nests of the year are usually made by the end of April, and are placed on or near the ground, amongst a tuft of rushes or amongst the dense vegetation on the banks of the canal or pool. Externally these are made of dry grass, moss, and scraps of aquatic vegetation; inside they are lined with finer grass and hair. The eggs are from four to six in number, olive or buff in ground colour, streaked and spotted with purplish brown and gray. It is worthy of remark, however, that the intricate penciling so prominent a feature in the eggs of the Yellow Bunting are absent, the lines being shorter and broader and the spots larger and rounder. One might fancy that they had been put on with a quill rather than with a steel pen. Both Pied and Gray

Wagtails are familiar objects on the towing-path; whilst among the vegetation near the water the Sedge Warbler has its summer home. This latter bird arrives here in April and leaves again in September. The Reed Warbler is much more local in Yorkshire, although it is known to breed at Hornsea Mere and one or two other places. In the back-waters of the canals, amongst the reeds and flags, both Coots and Moorhens have their residence, whilst the Little Grebe, if not quite so familiar, owing to its more skulking habits, is by no means rare. It is rather surprising what small pools of water will in some cases content a pair of these amusing little birds, whilst it is equally noteworthy how often this species is entirely overlooked. Possibly their alertness and partiality for cover to some extent explains it. Least showy, as they are the smallest, of all the British Grebes, they are often mistaken for a rat or even a fish; certainly they are as much at home in the water as the latter. Towards the end of March they build a bulky floating nest among the flags and rushes, composed of dead and rotten stalks matted and heaped together, the half-dozen white eggs (stained brown almost as soon as laid) resting in a shallow hollow at the top. The marvellous celerity with which the sitting bird covers her eggs with weed when the nest is approached must be familiar to every bird's-nester. A great many of the chicks

are destroyed by hungry pike, and to this, perhaps, must we attribute the fact of its seldom increasing in numbers, even in localities where it is never otherwise molested. As a rule the canals are too deep to admit of birds obtaining much food from their margins; but the insect life that flits over the surface is sought by Swallow, Martin, and Swift.

We must include a brief visit to the fish-ponds in the present chapter. There are many of these scattered about the parks of our northern shires, and not a few of them are frequented by birds in plenty. Most readers will remember what a paradise for aquatic birds the lake at Walton Hall became under the loving care of the famous old Yorkshire naturalist; how the birds used to flock there in winter and join the resident population that dwelt in that valley of peace. And this, mind, at no great distance from populous towns and villages, in a country filled with collieries and workshops, crossed by railways, and many miles from the coast. It only shows what can be done if we encourage and protect the birds that visit us. Many a picturesque old fish-pond we can recall in Yorkshire and Derbyshire—spots where the deep water teemed with fish, and the big elms and horse-chestnut trees almost swept the surface with their spreading branches, high up in which the Rooks and Herons reared their young. Amongst the clumps of iris and flag that grew so

luxuriantly in the shallows Coot and Moorhen made their nests, and their broods of black downy chicks might be seen paddling about the broad flat leaves of the water-lily and the candock, or resting and sunning themselves on the floating vegetation. The steel-blue Swallows and Martins come from the adjoining meadows and park to dart to and fro with shrill twitter, and thread their way beneath the drooping branches of the chestnuts gaily ornamented with their noble spikes of fair yet evil-smelling bloom, like miniature candelabra. The Herons all day long fly up and down from their nests in the tree-tops to and from the shallows, where the roach are an easy prey. How stately the big gray birds look standing so solemn in the shallows! With what patience they wait and watch and finally strike, sending that formidable spear-like bill into the doomed fish, which is quickly disposed of with a grunt of satisfaction! Now and then the Kingfisher's radiant beauty is reflected in the unruffled water as he glides across; at intervals a shy Water-rail or a Grebe sails timidly out from the rushes, dives at the least alarm, and the scarcely-ruffled surface indicates the quick return under water to the sheltering greenery. In winter these ponds are often visited by Wild Ducks, Wigeons, and Teals, with sometimes much rarer fowl. Indeed, the very uncertainty of what might be found was one of the greatest attrac-

tions of such a spot. Here also dwell the stately Swans, half-domesticated it is true, yet none the less ornamental for that. These birds mate for life, and are apparently much attached to each other. They always select the tiny islet in the pool for their domestic arrangements; and on this in April they construct a big nest of straw and sticks and other rubbish, in which the hen bird lays her massive pale-green eggs. At first the young birds are brown and dingy looking; nor do they acquire that pure white dress characteristic of their parents until the following autumn.

In a previous chapter we dealt at some length with the bird-life of Sherwood Forest. We will now return to that area in order to make a brief survey of the birds that frequent some of the pools in the vicinity of the Dukeries, round about Clumber and Newstead. It would be difficult to find a more suitable place for Ducks throughout the length and breadth of England than some of the charming rush-fringed ponds that are such a feature of this part of Nottinghamshire. They afford plenty of cover and food, not only the ponds themselves but the streams and marshes by which many of them are joined together, and above all they are well watched by vigilant keepers, so that the birds are practically safe from molestation during the nesting season. Here may the habits of the Tufted Duck be studied

to perfection. This bird is an old friend of ours; we have seen much of it in more southern haunts, especially during the non-breeding season. Most if not all the Tufted Ducks leave Devonshire for more northern haunts in spring, but in the Dukeries they



The Tufted Duck.

are to be seen throughout the year, apparently in undiminished numbers. There can be little doubt, we think, that this Duck pairs for life; certainly it may be seen in company with its mate summer and winter alike. During winter the birds are sociable and gregarious, and the fact is not so readily remarked, but as spring draws on they separate more, and from that time onwards to the laying season live almost exclusively in pairs. The nesting season

of this Duck varies a good deal according to locality. In southern haunts the duck commences to lay at the end of April or early in May; in North Notts the birds are at least two or three weeks later. The nest is frequently made in a tuft or tussock of sedge, amongst long grass, or beneath a small bush. It is merely a hollow lined with a little dry vegetation, but as the eight or ten eggs accumulate, the duck surrounds them with a bed of down plucked from her own body. These eggs are greenish-buff in colour. Tufted Ducks are most expert divers, and feed much towards evening, during the night, and early in the morning. By day they may usually be seen swimming lazily about, preening their plumage, and now and then sleeping, as they float buoyantly upon the water far out from shore. The Mallard is also a common bird about these ponds and pools. We have already seen that it not unfrequently nests far from water amongst the more open parts of the grand old forest; but nevertheless a fair number of birds frequent these pools for domestic purposes. The Shoveler is also present, in much smaller numbers, and hides its very similar nest in much the same sort of places. Its nine or ten eggs are, however, pale buffish-white, with a faint tinge of olive. The tame and confiding little Teal—smallest of all our British Ducks—is also a common resident in this district. We cannot say

whether the Pochard breeds here or not. We have seen it during autumn and spring, perhaps on passage only; but it certainly breeds in Yorkshire at Hornsea Mere, in the East Riding. We have also remarked several of the above-named species on the beautiful ponds at Newstead Abbey, once the classic home of Byron, during the early summer months, so that some of them may breed in this immediate neighbourhood.

Returning now to the rivers of our northern shires, we will briefly glance at one or two birds that are specially associated with such water-ways. Here in Yorkshire, Dipper, Gray Wagtail, and Heron may perhaps be the most familiar birds, but to our mind the Kingfisher is the most distinguished, and from some points of view the most interesting. We always think a special charm attaches to birds that have a place in ancient history, or that are surrounded by more or less classic legends and superstitions. The Kingfisher is one of these. From the very earliest times of which we possess any record, the bird, for some reason that to the modern mind does not seem always very clear, has figured largely in myth and superstition. Some of these are by no means wanting in poetic imagination. Legend, for instance, accounts for the beautiful colour of its plumage in the following amusing way: When the Kingfisher was liberated from the Ark it was a

plain gray-plumaged bird, but flying towards the sun it became of the same hue as the sky on its upper parts, whilst its lower parts were scorched by the solar rays to the chestnut tint they now are. Fable is also curiously associated with the domestic arrangements of the Kingfisher, mid-winter being given as the date of its reproduction. Ovid tells us that during this period Æolus, the god of wind, exerted his influence, so that the tempests were quieted and the sea remained calm, upon which the floating nest might remain in safety for the seven Halcyon Days. As old Shakespeare has it:

“This night the siege assuredly I'll raise:
Expect Saint Martin's summer, halcyon days”.

—*Henry V.*

We also find under the term Halcyon (another name for the Kingfisher) in Minsben's *Dictionary* the following quaint passage bearing on this fable: “A bird called also Kingfisher, because she fisheth in the sea, and casteth herself with such force at the fishes. She conceiveth in the sea, and in it she brings forth her young—and that in chill and cold weather; and meanwhile the heaven is serene, and the sea tranquil, nor agitated by troubles of winds. Hence those serene days are called Halcyon-days.” Superstition attributed to the Kingfisher not a few virtues. For instance, Lupton, three hundred odd years ago, in a book entitled *A Thousand Notable*

Things, &c., writes: "A little bird called the King's fisher, being hanged up in the air by the neck, his neb or bill will be always direct or straight against the wind. This was told me for a very truth by one that knew it by proof, as he said." Possibly the superstition widely prevailed at that remote date, as four years later Storer, in his *Life and Death of Thomas Wolsey, Cardinal*, gives it thus:

"As a Halcyon with her turning breast
Demonstrates wind from wind, and east from west".

Marlowe (*Jew of Malta*, i. 1) has another rendering of the superstition, thus:

"But now how stands the wind?
Into what corner peers my Halcyon's bill?
Ha! To the East? Yes! See, how stand the vanes?
East and by south."

It is interesting to remark that the quaint old superstition is not quite dead, even at the close of the nineteenth century! We have on more than one occasion come across country people in Yorkshire and Derbyshire who have assured us that the dead body of the Kingfisher, if hung up by a thread, will turn its beak in the direction of the wind then prevailing. Mummified Kingfishers were also believed to be a charm against thunderbolts, and also a preservative against clothes-moths. Professor Newton informs us in his *Dictionary of Birds* that in many islands of the Pacific Ocean the indigenous King-

fisher (of various species) is an object of much veneration.

Surely after these few extracts from some of the many legends in which the Kingfisher is involved the gem-like bird acquires a greater interest as we watch it passing like a gleam of blue light along the river. Even in our own day there is not a little fiction and absurdity gathered round the nesting habits of the Kingfisher. We are told that the bird is careful to make a nest of fish-bones for its eggs; this is a widely prevailing idea among persons who should know better, such as keepers, fishermen, and bird-nesting boys, for their experience is generally personal. Perhaps appearances have fostered, if they have not absolutely originated this belief. The Kingfisher pairs for life, and returns in most cases to the same place to nest season after season. This nest is usually in a hole, in many cases in a steep bank overhanging the river, and generally excavated by the birds themselves. Very often, however, a rat's hole will be selected and various trifling alterations made to suit the new tenant. The hole almost invariably slopes upwards from the entrance, and is from three to four feet in length, enlarged at the end into a kind of chamber. The birds, it should be remarked, resort to this hole to roost, and frequent it generally long before the eggs are laid, so that a collection of bones, decaying fish, and droppings accumulates in

the chamber. Upon these fish-bones the six or eight pearly-white eggs are deposited, surrounded in course of time by a heap of most offensive matter. When the young are hatched the place becomes even more filthy, owing to the increased amount of droppings and the number of fish brought for their food. We are not aware that more than one brood is reared in the season, although several clutches of eggs will be laid in the efforts to accomplish this, if the eggs chance to be destroyed. Not a few persons believe the Kingfisher to be mute; but this is not the case. Its note is shrill, but not very loud, and resembles the word *peep*, sometimes uttered several times in quick succession. It is not, however, by any means a garrulous bird, and usually flies along in silence. By the way, we might mention that the Kingfisher is by no means the only bird of gay plumage that as it were fouls its own nest, for the Hoopoe, a handsome bird with a wonderful crest, possesses a nest which, during the course of incubation, is rendered filthy and obnoxious from the droppings of the female, conditions which become worse when the young are hatched. How different this from the cleanly habits of the Starling, for instance, that conveys the droppings of its young away most carefully, usually after every visit with food.

As many of the rivers of the northern shires approach the sea they widen into estuaries, the shores

of which are the resort of a great variety of bird-life. The Humber and the Tyne on the east coast, the Solway, the Lune, the Ribble, and the Mersey on the west coast of England are capital instances of such. The mud-flats up to tidal limits, often extending many miles inland, are favourite feeding-places of large numbers of wading birds, not only during the two seasons of migration, but throughout the winter months. In summer these places are more or less uninviting; the birds are scattered far and wide, not only over our own uplands and inland waters, but beyond the seas on arctic tundras; in early autumn the birds appear again in small numbers, and as that season advances become increasingly numerous. When these birds of mud-flat and sand-bank depart, little else is left but an occasional Gull, or possibly a laggard wading bird or two that from some reason or another have not migrated with their companions. We might, however, mention that in or near the beds of some of these northern rivers the Ringed Plover breeds. In spring and autumn companies of Terns hang about these estuaries; the Sandwich, Common, Arctic, and Lesser Terns appear from the middle of April onwards; their return is noticed during August and the first half of September. These dates are nearly coincident with those at which we notice these birds in the Devonshire estuaries, save that in autumn the migration

continues into October, and during some years is even prolonged into November. Sanderlings, Curlew Sandpipers, and Knots, birds that migrate amongst the latest in spring and breed in the high north, are some of the first to reappear in autumn, even at the end of July or early in August. Common Sandpipers, as their name suggests, are abundant during their short stay at the mouths of these northern rivers previous to passing south. In the Humber district especially, vast flights of Dunlins often appear upon the mud-flats towards the end of August, and remain for the winter. When the rising tide drives them from the muds, they often resort to the fields to wait until the ebb. The movements of these birds are most interesting, as a vast flock wheels and spreads out or closes up with as much precision as drilled troops. Scattered amongst them are many odd Stints and Sanderlings and Ringed Plovers. Curlews, Whimbrels, and Bar-tailed Godwits also appear about these estuaries during migration time, and some of them remain upon them throughout the winter. At the latter season Ducks of various species are regular visitors. Some of these, however, keep well off the land out at sea, only entering the river mouths during rough weather, or at night for the purpose of feeding in the shallower water. One of the most familiar, perhaps, is the Scaup; the Pochard is another, with a much more

marked preference for rivers; the Pintail is a third. Companies of Swans from time to time may be observed, usually consisting of Whoopers, and much more rarely of Bewick's Swans.

During the migration season in spring, and more especially in autumn, these northern river-valleys are frequented by great numbers of land birds on their way to more northern and eastern breeding-grounds in Continental areas, or returning south and west to winter in our islands or to cross over them to warmer latitudes. These northern rivers are exceptionally favourable for migration, so many of them trending in the same general direction as the birds are bent on following. Vast numbers of migrant small birds follow such river-valleys as the Tees and the Humber, on their way into Yorkshire, Notts, and Derbyshire, by way of the Don and its tributary streams. It is unnecessary here to dwell upon these species in detail, for we hope to go much deeper into the matter when we come to a study of the migration of birds in the northern shires. We have gathered much evidence in support of this migration during a residence of many years at no great distance from the Humber and certain valleys in direct communication with that important estuary—next, perhaps, in interest, so far as bird-life is concerned, to that still more wonderful locality the Wash, a little lower down the coast.

CHAPTER VIII.

ON SEA AND SHORE.

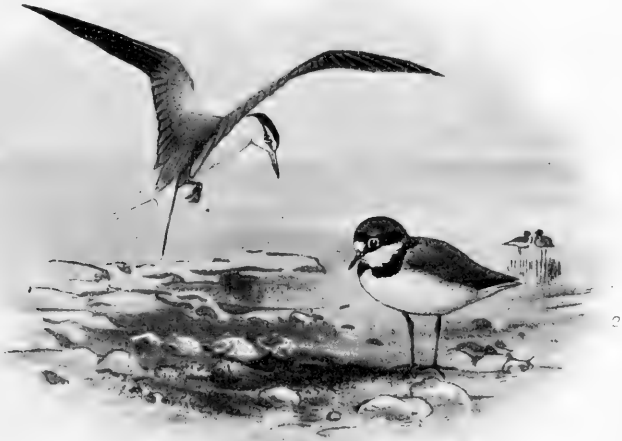
IT is the bird-life of sea and shore especially that renders these northern shires so much more interesting than the littoral counties of the south and west. Compared with these the southern coasts seem tame and deserted, indeed. This is principally due not only to the fact that so many marine species breed in northern areas only, but also to the much greater strength of migration generally along the coasts. All along the coast from Lincolnshire northwards to the Firth of Forth, and onwards to the Hebrides, St. Kilda, the Orkneys and the Shetlands, we have vast and varied bird populations, not only scattered up and down the shore, but congested here and there where the sea-fowl in unnumbered hosts congregate to rear their broods. The southern counties present us with nothing approaching to this; the wealth and variety of the marine avifauna of the northern shires is one of the most pleasing of their many characteristics.

For the sake of comparison we may here state that along the entire coast-line of South Devon—embracing some of the finest cliff scenery in Eng-

land and full of sandy reaches, rolling downs, rocky islets and stacks, and lengths of shingle and sand—there are but two typical marine species (at most three, if we include the doubtful Oyster-catcher) that breed, and one only of these, the Herring Gull, in any numbers; the other, the Ringed Plover, is local and nowhere numerous! But how very different is the case when we get round the English coast as far as the Wash and enter that area which for the purposes of the present work we describe as the northern shires. Let us follow this line of varied coast, with its alternating lengths of sand and shingle, buttress-like cliffs, rocky shores, and islets round to the Forth, and briefly glance at the several species that frequent it and breed upon it in succession. We will, however, leave for a future chapter the birds that are more strictly confined to the sea cliffs, and deal with those only that nest either along the flat shores or low rocky islands.

The first two species that we shall meet with during summer on the sandy reaches of the Lincolnshire coast are the Lesser Tern and the Ringed Plover. The first-named of these is a summer migrant and a late one. We remark it passing up the Devon coast early in May; it reaches its breeding-places by the middle or the third week in that month on the Lincolnshire and Yorkshire coasts, but is later still in Scotland. The return passage is

made towards the end of August and through September. Incidentally we may remark that not only this but the other British species of Tern often continue their migrations at night. We have frequently heard the well-known note sounding from the



1. The Lesser Tern.

2. The Ringed Plover.

darkened air as flocks of these birds passed north or south along the coast, a short distance from shore. The Lesser Tern breeds in May. It makes no nest, but deposits two or three eggs upon the bare shingle, in spots where the debris of the shore is large—pebbles, broken shells, and the like—not on the fine sand. We may remark that we have taken as many as four eggs in a clutch from this part of the coast. The eggs are very difficult to see on the rough

shingle, and during our search for them the distressed little birds flutter and beat about the air uttering their shrill note incessantly, peering down most anxiously, yet displaying no increased alarm when they are actually found and taken. It is a most unfortunate circumstance that this Tern prefers the coast of the mainland to an island for breeding purposes. To this fact its absolute extermination is largely due in not a few localities. There can be no doubt that the three or four other British Terns would have shared the same fate, and become rare and local long ago, in England especially, had they not bred in much less accessible spots, as on the Farne Islands, for instance. Upon the same coast the Ringed Plover also breeds. This bird is a resident in the British Islands, but subject to a good deal of local movement during autumn and winter. We shall find, however, that it always prefers to deposit its four pear-shaped eggs upon the finest brown sand, where scarce a pebble or a shell can be seen. The reason for this curious choice is because the eggs are only spotted, not blotched, and therefore they best resemble such a resting-place as is chosen for them. They would be much more conspicuous upon the shingle where the Tern's eggs rest. Both eggs have a buff ground-colour closely resembling the sand, but those of one bird are heavily marked to harmonize with shingle, those of the other finely

spotted to imitate grains of sand. These birds, again, evince little or no anxiety during our search for their eggs; they seem fully aware that the best policy is to leave them to the safety ensured by their protective coloration. They are laid in Lincolnshire in June, and fresh eggs of both species may be got together during that month; and during the day-time the nearly vertical sun renders incubation scarcely necessary. Both these species may be found breeding here and there along the shore right up to the Humber, and from Spurn still farther northwards until the coast assumes a more rocky character as we approach the famous Flamborough headland. When we reach the rocks a little Passerine bird makes its appearance, and this is the Rock Pipit. As its name implies—and it is a most appropriate one—the bird is only found breeding on a rocky shore. Given this, its distribution round our entire coast-line is a very general one. It breeds as commonly on the rocky shores of Devon as on the Hebrides and the Farne Islands; but there are no Rock Pipits on the flat coast-line between the Thames and the Humber. We meet with it again, however, here on the Yorkshire coast, and cannot easily mistake it, for it is about the only small bird that dwells in such a haunt during summer.

Travelling northwards again until we reach the coast of Northumberland, where between the towns

of North Sunderland and Berwick we shall find another length of shore of great interest to the ornithologist. Indeed between these two points are situated the famous Farne Islands, the grandest and most imposing haunt of sea-birds round the entire English coast. On the mainland, nearly opposite to the Farne Islands, there is a long reach of sand dunes between the sea and the cultivated land, and these are frequented by at least one bird of exceptional interest. We may dismiss the Gulls that beat along in restless flight, and pay small attention to the Common Buntings that here justify their name, and for the time being confine our observations to the Sheldrakes that haunt this part of the coast. These sand dunes are an ideal locality for such a bird. Should the tide chance to be out, more likely than not this species will be detected upon them. It is a shy and wary fowl, though, and we need the aid of our powerful binocular to bring it within range of much detailed scrutiny. This Duck is to our mind quite the handsomest of its family in our islands, a combination of very pronounced black, white, and chestnut, with a dash of crimson and pink on bill and legs thrown in. You may watch it thus through your glass walking in a somewhat stately way, not waddling like a more typical Duck; but should you attempt a much nearer scrutiny the big bird unfolds its broad

party-coloured wings and seeks a more secluded resting-place. Should the time be high-water, and the blue sparkling sea reaches almost up to the links, most probably a few Sheldrakes will be observed flying over the water up or down the coast. The flight is very characteristic, unlike that of the true Ducks, more like that of a Goose or a Swan,



Sheldrakes.

the wings moved up and down with slow measured strokes, so very different from the rapid beats of the bird's Anatine relations. In this species the sexes are very similar in colour; indeed the chief external difference is the absence of the frontal shield from the female. Following the almost universal law, this conspicuous hen bird takes good care to conceal herself from enemies during the critical period of incubation, and lays her eggs at the end of a long and often winding burrow in the sand. In this particular district a rabbit hole is almost invariably selected, and some of the chosen burrows are so intricate

that we may spend hours in the fruitless search for the exact position of the nest. This is usually made at the end of the burrow, and consists in the first place of a handful of dry grass—possibly a rabbit's old abode; but as the creamy-white and fragile eggs accumulate (to the number of a dozen or sometimes more) the old birds surround them with down of exquisite softness and lavender-gray in colour. As is generally the case where both sexes are showy, and incubate in covered or concealed nests, the male bird takes his due share in the duty of hatching; but so careful are the birds in relieving each other—usually at morning and evening—that they seldom betray the whereabouts of the nest. The young birds, soon after being hatched, quit the burrow and betake themselves in their parents' company to the sea-shore. In this locality the bird is certainly becoming rarer owing to the way the young are captured and the eggs taken by fishermen and others. We once inspected an entire brood of a dozen ducklings that a fisher lad was rearing at Seahouses. He had them confined in a small pen and fed them chiefly upon sand-hoppers, which they were marvelously adept at capturing as he threw them down one by one amongst the downy little creatures. From Holy Island right round to the Forth, this Duck may be met with breeding, preferring in the latter locality the numerous sandy islets. Round

the coasts of Scotland it becomes even more numerous and widely dispersed.

We will now retrace our steps to the Farne Islands and make a brief inspection of such birds that build their nests on the flat surface, reserving the cliff-haunting species for our next chapter. Repeated visits to these islands only increase their charm. A single visit is bewildering, renewed acquaintance impresses their wonders upon us and enables us fully to realize the grandeur of the scene and more completely to enjoy the avine wonders of the place. Apart from their bird-life, there is a strong human interest clinging to them, for Grace Darling casts a halo of romance around them by her daring deed long years ago, and which is still a stock subject for conversation up and down the coast. These rocky islands lying a few miles off the shore are nowadays almost a perfect sanctuary for sea-birds. This was not always so; for we can recall the time when the eggs especially were gathered in such a wholesale way that the wonder is there were any sea-birds left there. Strict protection is now the rule, and visitors are generally kept under such close supervision that the lifting of an egg without permission is almost an impossibility. There are, of course, a good many birds on and off these islands at all times of the year; now and then, especially in winter or during migration

time, a rare straggler of some non-indigenous British species appears, and the light-keepers have repeatedly assured us that at intervals the sea around them during winter often swarms with Ducks and other northern birds. It is, however, in spring and summer that the islands become crowded with their normal inhabitants—Gulls, Terns, Eider Ducks, Cormorants, Ringed Plovers, Oyster-catchers, Guillemots, and Puffins—assembled there for the express purpose of rearing their young. One of the most characteristic birds of the islands is the Lesser Black-backed Gull—in fact the entire group may be regarded as one vast colony of this species, and perhaps the most densely populated one throughout the length and breadth of the British archipelago. These birds return to the islands—coming from the south from many parts of the German Ocean and the English Channel—early in spring, but the exact date varies a good deal in different years. In some seasons they return *en masse* as early as from the middle to the end of March; in other seasons not before the middle of April. A month later they are engaged in nesting duties. The date of breeding, however, varies little, and the eggs are invariably laid during May and June. On approaching some of the islands, the first impression is that this Gull monopolizes the whole of the ground, as it occurs in such vast abundance. The air seems full of them,

the ground and bare rocks are crowded; and as our boat finally grates against the rough beach and we eagerly jump ashore all becomes noisy excitement—



The Lesser Black-backed Gull.

a perfect babel of protesting cries that is persistently kept up until we leave the place. We shall find that the nests vary a good deal in size, some being little more than hollows trampled out amongst the dense beds of campion and thrift, others more sub-

stantial and composed of pieces of turf, sea-weed, stalks of herbage and grass. The eggs are three or four in number, and subject to an incredible amount of variation in colour—greens, olives, browns, and grays of almost every possible shade representing the shell tints; browns and grays the markings, which take the form of round spots, blotches, streaks, either evenly distributed over most of the surface, scattered here and there, or forming zones round the end. Right through the summer these Gulls are employed in rearing their young, the period being unusually prolonged because so many of the first clutches of eggs are taken for culinary and other purposes. During the latter part of August and throughout September these Gulls and their young leave the islands and work their way southwards, scattering far and wide over the seas, following the shoals of herrings and sprats and other fish, some of them possibly wandering as far as the Spanish and north-west African coasts. A few Herring Gulls breed here and there among the other species, but this bird has very few large colonies in the northern shires. This is the one species of Gull that breeds on the south coast of Devon, and there its colonies are larger than any we have visited elsewhere in the British Islands. Scattered pairs, however, may be met with here and there along the coasts, and in some few inland spots throughout the northern

shires. The Kittiwake also breeds in numbers at the Farnes, but we will reserve our notice of it for a later chapter.

Next to the Lesser Black-backed Gull the Terns are certainly the most numerous and most interesting birds. Three out of the five British species return each spring to these famous islands to breed. The Roseate Tern, rarest of all the indigenous species, used formerly to breed here, but it eventually became extinct, although from time to time an odd pair or so are observed in their old-time haunts, so that the bird may re-establish itself in them, more especially as the sea-birds are now so strictly preserved there. The three regular breeding species are the Sandwich Tern, the Common Tern, and the Arctic Tern. All are summer migrants only to the British Islands. The Sandwich Tern, by far the largest of the three species, arrives at the islands during the last half of April, as a rule, but some seasons is not seen until the beginning of May. There is much in their early movements that reminds us of the actions of Rooks just previous to nesting. Every morning for perhaps a month after their arrival they assemble at the islands and stay for a short time, previous to dispersing over the surrounding sea to search for food, lingering longer and longer as the actual breeding time approaches, until they finally decide upon a spot to nest, and

about a week after this the first eggs are laid. The laying season lasts a month, say from the middle of May until the middle of June. The earliest young may be remarked about the latter date, and from that time onwards rapidly increase in numbers from day to day. July is a busy month indeed for the parent birds. In exceptionally early seasons some of the young are able to fly by the beginning of August, and by the end of the month the birds quit the breeding-place, and finally desert the vicinity of the islands during the first week in September. Sometimes the autumn exodus is made, but the birds return in a day or so and linger about the islands before finally taking their departure south. The Sandwich Terns do not always breed in exactly the same spot every season. Sometimes an exceptionally high spring-tide will wash away most of the eggs, and then the poor birds move to another situation, perhaps to another island, and try again. This happened in the summer of 1883, and we saw the beach literally strewn with broken egg-shells, the sole remains of the wrecked colony. On our way from the beach towards the barer rising ground in the centre, where the main colony chances to be established, we pass many outlying nests, not only of this Tern, but of Gulls and Eiders. Birds are rising from all parts of the ground, and gradually congregating into a dense bewildering, drifting, noisy throng

above our heads. At last we reach the colony of Sandwich Terns, and there we find for an area of many square yards the ground literally covered so closely with eggs that to walk amongst them without breaking them is almost an impossible feat, not only because the nests are but a few feet apart, but because the eggs themselves so closely resemble the ground in colour. The nests are slight enough, many of them nothing but hollows in the ground, some of them with a few bits of weed and grass loosely arranged, and chiefly round the margin. The two, or less frequently three, eggs are very beautiful objects, and vary enormously in the character of the markings. The ground colour may be any shade between rich buff and dull white; the markings are brown of many shades, and ink-gray. These latter vary considerably in shape and size, from large irregular blotches that conceal nearly a third of the shell to splashes, spots, and streaks, sometimes distributed over the entire surface, or in zones, or irregularly here and there. During the whole period of our stay the birds remain above us, fluttering and gliding to and fro uttering shrill notes of alarm.

The Arctic Tern, on an average, arrives later than the preceding species, generally about the first week in May, sometimes not before the third week in that month. A week or so elapses before the birds

finally settle down to nesting duties, so that the eggs are seldom laid before June, exceptionally during the last few days of May. As a rule the breeding season is over by August, and the bulk of the birds quit the islands in the first week of September. In later seasons they may not leave until the end of that month, and a few in rare instances linger into October. The eggs are generally laid close to the water's edge, and so far as our experience extends (and that is a rather wide one, for we have visited colonies in many parts of the British area) no nest is ever made for their reception. They are placed upon the bare sand and shingle, and upon the line of rubbish that marks the limit of the highest watermark. Two or three eggs are laid for a clutch, varying from buff to olive and pale-green in ground colour, heavily spotted and blotched with brown of many shades, and gray. Lastly, we have the Common Tern, a bird that arrives and departs at about the same dates as the preceding species. We generally found the breeding-places of this Tern at a greater distance from the water than those of the Arctic Tern, amongst the grass and sea campion on the higher parts of the island. As our boat approaches the nursery of this Tern, numbers of birds may be seen squatting on the beach or swimming about in the rock pools. These are the first to take alarm, and as we finally land others rise from the island,

and the air is soon filled with screaming birds. The colony is established on some rising bare ground, and the eggs are laid in scanty nests—hollows lined with bits of grass and stalks of marine plants. The eggs, two or three in number, very closely resemble those of the Arctic Tern, but are larger, rounder, and never appear to have any olive or green tint on the shell.

Many pairs of Eider Ducks also breed upon the



The Eider Duck.

Farne Islands, placing their nests amongst the campion and long grass, in crevices of the lichen-covered rocks, or in holes in the ruins that are to be found on some of the islets. These Eiders are remarkably tame, and allow the observer to watch them as they brood over their eggs. The male birds, however, are much shyer, and never come near the nests at all, spending most of their time upon the sea off the islands. Then the Ringed Plover breeds

here in small numbers, also the Oyster-catcher (a noisy, shy bird enough), and not a few Rock Pipits. Upon an outlying reef the Cormorants have their colony—a dirty, evil-smelling spot, which apparently by common consent is shunned by all the other species. This islet is low, not more than a dozen feet above the sea in its highest part, sloping to the water's edge on one side. Where the huge nests of the Cormorants are built there is scarcely a trace of any vegetation; everything is more or less covered with droppings, and decaying fish are strewn here and there—the whole place smelling most offensively on a calm hot day. These nests are made of sea-weed, stalks of marine plants and turf, and many are lined with green herbage. The three or four long oval eggs are pale-green, but so thickly coated with lime and dirt that all trace of this is hidden until they are washed and well scraped.

The Farnes are also a great breeding resort of the Puffin (called "Coulter-neb" by some people because its beak closely resembles the coulter of a plough), some of the islands being so undermined by their burrows that almost every few steps we sink deep into the soft loamy soil. During the non-breeding season these birds disperse far and wide over the sea, roaming immense distances from their birthplace, but as spring arrives they collect at the old familiar spots to rear their young. Puffins can-

not be regarded as common about the Farne Islands until April, but from then until the end of the following August they are one of the most abundant species at them, although, owing to their subterranean habits, the fact is not very palpable to ordinary observation. These birds excavate a long burrow in the soft soil, often extending many yards underground, and at the end, upon a handful of dry grass perhaps mixed with a few feathers, the hen bird lays a solitary egg, dull-white in colour, very sparingly marked with pale-brown and gray. When the colony is approached such birds as may chance to be above ground soon betake themselves to the sea; those in the burrows remain to be dug out before they will usually budge from their egg, resenting this by bites and scratches dealt in the most savage manner. There is something immensely ludicrous about the look of a Puffin as you drag the struggling bird into the daylight; but we would warn those who might essay the experiment to encase their hands in strong gloves, or they may repent the business. Had space permitted, we should have liked to say something about the curious transformation the beak of this bird undergoes as the pairing season approaches, but we must wait for a future opportunity. Most, in fact all, of these species breed in many other parts of the coasts of the northern shires, but we have elected to describe them here, for the Farne Islands are pro-

bably the most accessible locality and admirably situated for studying all these birds within a very small area.

The bird-life at sea off our northern shires is replete with interest at all seasons of the year. In summer, in the neighbourhood of the great breeding colonies of sea-fowl, the surrounding seas for many miles are full of animation, the birds scattering from these home centres far and wide in quest of their finny prey. What a variety of birds we meet with thus, each searching in its own peculiar way for sustenance! How varied their actions; how diversified their habits and economy! In winter these self-same waters are the home of countless birds that migrate from arctic latitudes to spend that season where food is ever plentiful and the water always open. Hordes of Ducks and Geese swell the more sedentary avine populations, or replace such species as Terns, that migrate or wander south with the approach of winter. Vast numbers of Divers and birds of the Auk tribe move south to these seas off the northern shires; Gulls in uncounted hosts do the same. At varying distances from the land armies of these sea-fowl migrate south in autumn and north in spring; sometimes for days in succession Gulls or Skuas, Terns, Gannets, Guillemots, and so on pass to and fro according to season, these avine movements being on a much grander

scale than ever we remark on our southern coast lines.

From shore, on this bright May morning, for instance, there is nothing to indicate that much of



Gulls and Terns.

special interest is to be seen among the birds at sea. From where we stand, near the old-fashioned little quay of this northern fishing village, redolent of tar and stale fish, the sparkling water right away to the headland yonder, and still beyond to the line of the horizon where blue sky and blue sea seem to meet

in an indistinct haze, is apparently deserted of bird-life. But we will get aboard this well-found taut little coble, hoist the brown sail and put her nose before the spanking breeze, and see what birds we may fall in with during a few hours' cruise. Behind the headland yonder, and at no great distance from land, a mixed company of Terns are fishing. There are few prettier sights than this amongst bird-life on the sea, especially should a shoal of fry chance to be swimming close to the surface. Above the moving mass of glittering fish the snow-white looking Terns flutter and poise and drift to and fro in a constantly-changing throng; many birds are swimming above the shoal, and every few moments one of the flying Terns drops down like a stone into the water with a splash that we can hear half a mile or more across the sea. The force with which they descend is scarcely sufficient to immerse their light bodies, and before the spray has cleared the bird is either up again into the air, or swallowing the captured fish whilst sitting on the surface. A few Gulls are flying about close by, but these birds prefer larger game; although occasionally they will chase a Tern that may chance to be passing with a tiny fish and endeavour to make the poor little bird drop its capture. Out in the offing the Gulls are much more numerous, for there the fishing fleet is at work, and the birds hover around ready to pick up any unconsidered

trifles that may chance to come in their way. A mile or so off the headland the sea is literally alive with birds of the Auk tribe that are breeding on the long range of cliffs. Here we renew our acquaintance with the comical-looking Puffins—hundreds of them swimming about, diving at intervals, preening their plumage, and disporting themselves generally. Many of them allow the bows of the coble almost to reach them before they dive with startling speed and reappear some distance ahead or astern, the first thing they do upon reaching the surface again being to look about in all directions for any possible further danger. Mingled amongst them are the Guillemots and Razorbills, the one bird easily identified by its long pointed bill, the other by its deep flattened one crossed with a conspicuous white line on either side. The Razorbill may be further distinguished by the white streak of plumage which runs from the base of the upper mandible to the eye. In the Ringed Guillemot, a form of the Common Guillemot, the white streak extends backwards behind the eye. Both birds are very similar in their actions out here at sea, swimming and diving with great celerity. Here and there small parties of one species or the other may be seen flying swiftly along just above the waves on their way to or from the headland where they are now breeding. They feed on fish—here in these northern waters young herrings and

coal-fish are favourite fare—crustaceans, and molluscs, chasing the former with great dexterity through the water, searching for the latter in soundings amongst the weed and rocks. We shall have more to say about these Auks in the following chapter. They are all resident in British seas, coming to the land in summer to breed, and during the remainder of the year wandering far and wide over the waste of waters, and then visiting coasts and estuaries and harbours where they are never seen during the season of reproduction. Here and there in our northern waters, but only off the western coast-line during summer, we may frequently fall in with Petrels and Shearwaters. These birds are the most pelagic of all, and only visit the land to breed. The Fulmar is the largest indigenous British species, and looks very like a Gull as it flies about over the water. The Manx Shearwater comes next in size, but it is a dark-plumaged bird on the upper parts, only white below. Its long wings are very noteworthy, as it skims and dashes about round our boat. The Fork-tailed Petrel comes next in point of size. This and the following species are more nocturnal in their habits, but equally as pelagic as the foregoing. Lastly we have the Stormy Petrel—the smallest of web-footed birds—perhaps the most widely and commonly distributed of all, and often met with not only in our northern seas during summer, but as far to the south

as the English Channel, in which it has at least one known nesting station. None of these birds are known to breed anywhere along the east coast of England or Scotland. The typical Petrels may be readily identified by the sooty-black plumage, relieved by a patch of white across the rump and the upper tail-coverts. These small Petrels rarely alight upon the sea to swim notwithstanding their webbed feet. They flutter often close to the big waves, and may then be seen to drop their legs downwards and to pat the water with their feet, seeming sometimes literally to run down the glassy surface of some huge roller. We shall have occasion to enter into more details respecting all these Petrels in the following chapter.

Then during the wild winter months many parts of the sea off the northern shores teem with bird-life, much of it consisting of migrants from the arctic regions. Vast flocks of Scaups and Scoters hang about these northern waters; companies of Eiders and Long-tailed Ducks especially may be met with long distances from land. Flocks of Scoters may occasionally be seen upon these waters all the summer through, and we have heard of Pink-footed Geese also apparently foregoing their usual summer journey to the north. In mid-winter large flocks of Sheldrakes frequent various parts of the North Sea, whilst Wigeon and Mallard often occur in enormous

numbers. Occasionally during winter the rare King Eider is detected in company with the commoner species. The congregations of Brent Geese (in some years but not in others) that assemble off the lower-lying coasts especially are also a feature of winter bird-life at sea. Indeed, we should state that the latter season is by far the best for birds in such a locality, for the land is then only visited under exceptional circumstances. Lastly, we might allude to the Gannet. During summer this bird assembles at a few recognized breeding-stations round the British coasts, and here we hope presently to visit them; but throughout the remainder of the year it is a thoroughly pelagic species, and wanders south down both east and west coast-lines to the English Channel and even beyond. There are few more charming sights amongst bird-life at sea than a company of Gannets when fully on the feed. Sometimes they may be watched from the shore, at others they pursue their labours far out at sea. The way the big white birds hurl themselves down into the water from hundreds of feet above is most impressive, especially if the sun is shining full upon them. Then their magnificent powers of flight are very attractive to us, as we watch them by the hour together sailing to and fro above the water at vast heights on never-tiring wings.

Space forbids but a passing allusion to the bird-

life upon the mud-flats of the Wash during autumn and winter. We shall, however, have another opportunity of dealing with this area more especially in our final chapter relating to migration in the northern shires.

CHAPTER IX.

ON CRAG AND SEA-CLIFF.

THE bird-life of the inland crags nowadays is comparatively limited, but what it lacks in numbers is to some extent made up in interest. Time was when the Golden Eagle bred on some of these inland precipices of the northern shires; when the Raven and the Buzzard made them their home. For the purpose of the present work we propose to glance at the few birds that frequent the various crags and rocks—chiefly of limestone and millstone grit—of South Yorkshire and North Derbyshire. They may be taken as typical of many similar localities in the northern shires. It would certainly be difficult to find more grandly romantic scenery than is contained in the district of the limestone rocks of the Peak—in such spacious valleys as Dove Dale, Monsal Dale, and Millers Dale, or in such savage glens as are in the vicinity of Castleton. As examples of the crags of millstone grit we have the noble range of rocks known as Wharnccliffe, that crest the valleys like a series of colossal bulwarks, below which is a sea of rolling wood and bracken. It is hard to believe that so

much beautiful scenery still remains, surrounded as it is by some of the blackest towns and grimmest centres of manufacturing industry in the British Islands.

One of the commonest birds throughout this district of crags is the Jackdaw. In the south of England this birds perhaps shows more partiality for marine cliffs; inland, as in Yorkshire, it frequents churches and other buildings. Perhaps this is because such inland cliffs are not so common in the south. There is scarcely a rocky glen in the Peak that does not echo the Jackdaw's cackling cry. At Castleton there is an exceptionally fine colony established in the lofty cliffs at Devil's Hole, and which are crowned with the crumbling ruins of the keep of once-famous Peveril Castle. Here many times we used to stand at the mouth of the vast yawning cavern, in which the rope-makers are established, as the dusk gathered, and watch the noisy Daws come home to roost. Usually in one compact flock they came, sometimes in several detached parties, and after wheeling and fluttering they finally settled upon the scraggy trees growing out of the rock face. Their cackling cries made the grand old gorge echo again—a chorus that was kept up till their sable forms could not be distinguished in the evening gloom. They make their nests here in the holes and crevices of the mighty cliffs. Another

common bird is the Rock Dove. Whether this white-rumped Dove is the truly feral Rock Dove, or whether they are descendants of tame birds run wild, it is perhaps difficult now to say; but our own opinion leans to the latter view, because we believe that the true wild Rock Dove is found nowhere but on maritime cliffs. Whatever their origin, however, here the birds are now, and wild enough. Their abundance is reflected in the names that they have inspired for "Dove" river, and "Dove" dale, both of them famous haunts of these birds. They nest in crevices of the limestone crags, and their habits generally are very similar to those of their relatives along the coast, which they also resemble closely in appearance. Another, yet much smaller colony of these Doves, is to be found in the range of crags that crest the right-hand side of the Rivelin Valley going westwards, close to the Norfolk Arms at Hollow Meadows. We can state from long personal observation, confirmed by keepers and others, that these birds arrive at this place in February, and after rearing several broods during the spring and summer and early autumn, that they leave in October. We have seen these birds perch upon a narrow rail fence on the edge of the crags they frequent. Vast numbers of Starlings also build in these places up and down the Peak and elsewhere. Another very common species is the House Martin. There

must be many thousands of nests of this bird in the dales of North Derbyshire alone—a profoundly interesting fact, which indicates that such situations were invariably selected in prehistoric times before such things as houses and bridges were in existence. Talking of bridges brings to mind the fact that on some of the railway viaducts in these dales the copings are so thickly studded with nests in some places as to hide the masonry. We ought also to mention that the Kestrel breeds commonly in these limestone crags, and not a few Redstarts and Wheatears have their homes in crevices among them, at a lower level and near the ground, of course. Swifts are equally common, and in their choice of a haunt suggest a habit that has been retained from a remote period, although changed by many individuals in more recent times. We might also mention that the Peregrine Falcon still breeds locally on some of these inland crags of the northern shires, especially in the Lake District.

So far the inland crags; we will now proceed to a study of the bird-life on the sea-cliffs of the north. It is in these localities again that the northern shires show to advantage over most southern counties in the matter of their bird-life. Nowhere in the south can be found such vast bird bazaars as those that are established in such wonderful abundance upon the sea-cliffs of the northern shires. From York-

shire northwards to the Hebrides and the Shetlands, one stirring scene of bird-life after another in bewildering numbers crowd upon the observer. From Flamborough's cliffs to the Pinnacles at the Farnes; thence onwards to the Bass Rock, and across the Highlands to the Hebrides and to St. Kilda in one direction; or up the east coast of Scotland to the wall-like crags of Sutherlandshire and Caithness, and across the Pentland Firth to Orkney and on to Shetland, in another, what famous bird-stations may be found! We will visit a selection of these in turn, commencing our inspection upon the noble headland at Flamborough, at Speeton and Bempton.

Some of the finest cliff scenery in the north of England lies between Flamborough Head and Filey on the Yorkshire coast, and what is of more importance from an ornithologist's point of view, its bird-life is correspondingly impressive. We have many fine cliff-scapes in the south of England, but the birds are disappointing, because they occur in small numbers only, or are absent altogether, as is the case in South Devonshire, for instance. There are few such haunts of Guillemots and Razorbills in the northern shires of England as are located upon some of these grand cliffs. During the non-breeding season they are practically deserted by sea-fowl, left to the undisputed possession of Jackdaws and Rock

Doves. But with the approach of spring a great change comes over the scene, and Gulls and Auks begin to assemble once more upon the famous cliffs. Large numbers of eggs, especially of the Guillemot, are taken every season, and prove a welcome source of income to the intrepid climbers who risk their lives



The Razorbill.

in gathering this somewhat unusual harvest. From the summit of the cliffs but little can be observed of the stirring scenes going on upon the rock face. The ground at the top is too sloping to peer over, and it is only here and there where the sea has made a deep indentation, and a view of the cliff face can be seen from the opposite side of the gorge, that we can obtain some faint idea of the bird wonders of the place. For more years than "the

oldest inhabitant" of Bempton or Flamborough can recall, the birds have bred here in enormous numbers and have been as regularly robbed. The Guillemots and Razorbills and Puffins are somewhat irregular in their date of return to the cliffs in spring. Sometime towards the end of April is perhaps an average date, although they have been known to come back as early as February (1884). At the Farnes they are apparently earlier, assembling usually some time in March. The young and old birds generally leave the breeding-places for good during the last ten days of August in both of these localities. The eggs of the Guillemot are the easiest to obtain, being laid upon the ledges and in the numberless little hollows about the cliffs; the Razorbill deposits its big solitary egg in a crevice where in not a few cases it is absolutely safe from man; the Puffins, breeding nearer to the top of the cliffs, lay their single egg in burrows. It would be impossible here to describe the wonderful variety in the eggs of the Guillemot: they are by far the most beautiful of any of those of the sea-fowl. Great numbers of these eggs are taken for food; and we can remember how the climbers at Flamborough used to return home to breakfast hungry as Hawks, and break the pretty eggs into the frying-pan with the bacon—forming a meal a gourmand might envy, provided his appetite has been sharpened by a long morning in the bracing

air that blows in from the German Ocean. The "Pinnacles" at the Farne Islands are another famous haunt of the Guillemot; the most attractive of all the breeding-stations of this species throughout our islands, owing to the exceptional ease with which the birds can be observed. These pinnacles are a group of flat-topped rocks, rising perpendicularly from the sea, close to one of the islands, from which a good view can be obtained right on to their table-like summits. These are crowded, densely packed in fact, with a struggling mass of Guillemots. When the birds dash off and fly down headlong into the sea, a still more extraordinary sight is presented; for all over the surface are strewn hundreds of eggs—like great pears—of almost every conceivable hue and pattern of marking. The Guillemots are comparatively silent; but the scene is noisy enough, because on the sides of the perpendicular rocks numbers of Kittiwakes are nesting, and their cries are incessant, sounding high above the surging sea and the whirring of the wings of the departing Guillemots. Into many of these Kittiwakes' nests we can look from the summit of the island adjoining, and are thus able to count the eggs or young as soon as the brooding birds are driven off.

Our next rocky haunt of sea-fowl lies far away to the northward, and is the widely and justly famous

Bass Rock in the Firth of Forth. This is another favourite locality of ours; we have visited it repeatedly, and the stirring scenes of bird-life we have witnessed there each time are indelibly fixed upon the memory. It was at the Bass that we went through our apprenticeship to marine cliff-climbing, and where we first made the acquaintance of the Gannet at home. As most readers may know, the Bass is one of the few grand breeding-places of the Gannet in the British archipelago. There are several other rock-birds breeding in some plenty upon the Bass, but the Gannet stamps the rock with its individuality, and all other species are overpowered and comparatively lost amidst its numbers. Perhaps we might make an exception in the case of the Puffins. There is a large colony of these birds established in the walls of a ruined fortification facing the sea, and Puffins may be seen repeatedly coming and going in their usual hasty way. There are many more of these birds breeding here and there about the rock, but this, so far as we know, is the largest congregation. The Gannet is a thoroughly pelagic bird, and only comes to the land to breed, retiring once more to the sea as soon as its young can fly. During the late autumn and throughout the winter the Bass is practically deserted by birds. At the end of March or during the first half of April the Gannets begin to assemble at the time-honoured nesting-place. At

first their stay is fleeting, but it gradually becomes longer and longer until nest-building commences,



The Gannets.

and from that time onwards the Bass is the grand head-quarters of many thousands of Gannets. It

has been computed that at least twelve thousand adult birds frequent the Bass; probably this underestimates the actual number, although we must remember that in 1831 Macgillivray gave twenty thousand. In any case, judging from the most reliable information obtainable, the Gannets seem to be on the decrease. Throughout the summer the Bass is literally vignettted in a throng of ever-moving Gannets; but even at this season many of the birds fly long distances out to sea to feed, coming home stuffed with fish, lots of which are disgorged at the nests. Numbers of the birds begin nest-building at the beginning of May, but, as is the case with Rooks, the operation is not commenced simultaneously by all, and a fortnight later, when many of the nests contain an egg, there are a good number of others in an uncompleted state. At this time many of the birds flying about will be remarked with pieces of turf or other material in their bills, which they will thus carry for a long period without attempting to alight and work it into the unfinished nests. The grand home of the Gannets here is situated upon the north, north-east, and west cliffs. Here on the grassy downs, near the edge of the cliffs, numbers of Gannets may be seen standing quietly, some fast asleep with their head buried in the dorsal plumage. We have caught Gannets when thus asleep, but care must be exercised to grip the bird firmly round the

neck, or a stab from the formidable beak will reward the would-be captor's rashness. The nests are made almost anywhere—at the top of the cliffs amidst the broken rocks and crags, lower down the cliffs where any ordinary climber can reach them, and, most numerous of all, on the ledges far below which are only accessible with the aid of a rope. To say the least, the nest is not a very attractive one; it is often trodden out of all semblance to such a structure, and frequently covered with droppings and slime, whilst around it are dead and decaying fish, many of them disgorged when partly digested. The hot sun soon completes the work of decomposition, and generates a fearsome stench which it requires all the fortitude of an enthusiastic ornithologist to tolerate. The nests are made of sea-weed, turf, straws, and scraps of moss, the soil from the turf being trampled into a mortar-like mass and binding the whole together. In a shallow cavity at the top of this cone-like structure a single egg is laid, originally white coated thickly with lime, but soon becoming stained into a rich brown from contact with the big webbed feet of the parent birds. Numbers of nests in some spots are crowded together, often so closely that the cliff is literally white with sitting birds. The noise is deafening. The Gannets in the air are quiet enough, gliding to and fro in a bewildering throng, but the birds on the cliffs and the grassy downs at the

summit, those that are standing or sitting, keep up a never-ending chorus of harsh cries. As we wander to and fro inspecting the dwellings in this curious city of birds the indignant owners bark defiance with sparkling eyes, and only tumble off their solitary egg when prompted by feelings for their own personal safety. They are quarrelsome birds too, possibly because so very overcrowded, and fights and sparings are continually taking place. Every now and then two birds will each seize the other in its powerful bill and go tumbling over the cliffs together, not to separate until they have perhaps fallen a hundred feet or so, when they will part, and soon lose their identity among the drifting crowd that circles about the face of the cliff in never-ending activity. All the time of our stay birds are coming and going, dropping lightly on to the land or soaring upwards into the air; whilst the sea below is well sprinkled with birds, and some distance down the Firth many others may be seen busily engaged in fishing. The scene becomes still more animated when the young are hatched. At first these are ugly, ungainly-looking objects, blind, and covered with dark-gray skin. This, however, is soon clothed with dense down of dazzling whiteness, which in its turn is succeeded by a speckled plumage—brown spotted with white. The young birds pass through several stages of plumage before they acquire the white livery charac-

teristic of their parents; neither do they breed until they are four or five years old. A few of these party-coloured immature birds may be detected amongst the crowd of adults at the Bass; but, as a rule, these young ones do not congregate much at the breeding-places until ready to propagate their species. In many respects the Gannet is a very remarkable bird. The nostrils are closed, being practically obliterated, the tongue is small and aborted, whilst nearly the entire surface of the body is covered with a net-work of subcutaneous air-cells, communicating with the lungs, and thus emptied or inflated as the bird may desire. We have already dwelt at some length upon the Gannet's ways of life, and it will at once be seen from the above facts how admirably the bird is fitted not only for an aerial existence, but for withstanding the great pressure of the water during its repeated plunges into the sea from high altitudes.

There are also many Kittiwakes nesting about the cliffs of the Bass, and a few Herring Gulls. The former birds breed most abundantly upon the precipitous cliffs, low down many of them, and in very inaccessible spots. We have, however, taken many eggs of this Gull from nests nearer the top of the cliffs, and in places which we had little difficulty in reaching without the aid of a rope. The nest of this Gull is a substantial one, made largely of turf,

which is trampled into a solid mass by the owners. Sea-weed and dry grass, as well as the dead stalks of plants, are also used. The eggs are usually two or three in number, green, or olive, or brown, of various shades, marked with darker brown and gray. Then amongst the cliffs great numbers of Guillemots and smaller numbers of Razorbills deposit their eggs in suitable spots; whilst the Jackdaw and the Rock Dove frequent them. The Daws are great robbers of eggs, and as soon as the Auks or Kittiwakes chance to leave them unprotected the foraging birds beat along the cliffs and pounce upon them, carrying them off transfixed on their bill. The Herring Gulls prefer the grassy downs in the hollow on the north side of the Bass, making their somewhat slight nests amongst the herbage. Their eggs closely resemble those of the Lesser Black-backed Gull—the brown varieties—but do not present anything like the same diversity, although they are as a rule perceptibly larger. We are glad to be able to state that the Peregrine Falcon breeds upon the rock, and on more than one occasion, after an exciting climb, aided by a rope, we have succeeded in reaching and minutely examining the nest of this interesting bird. It preys upon the Puffins, Rock Doves, and Guillemots that make the Bass their summer home, and we earnestly hope that it may long continue to frequent this noble pile of rock.

From the Bass it is a long jaunt to St. Kilda, but we will do the distance on Icarian wings, and contrive to reach the famous islands during the very height of the breeding season of the birds. We have appropriately left this romantic place to the last, for it is here, we say without hesitation, that littoral rock scenery throughout the northern shires culminates in grandeur, and that rock bird-life attains to its highest degree of impressiveness. Sixteen years ago the group of islands (collectively known as St. Kilda) were comparatively unknown to British ornithologists. Of their existence, of course, most bird-lovers knew, but only in a hazy sort of a way, whilst the wonders of their bird-life were even more traditional to most of us. Nowadays St. Kilda has become ornithologically "fashionable"; it is considered quite the correct thing to "do" the archipelago, and the place has become popularized—we had almost written a much stronger, if perhaps not quite so genteel a word. Sixteen years ago we visited the islands and published an account of their bird-life—the first, we believe, that had been written for nearly twenty years. We have in various works still further emphasized the richness of the place from an ornithological point of view. This, we profoundly regret to say, has resulted in a wild rush of collectors to the islands, with the inevitable result that the natives have been corrupted, and the Wren

peculiar to the place has become threatened with absolute extermination! Better perhaps had we remained silent, at least until sufficient steps had been taken to secure the safety of perhaps the most interesting bird on the islands, if the most diminutive. Collectors have taught the St. Kildan that there is more wealth in the long-despised Wren than in the much-vaunted and highly protected Fulmar, but the source of it will prove a transient one indeed if something be not quickly done for its preservation.

It would be difficult to find, or even to imagine, more grandly beautiful rock scenery than St. Kilda presents. There is not, for instance, in all the British Islands, a precipice approaching in magnificence to that of Connacher, which is formed literally by the side of an island twelve hundred feet high falling sheer into the Atlantic; and when we add that this awful wall of rock is crowded with birds, almost from foot to summit, we complete a description which has no parallel in Britain. This is but one item in the grand sum total of the crags of St. Kilda. It would be as hard to conceive a more majestic outline of sea-crags than is formed by the towering jagged summits that cut the sky-line and form the long narrow sister island of Doon, forming the southern horn of a most picturesque, if somewhat treacherous bay, of which a spur of St. Kilda itself completes the watery enclosure. The cliffs that

buttress the western isle of Soay, though not so high, are in their way as picturesque; whilst both islands literally swarm with birds, some of them the most local in the British avifauna. Then lying away to the north, four miles from St. Kilda, in lonely isolation, towers the lofty island rock mass of Borreay, with its two attendant satellites, Stacks Lii and Armin, all sacred to the Gannets that in tens of thousands crowd upon them during the summer months. This island itself rises nearly sheer in parts a thousand feet or so from the ocean. Undoubtedly the grand secret of the charm that has attracted sea-birds in such numbers to these rocky islets is their utter isolation and loneliness, combined with the vast food supply furnished by the surrounding sea. These islands are far without the ocean highways of vessels; they are rarely approached by man; whilst the small number of people—quite an ideal commonwealth in its way—that live there are sensible enough to treat the birds fairly, and not literally to kill the Geese that lay the golden eggs. They farm the birds as an agriculturist would his land, or a stock-keeper his sheep and cows; they allow them a close time, or perhaps the place is so extensive that these few fowlers are unable to exhaust the store, and the supply is kept up by natural increase. Be this as it may the birds live and thrive, and this notwithstanding the fact that the

Sea Birds Protection Acts do not apply to any of the islands, possibly, as some readers might say, because it would be utterly impossible to enforce them, not even by removing every living soul from the place.

We need not linger here at any length upon species that we have already dealt with elsewhere. Such birds as Guillemots, Razorbills, Puffins, and Gannets are here in vast abundance, but our space is required for the description of a few birds that we meet with nowhere else in the British archipelago in such numbers. The island of Doon, for instance, so thickly swarms with Puffins that when we land upon it these birds glide down to the sea in such countless hordes that the very face of the hillsides seems slipping away beneath us. As for the Guillemots, we knew an old St. Kildan, so the story ran in the village, who came across such numbers of their eggs upon the cliffs that he was compelled to take off his breeches and turn them into a bag to hold them! But there are more interesting birds to us, perhaps, breeding on Doon, and these are the Fork-tailed Petrels. They have their nests in burrows upon the grassy summit of the island. Those we discovered were on the western end, nearest to St. Kilda, and made in the rich soft soil, the burrows some two to five feet in length. At the end of this burrow the Petrel makes a scanty nest of dry grass,

moss, and roots, upon which it lays a single egg, white in colour, faintly marked with dust-like specks of brown and gray. Sometimes a nest is dispensed with altogether. We caught some of the Petrels upon their nests, which, when released, flew about in a dazed sort of way as if unaccustomed to the light.



The Fork-tailed Petrel.

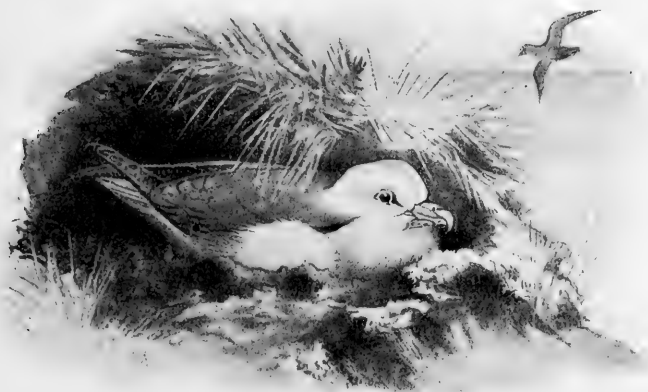
These Petrels are chiefly crepuscular or nocturnal in their habits, and during the daytime not a bird will be seen. The St. Kildans pay little or no attention to such small birds, and possibly the Fork-tailed Petrels had remained here undisturbed for ages, for we are not aware that Bullock obtained any eggs from this colony when he discovered the species in the British Islands upwards of eighty years ago. Bullock, we might mention, came very near the honour of discovering this bird absolutely, for he was only anticipated by a year by Vieillot.

St. Kilda is indeed the grand head-quarters of

our British Petrels. All the indigenous species breed there, and in greater numbers than they do anywhere else. The Stormy Petrel is common enough, and doubtless breeds on every island in the group. Its habits are almost precisely the same as those of the Fork-tailed Petrel, and its egg is similar in colour, only much smaller in size, as the bird is itself. But the grand colony of Manx Shearwaters is perhaps of more general interest; the bird breeds in many other parts of our islands, although nowhere in such numbers as it does here. Soay is its grand head-quarters, but great numbers breed in suitable localities on every other island in the group. This Petrel is also nocturnal in its habits, lying close concealed in its burrow during the day, coming out at dusk to search for food over the surrounding sea. St. Kildans say that the Manx Shearwater is one of their first bird visitors in spring, and amongst the last to leave in autumn. Probably the real fact of the case is that the bird haunts the islands throughout the year. Towards the end of May this Shearwater commences to lay. It provides a scanty nest of dry grass at the end of the burrow it has excavated, and here it lays a single white egg. Like the Owls and the Nightjars, this bird becomes active at nightfall. The Shearwaters then leave their burrows in thousands, and the grassy island becomes a scene of activity, birds coming and going in the

gloom, and their cries filling the air. The "Scrapire", as the St. Kildans call this bird, is a favourite article of food with them, and large quantities are caught at night, when parties of men visit the birds' haunts and knock the poor Shearwaters down with sticks or drag them from their holes.

But the most important bird of all in the entire group of islands is the far-famed Fulmar. Its num-



The Fulmar.

bers here would be very difficult to estimate even approximately, but some faint idea may be derived from the fact that the St. Kildans are reputed to take, during one special week in August which custom has long reserved for the purpose, no less than twenty thousand young birds! To these we must add the numbers of old birds that are snared on their nests during the hatching season; whilst we

must also bear in mind that comparatively a small proportion of birds are caught at all. Darwin had certainly strong grounds for asserting that the Fulmar is the most numerous bird in the world. Without being held in any way to support an assertion which is so difficult of proof, we may certainly state that no other sea-bird breeds in such vast numbers anywhere in the British archipelago. The Fulmar commences to breed in May, the eggs being laid from the middle of that month onwards to early June. Unlike the Shearwaters and the more typical Petrels, this bird rarely makes a burrow big enough to hide itself, but is content to scratch out a hollow in the soil, or even to deposit its egg on ledges of the cliffs. In some parts of the cliffs the nests are so close to each other that from a distance the birds seem crowded together into great white masses. Beyond a small portion of dry grass the Fulmar makes no nest, although some we found on Doon were hollows lined with small bits of rock. The single egg is white, rough in texture, and with a strong pungent smell. Of all the varied scenes of bird-life that it has been our good fortune to witness, not one has been quite so impressive as that we witnessed from a shoulder of Connacher, when, after a stiff climb from the village, we suddenly came upon the assembly of Fulmars at their nests. The first thing that impressed us was the *silence* of it all.

We had hitherto been so used to a noisy din as an inseparable accompaniment to a gathering of sea-fowl that the silence of these Fulmars seemed almost weirdly strange. We can only compare this scene to a dense snow-storm in which each flake was a separate bird. In an apparently never-ending throng the big white birds drifted by, those nearest to the cliffs passing in one direction, those farther out at sea going directly opposite. There seemed thus to be two streams of birds passing and repassing each other, whilst as far as the eye could reach the air was filled with gliding fluttering birds—some of them so indifferent to our presence that they approached almost within arm's-length. No birds were flying over the land, all were above the water or floating on its surface far down below. We stood looking at the wonderful scene for quite an hour literally spell-bound; and even now, after the lapse of many years, we can see the whole thing again as we write these lines, graven as it is indelibly upon the memory. There was a strange indescribable fascination about the whole scene which held us to the spot, and many times during our fortnight's sojourn upon these islands we wended our way alone to the summit of the cliffs to sit there and watch the comings and the goings of these wonderful birds. Even more impressive still does all again become when viewed from the sea below. Then the masses of birds, as

they appear to fall away from the rock face, literally darken the air and overpower us with their numbers.

The St. Kildans are expert fowlers, snaring the Fulmars as they sit upon their nests, with long rods to which a horse-hair noose is attached. The birds that breed here are the source of the St. Kildans' wealth; thousands of them are killed and salted for food; thousands of eggs are taken for a similar purpose. When caught, the Petrels are made to vomit a quantity of oil into the dried gullet of a Gannet that the fowler carries attached to him; and this oil, together with the feathers from these birds, Gannets and others, are also a further source of income.

CHAPTER X.

MIGRATION IN THE NORTHERN SHIRES.

WE propose to bring the present volume to a close by a brief review of the more salient features of avine migration in the northern shires, especially as it is presented on the coasts of Lincolnshire and Yorkshire, and in some of the river-valleys in the south of the latter county. It is perhaps in the migration of birds that comparisons become most pronounced between the avine characteristics of the northern and south-western counties of England. In the latter area, as we have already pointed out, not only in our volume dealing with the season-flight of British birds, but in another devoted to bird-life in a southern county, migration is almost as remarkable for what it omits as for what it includes; the south-west peninsula of England being singularly poor in migrational phenomena. In the northern shires, on the other hand, the story of migration is unfolded every season in all its wondrous grandeur, and along our eastern sea-board, especially in autumn, birds in uncounted hosts pass to and fro in a way more impressive than any words can tell. Another thing, there is infinitely more local movement amongst

birds in the northern shires than in the southern and south-western counties. The former area is subject to much greater climatic vicissitudes, to sudden falls of temperature, and heavy snowstorms, disturbances that have a marked effect upon birds, and cause them to wander to an extent seldom remarked in the south-west, where conditions are much more equable and the temperature uniformly higher. For instance, we believe the isotherm of January in Yorkshire and Lincolnshire is about 37° , whilst in the south-west of England it is as high as 43° . In one way the southern counties possess perhaps an exceptional migrational interest, from the fact that they are the first point of arrival as they are the last of departure of birds moving north or south into or from the British area. But many of the northern shires are exceptionally fortunate, for on their coast-line breaks that mighty tide of east-to-west migration in autumn, as also that from the north and north-east at that season, together with the departures in the reverse direction in spring—movements which are but faintly or never indicated at all in the south-west of England. In that remote district the tide of migration from the north and north-east is comparatively weak and exhausted by the time it is reached.

In spring, migration in the northern shires is to some extent, and in certain directions, perceptibly

less marked than it is in many of the southern counties, especially as regards our normal summer migrants. It is, on the other hand, more emphasized in connection with the spring departure of birds that breed in northerly or easterly localities beyond the British area, and also perhaps in so far as it relates to the coasting migration of certain species. Here in the northern shires, as elsewhere, the first indication of migratory movement among the birds is the departure of some of the species that have been spending the winter in them. But so far as South Yorkshire is concerned, perhaps we ought to say that migration is absolutely initiated by the return of the Song Thrush at the end of January or early in February, and of many Blackbirds at the beginning of the latter month—individuals breeding in this district, but leaving it in November. The movement may be small and comparatively unimportant, nevertheless it is to be remarked by the careful observer of birds. There is also some slight movement north or north-east of the Redwing and the Fieldfare; whilst Song Thrushes and Blackbirds that have been wintering in the southern portions of our islands begin to migrate towards continental and perhaps North British haunts. The same remarks also apply to the Robin, the Greenfinch, the Linnet, the Chaffinch, the Tree Sparrow,¹ the Snow

¹We say nothing about the migrations of the House Sparrow, because at

Bunting, the Sky-lark, and the Shore Lark especially. Starlings, Jackdaws, and Rooks also initiate a migrational movement during February; and there is also some evidence to show that Sparrow-hawks, Bitterns, Geese, Swans, many Ducks, Ring Doves, Golden Plovers, Lapwings, Woodcocks and Snipes, Redshanks, Curlews, Little Auks, the three British species of Divers, and the Red-necked and Slavonian Grebes are at least in movement of a definite character. This applies not only to an actual departure from our shores, but to a coasting movement across them from winter stations still farther south. With the exception, perhaps, of the Shore Lark and the two species of Swans, the migration can only be regarded as slight, and becomes in the majority of cases much more emphasized in the following month, more especially as concerns the Song Thrush, the Greenfinch, the Linnet, the Chaffinch, the Sky-lark, the Starling, and the Jackdaw among Passerine birds; and the Bernacle and Brent Geese, the Mallard and other Ducks, the Snipes and the Divers among others. It will be remarked that the earliest birds to leave are those that breed in continental areas due east of the British area; the next species to go are such as have their breeding-places in a general north-

present they are not at all clear. The bird visits the lighthouses and light-vessels in spring and autumn, but the movement is not yet clearly defined.

easterly or north-westerly direction. It should also be stated that many species—especially among the Ducks and Waders—are still found on passage in the northern shires, long after they have finally deserted our southern coasts for the season. Thus the Scoters mostly leave Devonshire during March and April, but they are still passing the coasts of Yorkshire in May; the Jack Snipe, the Dunlin, and the Sanderling leave in March; in the northern shires they are still on passage in April and May.

With the advent of March a further exodus of our winter visitors takes place, and many of these birds continue to leave throughout this and the following month. March initiates a migration north of the Stonechat, the Hedge Accentor, the Goldcrest, the Titmice, the Pied Wagtail, and the Wren, the Goldfinch and the Brambling, the Yellow, Common, and Reed Buntings, the Carrion and Hooded Crows, the Jay, and the Short-eared Owl, the White-fronted, Bean, and Pink-footed Geese, the Teal and the Wigeon, the Tufted Duck and the Golden-eye, the Gray Plover, the Turnstone, the Dunlin, and the Purple Sandpiper. This movement is continued throughout the month and into April, in many cases gradually dying out in May. Fieldfares and Redwings migrate in large numbers during April, as also do Goldcrests, some of the Finches, Snow Buntings, Starlings, Golden Plovers, and Wood-

cocks; Dunlins perhaps leave most abundantly in May, as also do Turnstones, Gray Plovers, Knots, Sanderlings, and Godwits—birds that breed late in the arctic regions. The coasting migration of the Pied Wagtail, the Hen Harrier, the Merlin, the Ringed Plover, the Ruff, the Whimbrel, the Little Stint, and the Curlew Sandpiper is most apparent in April and May; the Skuas perhaps in April, with the exception of Buffon's Skua, that is still passing the coasts of the northern shires in May and even early June.

This grand departure of birds, however, does not appeal to the ordinary observer one quarter as much as the arrival in spring of the first Swallow or Cuckoo—birds which he associates inseparably with the so-called mystery of migration. As it is always more difficult to detect a departure than note an arrival, all these other birds slip away during spring almost without being missed, and more especially so because few of them are familiar species; whilst such that are more widely known are usually still represented by sedentary individuals. We allude to such species as Wrens, Robins, Titmice, Greenfinches, Chaffinches, Hedge Sparrows, and so on. To the ordinary observer, then, spring migration apparently commences with the appearance of the first of our usual summer migrants—birds that come to our country to breed, and leave it again without fail in

autumn. This northern movement is remarked, even in our northern shires, during the latter half of March. In the north of England, as it is in the south, the Chiffchaff is perhaps the most constant pioneer of the spring migrants. We have known this bird arrive in Devonshire as early as the 5th of March; in Yorkshire we have observed it a week later. These dates are somewhat exceptional, but we can pretty safely depend upon its appearance towards the end of that month. The migrations of the Wheatear are practically coincident in date. In fact this bird, we believe, has been recorded from the northern shires as early as February, but this is certainly abnormal. The migrations of both species are, however, much more marked in April. Another March migrant is the Ring-ouzel, but these are venturesome birds ahead of their companions, and the usual date of this bird's arrival in the northern shires is April. Similarly, the Blackcap has been known to arrive in March, but its normal date is the first week or so in April. This latter month brings the migrants back in constantly increasing numbers, amongst which we may mention the Redstart, the Whinchat, the Willow Wren, the Wryneck, and the Cuckoo. Now during this month, especially during the latter half, may also be noticed in their old accustomed haunts the Whitethroat and its congener the Lesser Whitethroat, the Reed Warbler

and the Sedge Warbler, the Grasshopper Warbler, the Tree Pipit, the Pied Flycatcher, the Swallow, and the two species of Martins. At the end of the month and early in May come the Garden Warbler, the Wood Wren, the Tree Pipit, the Spotted Flycatcher, the Swift, and the Nightjar. The Merlin migrates in April, as also does the Hen Harrier; towards the end of the month we have the Quail, the Stone Curlew, the Landrail, the Red-necked Phalarope, the Greenshank, and the Common Sandpiper. The passage of most of these birds continues into May, which is the usual date for the arrival of the Turtle Dove, one of the very last to reach the northern woodlands. We may remark that many of our more familiar summer migrants continue to pass the northern shires well into May—individuals bound for higher latitudes than Britain.

Spring migration is scarcely over for the year when signs of the return movement begin to be seen. Indications of the southern exodus first become apparent upon the coast with the arrival usually of a few northern wading birds by the middle or towards the end of July. Records kept along the coast also show that Wheatears, Swallows, Martins, Pied Wagtails, Song Thrushes, Robins, Goldcrests, Wrens, Whitethroats, Starlings, Cuckoos, and Landrails are certainly on the move. In August migration becomes stronger, not only as regards birds that

are coming into our area for the winter, or simply passing over it to more southern latitudes, but also those that, having bred in this country, are now leaving it for winter quarters beyond the English Channel. Among Passerine birds that are now entering the British area may be mentioned the Missel-thrush, the Song Thrush, the Redwing, and the Blackbird. Each of these, however, will continue to arrive in much greater numbers during September and October, the migration dying down again in November. Stonechats are now returning to us, as also in small numbers are Robins and Hedge Accentors, both of which will arrive in greater abundance during the two succeeding months. The same remarks almost exactly apply to the Titmice, the Goldcrest, the Wren, and the Pied Wagtail. Amongst the hard-billed Passeres such birds as Linnets, Greenfinches, Chaffinches, Yellow Buntings, and Tree Sparrows are also returning; as are also Skylarks, Starlings, Rooks, and Short-eared Owls. Among the Duck family and the Waders, the Bernacle and Brent Geese, the Mallard, the Teal and Wigcon, the Scaup and the Scoters; Plovers, Turnstones, Woodcock and Common Snipe, Ruffs, Redshanks, Curlews, Godwits, Dunlins, Knots, and Sanderlings are now migrating, but their numbers will enormously increase during the two, or in some cases even three, succeeding months. But few of

our own summer birds depart from the northern shires in August, but there is certainly a coasting



Migrants at a Lighthouse.

movement apparent among most of the species—individuals coming from more northern areas and

passing over Britain to winter homes in South Europe and Africa. There can be little doubt, however, that many individual Whitethroats, Willow Wrens, Spotted Flycatchers, and Turtle Doves move south from their summer haunts in the northern shires during August. During this month the Swift and the Cuckoo leave us, although some few of the latter may remain into September. Speaking of Swifts brings to mind a very extraordinary migration of this species that we witnessed in the early part of August, 1879, on the Yorkshire coast at Flamborough. There must have been tens of thousands of birds passing down the coast just below the lighthouse; all day the birds kept migrating on in a leisurely sort of way, feeding as they went, and a very large percentage consisted of young ones. During late August many bands of Terns migrate south along the Yorkshire coast, not only from the Farne Islands, but from more northern stations still.

During September most of our own summer migrants disappear, but the Ring-ouzel, the Whinchat, and the Wheatear prolong their passage into October, as also does the Whitethroat, the Chiffchaff, the Willow Wren, the Sedge Warbler, the Swallows and Martins, the Common Sandpiper, and some others, but all in a more or less exceptional manner. Up to the end of this month birds are

constantly pouring into our islands from the north and north-east; in October the general trend of migration falls to nearly due east, and from this date onwards some of the most wonderful scenes imaginable are to be witnessed upon many parts of our eastern coast-line, more especially between Spurn in Yorkshire and the Wash in Lincolnshire. Our own observations principally refer, so far as this grand avine movement is concerned, to the latter district. Here season after season we have watched during the late October and early November days that wonderful influx of feathered life that breaks like the waves of the ocean upon the shore, often in such multitudes as to defy estimation. Indeed, we know of no other place on the entire coast-line of the British Islands where the fascinating phenomenon of migration can be studied to better advantage. Along this coast, at intervals during the autumn, birds literally pour in from across the North Sea, or are tempted to loiter upon it when following the entire line of our eastern sea-board to winter quarters far to the south of the British archipelago. Few wilder districts can be imagined, few more monotonous, and even dreary, than the vast expanses of mud and sand that fringe the Wash. At high-water the tide comes up close to the huge banks that extend along the coast here, erected for the purpose of keeping out the sea from

the adjoining farms; although it is said that these earth-works are the remains of Roman roads. At low-water the sea is several miles from the banks, and the vast expanse of mud is scored in many directions with tortuous streams and long narrow pools. In summer few birds frequent the place; in autumn it is a grand resort of birds, being in the direct pathway of that vast stream of migrants that flows across the wild North Sea from regions possibly as remote as Siberia.

Although a very large proportion of indigenous British birds are migratory—probably the greater number—a great many of these undertake their annual journeys in such a very modest and undemonstrative way that they escape general notice. On the other hand, there are a certain if small number of species that migrate in such vast numbers that even the most casual observer cannot fail to remark the fact. Of this small proportion the Goldcrest, the Sky-lark, and the Hooded Crow are certainly amongst the most prominent. The migrations of the first-named bird in autumn are sometimes on a prodigious scale. The autumn of 1882 was remarkable in this respect, especially as regards the Yorkshire and Lincolnshire coasts. This migration appears to have first been recorded from Redcar on the 13th of August. During this month the birds came in comparatively small numbers, which did not

appreciably increase during September, but in October they poured across the North Sea in countless thousands, and from all parts of the east coast came reports of the unusual visitation. Two nights in October were specially remarkable for the marvelous migration waves of this tiny bird, which not only spread across England, but reached Ireland,



The Hooded Crow.

and possibly spent themselves in the Atlantic beyond! So far as concerns our own special length of coast-line, the migration appeared to reach its climax on the 8th and the 12th of October, when vast numbers were recorded from Whitby lighthouse; at Flamborough it was reported in unusual abundance between the 7th and the 14th; at Spurn on the 7th and 8th, crowding into the hedgerows and fields near the sea; whilst on the Lincolnshire side of the Humber the 8th was remarkable for these migrants, many of which actually sought refuge amongst the piles on the quays and in the timber yards at

Grimsby; in the district of the Wash the poor little birds came on to the coast in a more or less exhausted condition three or four days later, many migrating at night. One favourite line of migration into inland districts of the northern shires, not only of this species, but of Titmice, Chaffinches, Bramblings, and some others, is along the Humber, and down the valley of the Don, which brings them into the coppices and fields of South Yorkshire and North Derbyshire. We have upon many occasions, during the twenty years or so that we resided in Sheffield, met with these waves of migrant Goldcrests and Titmice in the birch and alder coppices of the Rivelin Valley. This district, as the crow flies, is sixty miles from Spurn, at the mouth of the Humber, and about thirty miles from the head of that vast estuary, with an abundance of suitable haunts by the way. Yet this vast tract of intervening country has not absorbed the waves of birds, and we have found them literally swarming in these Rivelin coppices during October. It is also somewhat remarkable how confined these waves of birds in many cases are. For instance, we never met with these birds in numbers at all indicating a strong migration anywhere beyond the somewhat narrow limits of this rock-girdled valley. To have reached it the birds must absolutely have passed over Sheffield in incredible numbers; they also appeared

in rushes, that corresponded with similar extensive incursions on the distant coast.

The Sky-lark is perhaps even more interesting in its autumnal invasion of the coasts of the northern shires. Every autumn, especially towards the end of October or early in November, incredible numbers of Sky-larks cross the German Ocean both by day and by night, and land in the district of the Wash, to name but one locality, although similar phenomena may be witnessed here and there from one end of our eastern coast-line to the other, from September onwards. Year after year have we seen this autumn invasion of the Sky-lark. Day and night the migration continues, the birds coming in from the sea in flocks and smaller parties, flying at a moderate height, say from thirty to fifty yards above the earth, and in a by no means hurried manner. We have repeatedly noticed a few birds commence to warble the moment they left the sea and reached the land. Many thousands of these birds continue their way south along the coast, doubtless in some cases to follow the rivers inland; others fly inland over the fields, continuing the exact direction of the course followed over the sea. In the same district the autumnal passage of the Hooded Crow is little if any less impressive. This migration usually commences about the middle of October, and lasts about a month. The arrival of this bird in the Wash district is almost

regarded with as much interest as the appearance of the Swallow in spring. Fishermen and farmers in the locality say that the two birds are never seen in the air together, meaning by this that the Swallow has gone to the south before the Crow comes in from the east. Unlike the two other species we have just alluded to, the Hooded Crow migrates exclusively by day—at least that is our invariable experience. During the periods of its passage the bird may be remarked coming towards the land from the sea in parties, in twos and threes, and now and then in a large open flock, flying at a moderate height and in a somewhat slow and deliberate manner. Hundreds of thousands of this species must enter the British Islands by way of the Wash alone. Many of these do not penetrate inland far, but live during the ensuing winter on the farms and saltings; others, however, follow the river-valleys to more central areas. It is interesting to remark, however, that the Hooded Crow does not migrate down the Humber and the Don valley to South Yorkshire, where at all seasons it must be regarded as a rare bird.

There are many other migrants that enter our islands by way of the Wash, some of them specially interesting. One of the most remarkable of these is the Short-eared Owl, another the Woodcock. Very often these two birds arrive together, making the sea

passage from the Continent during the same night. The Woodcock, however, appears to fly high; the Owl at no great distance from the water. Large numbers of wading birds also pass along this low coast in autumn; in October the mud-flats there used literally to swarm with them. Here might be seen great flocks of Knots and Dunlins assembled upon the marshes, whilst on the banks of the many tidal streams and pools Redshanks, Curlews, Bar-tailed Godwits, Plovers, and Sanderlings, in parties or singly, might be watched. Keeping us at a more respectful distance were large flocks of Brent Geese, whose noisy clamour came clanging in fitful clashes across the mud-flats; whilst Wigeon, Scoters, and various other Ducks bore them more or less close company. After a migration night it was a most fascinating experience to wander out at dawn among the birds. As we reached the second of the banks nearest to the sea, that crosses the mile or so of straight road that leads from the cockle and shrimp famous village of Friskney, we often used to flush Woodcocks from the ditches at the bottom of the tall whitethorn hedges, and this fact we always regarded as a sure indication that the past night had been a favourable one for migrants. Then more Woodcocks would be flushed from the long dry grass, on the sea-banks; perhaps an Owl; but the latter birds we found to have a greater preference

for the large flat turnip-fields just over the earth-works. Then perhaps the warbling cry of the Sky-lark would sound from the still dusky sky—the note of tired pilgrims that had been winging their way across the wild sea whilst men slept, and music which never failed to inspire a feeling of sympathy in us. Poor tired and hungry little birds—we always wished them well. Sometimes we should find the bushes and even the long grass on the banks crowded with tired Goldcrests; some of them, poor little mites, so weary that we have stood and watched them sitting fast asleep or swaying on the twigs utterly overcome with fatigue and hunger, quite exhausted and apparently indifferent to their own safety any longer. Then on some lowering November afternoon an occasional flock of Snow Buntings would suddenly appear on the wild salt-marshes, little strangers from an ice-bound region far away to the north. They would settle upon the weed-grown places, or perhaps amongst the drift and tangled sea-weed upon the shore, and there busily search for food. On other days, earlier in the autumn, vast flights of Finches would arrive, and occasionally immense numbers of such familiar species as Hedge Accentors, Redwings, and Fieldfares; whilst far overhead at intervals during the short autumn days, company after company of Golden Plovers would be noted either flying down

the coast towards Norfolk or passing inland. A gale, especially about the time of a new moon, would be sure to bring us interesting birds to the coast. Then the Fork-tailed Petrel would as likely as not be driven ashore; and at such times we have seen Stormy Petrels flitting about over the roofs of the cottages at Friskney—lost birds that had rashly entered the enclosed waters of the Wash and been blown before the stiff nor'-easter right on to the land. Now and then a Fulmar would be caught in the flight nets, and Little Gulls and Great Gray Shrikes appear, whilst the late autumn days sometimes brings a succession of flocks of Ring Doves and many odd Bitterns. Now and then a rare Lapland Bunting is detected along the shores of the Wash; we have shot it there in November close to Wainfleet haven. The Shore Lark is also occasionally met with in this district.

The mortality amongst these autumn migrants can scarcely be over-estimated. Young birds of course predominate in every species, and it is among them that the death-rate is highest. Gales and dark nights, with driving rain or fog, are exceptionally fatal to these journeying birds across the German Ocean. Some of the scenes at the lighthouses and light-ships along the coasts of these northern shires are most impressive on such nights as these. The lost bewildered birds, attracted by the glare of the

flashing brilliant lamps, crowd round the lanterns, and many of them not only kill themselves by dashing against the glass but are observed to fall exhausted into the sea below. Birds of many species compose these lost and bewildered flocks. Adversity makes strange companions, as the old saying has it, and never perhaps was it better illustrated than by a crowd of birds at the lantern of a lighthouse. Significantly enough, the return passage in spring is invariably undertaken by numbers scarcely a tithe as great as in autumn—the bulk of the little pilgrims having met their fate either on passage or during the intervening winter.

In the northern shires birds of some species or another are almost constantly moving about throughout the winter months. Even in inland localities this fact is abundantly apparent to the most casual observer of birds. Rough weather and snow-storms are almost invariably accompanied or heralded by wandering flocks of Lapwings and Larks; Finches and Fieldfares are constantly moving about as the food supply becomes exhausted or inaccessible in various districts; Ducks and other water-fowl change their haunts as frost compels them. We might also here allude to the considerable amount of vertical migration that takes place in the northern shires—that movement between the uplands and the low-lying country and littoral districts, undertaken by

such species as Twites, Merlins, Meadow Pipits, Lapwings, Plovers, Curlews, Mallards, and some few other Ducks. This movement has already been described in detail in our accounts of these various species, so it is not necessary to treat with it here at greater length. It is, however, a migrational movement of no small interest, though not a little overlooked by ordinary observers. Thus does the migration of birds progress, in spring and in autumn, across these northern shires, the phenomenon being very similar in its general aspects from year to year. Variety is, however, furnished in the numbers of the several species that so migrate, in the dates of their movements, and also in the occurrences of those abnormal migrants for which these shires have an exceptionally abundant share. We have not space here to chronicle the species that have paid these shires such abnormal visits, but the subject is certainly an interesting one and worthy of passing mention at least.

We propose now to devote the concluding pages of the present chapter to a brief résumé of the various ornithological events that so thickly dot the field-naturalist's calendar, more especially as they relate to South Yorkshire. There is a great charm about the observation of these events, that from year to year take place in sequence that is as remarkable for its order as for its punctuality; a

greater charm even in recording them season after season as the birds unfold their story with the passing months. For a dozen years or more we kept such a record, dealing more especially with the environs of Sheffield; season after season we noted the arrival and departure of the migratory species, the resumption and the cessation of song, the varying food from month to month, the pairing and nest-building, the rearing of the young; the flocking in autumn, the disbanding in spring, the habits of birds at nightfall, their awakening from slumber, their various local movements about the country-side, their actions generally in sunshine and in storm, by daylight and in darkness throughout each month, each week, each day, and not unfrequently each hour of the twenty-four. From a store of note-books which has accumulated through these long years we will draw our information, that shall carry the story of the birds onwards in a cycle through the months from January to December.

The northern shires are not specially remarkable for avine song during the winter months, and here we have a deficiency that contrasts very strongly with that musical abundance of some of the southern counties. As Waterton remarked long ago, our three best-known perennial choristers are the Robin, the Wren, and the Hedge Accentor, of which trio the first is certainly the most persistent, as it is per-

haps the sweetest and most musical, whilst the last is the least so. The Starling, however, is a very fair winter singer. The voice of the Missel-thrush is also heard throughout January, but now and then we have a day perhaps when he is silent, sure sign that music is on the wane. Towards the end of the month the Song Thrushes are back again in their accustomed haunts, and on exceptionally fine and sunny days may be heard to sing a little; the Black-bird, however, is invariably silent. Another irregular singer in January is the Sky-lark. It requires a warm and spring-like day indeed to woo him into voice, still his song must not be overlooked at this season. So far as most birds are concerned, January is a typical winter month. There are few signs among the birds here in South Yorkshire to indicate any change of seasons. At the end of the month Sparrows may be remarked at their old nests, and many Hedge Accentors undoubtedly pair at this time. The Titmice are still leading a nomad life; but the Rook and the Starling seldom fail to visit their nesting-places each morning. The Finches are of course still in flocks, but a rapid abrasion of the pale edges to the feathers is remarkable, sure sign that the nuptial period is now approaching. This is specially the case with Chaffinches and Bramblings: Greenfinches abrade later. Yellow Buntings are still in flocks upon the fields; the Meadow Pipit, yet

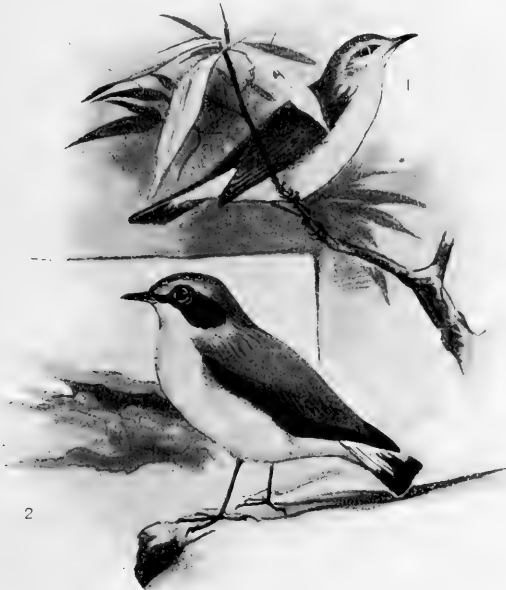
gregarious, is upon the lowlands. The Moorhen, however, is about to pair; most other of our familiar birds are still displaying characteristics of their winter life.

In February, however, there is a marked change in the habits of many birds, and the few signs of approaching spring rapidly develop themselves. Perhaps these indications are most eloquently expressed in song. During this month the Blackbird regains his voice, irregularly it is true, but the fact is obvious nevertheless. The Song Thrush has now fully regained its matchless varied song; the Skylark sings more frequently, and our winter singers are in constant voice. Many Kestrels return to their accustomed summer haunts this month; and the Missel-thrush pairs at the beginning of it. Many Robins also pair; and the Titmice may be heard uttering their love-notes amongst the trees. Starlings are now in pairs; and odd pairs of Sparrows actually commence nesting. March brings still more important changes among the birds, and by many of their ways and movements we read the unerring sign of spring's approach. Among other things may be mentioned the nest-building of the Rooks, the resumption of song by the Chaffinch and the Yellow Bunting, the flocks of both species now disbanding. Avine song is everywhere on the increase; the Blackbird is getting into finer and

more frequent voice, the Hedge Accentor and the Wren are particularly musical; whilst during this month we may find the first nests of the Song Thrush and the Missel-thrush, the Robin and the Hedge Accentor. In the northern shires, however, these early birds not unfrequently suffer for their precocity, and a late fall of snow destroys many nests and eggs. The Dipper is now full of nuptial song, and the Gray Wagtail resorts to the streams where shortly it will rear its young. There is also a considerable migrational movement going on among Pied Wagtails, and Yellow Wagtails in some numbers appear upon the fallows. The Bramblings leave their winter quarters in the shrubberies, and the numbers of the Redwing visibly decline. The first indication of our summer birds of passage is given by some venturesome Chiffchaff or Wheatear; the flocks of Lapwings are dispersing to their breeding-places; so too are the Mallards. March is generally a cold and cheerless month in the south of Yorkshire, and the advance in bird-life is not unfrequently checked by spells of winter weather.

We find abundant recompense for this, however, in the avine changes associated with April. The Missel-thrush now finally becomes mute; but every other singing species is full of song. Now the Yellow Bunting and the Greenfinch are in fine voice, the Sky-lark warbles incessantly, and the avine

calendar is punctuated with the note of the Cuckoo once more. Most of our resident birds are now nesting; migrants appear one after the other as the month slips away — Willow Wrens,* Whitethroats,



1. The Chiffchaff.

2. The Wheatear.

Blackcaps, Redstarts, Ring-ouzels, Tree Pipits, Swallows, and Martins among the rest. Grouse are now breeding.

Bird-life in May perhaps reaches the zenith of its activity. It is a month of song and a month of love, during which the nests of nearly all our commoner birds may be found. It also marks the arrival of

the last of our summer migrants—the Swift, the Wood Wren, the Flycatcher, the Nightjar, and the Turtle Dove especially. Merlins, Plovers, Twites, and Ring-ouzel's are nesting on the moors; Sparrowhawks and Kestrels in the woods; where also Pheasant, Jay, and Magpie are deep in family cares. Away on the distant coast we also know that sea-fowl are busy too, crowding on sea-cliff and islet, repairing to the sands and shingles, for the sole purpose of reproduction during this and the three succeeding months. Inland bird-life again presents marked changes in June. The Common Sandpiper, which we know came back in April, is now nesting by the side of upland waters; the Nightjar and the Turtle Dove are breeding. One significant fact the chronicler of avine annals will not fail now to remark is the slight cessation in the glorious concert of the woods and fields. There is a decided decrease in song, especially among our earliest breeding birds. Each may and will be heard to warble on every day of June, but certainly not in such abundance as characterized their melody in May. The Cuckoo is also in less splendid voice, and not unfrequently cries in a treble series of notes instead of the normal double one. As birds are notably later here than in south-western counties, we shall also find that June is certainly a more musical month in Yorkshire than it is in Devonshire. With the advent of July,

however, the beginning of the end arrives. Thrush, Blackbird, and Robin sing fitfully, as also do the Blackcap and Whitethroat and many others. By the end of the month much song has ceased, Tree Pipits and Chaffinches especially becoming mute. Some birds are still busy with their second or even third broods, but the moulting season is coming on, and that is ever a time of moping and of silence. This month also marks the flocking of many birds, notably the Ring-ouzel, the Rook, the Twite, the Meadow Pipit, the Lapwing, and the Curlew. Tits are also to be seen in family parties, as are also Jays, Magpies, and Starlings. August is much of a repetition of July among our common birds in inland northern districts. Moulting is nearly universal; there is almost a complete cessation of music, and gregarious instincts are becoming stronger. Already some of our summer birds are gone before the middle of the month, especially the Cuckoo and the Swift. Birds now congregate upon the hay-meadows, and vast flocks of Sparrows and other Finches resort to the ripening corn. Migration, of course, is more apparent along the coast; but from time to time, during the stillness of the night, a flock of Waders or Ducks may be detected passing onwards to the south. Towards the close of August the Robin, having passed through his moult, in small numbers regains his song; and the last few days almost

invariably reintroduce us to the glad wild lay of the Missel-thrush. The Wren is a very irregular singer yet; but the Starling resumes his music, whilst the Yellow Bunting and the Greenfinch during the first fortnight lose theirs for the winter. The Chiffchaff also is an irregular singer during August.

In September we have migration once more in full progress. Day by day our summer visitors are now deserting us; birds that spend the winter gregarious are closing up fast into flocks; Pipits, Twites, and other moorland species come down to the lowland fields; the Swallows and Martins congregate into those vast companies that invariably herald their departure. Song Thrushes in great numbers frequent the turnip-fields, as also do Meadow Pipits and Hedge Accentors; by the end of the month Missel-thrushes are in flocks upon the fields, as also are Starlings and Sparrows. Now the Ring-ouzel speed away to the south, and the Blackbird shows a far too unwelcome partiality for the fruit-garden. All the Warblers are migrating fast; the Rooks and Jays complete their moult, as also do the Chaffinch, the Redpole, and the Yellow Bunting. October, nut-brown October, finally clears away the last of our summer visitors, and brings us bird guests from the far north-east. One of the most familiar of these is the Redwing; they return with pleasing regularity to their old haunts. Now the coppices begin to

swarm with migrant Goldcrests and Titmice; the Merlins leave the moors finally for the winter; a few Fieldfares come to us; the Stonechat quits the moorland roughs; the parties of Jays disband; flocks of Finches resort to the stubbles; the Yellow Bunting is gregarious once more; many of the Red Grouse resort to the highest parts of the moors; Pheasants are still moulting; Woodcocks and Jack Snipes appear in their accustomed winter haunts. On every side are indications of avine habits and movements characteristic of winter. The Robin, the Wren, and the Missel-thrush are now in charming voice, but the Starling is only an occasional singer, as is also the Sky-lark.

With November we welcome the principal arrival of the Fieldfare; the large flocks of Missel-thrushes disband; Song Thrushes and Blackbirds decrease in numbers almost imperceptibly. The Robin now shows a marked tendency to leave exposed haunts, and to draw near to houses and gardens; the Goldcrests disperse, the Titmice are nothing near so gregarious; the House Sparrow deserts the fields and takes up its residence about farmyards and homesteads; the uplands are now almost entirely deserted; and shrubberies are filling rapidly with their mixed avine populations characteristic of the winter; the Yellow Bunting and the Lesser Redpole are still upon the stubbles left unploughed, whilst the Pied

Wagtail resorts to them as soon as the share turns over the earth. In November the flocks of Bramblings return to the beech-woods for the winter, and



Fieldfare and Titmouse.

bird-life generally becomes much more localized, crowded into areas where food and shelter chance to be found most easily. December is but an emphasizing of the preceding month. The Kestrel is now

very rarely seen about the South Yorkshire woods and fields. Now come the periodical snow-storms that usually punctuate a Yorkshire winter, and with them bird-life becomes more or less disorganized. We have now much wandering to and fro, the recurring frosts drive birds from their usual haunts, and we meet with species in localities where they are seldom seen at any other time. Many birds change their food at such times; but others, not so adaptable, perish in large numbers, especially Redwings. From time to time flocks of Plovers or strings of Geese may be seen crossing over from one sea-board to the other, and the whole month is filled with considerable unrest among the feathered tribe. Avine song in this dreary month is principally confined to the Missel-thrush, the Robin, the Wren, and the Starling; more rarely the Sky-lark and the Hedge Accentor sing. And so the month draws on, and gradually completes the cycle of the year with the advent of January, the latter bringing with it a few slight changes that indicate the beginning of another round of avine phenomena.

THE END.



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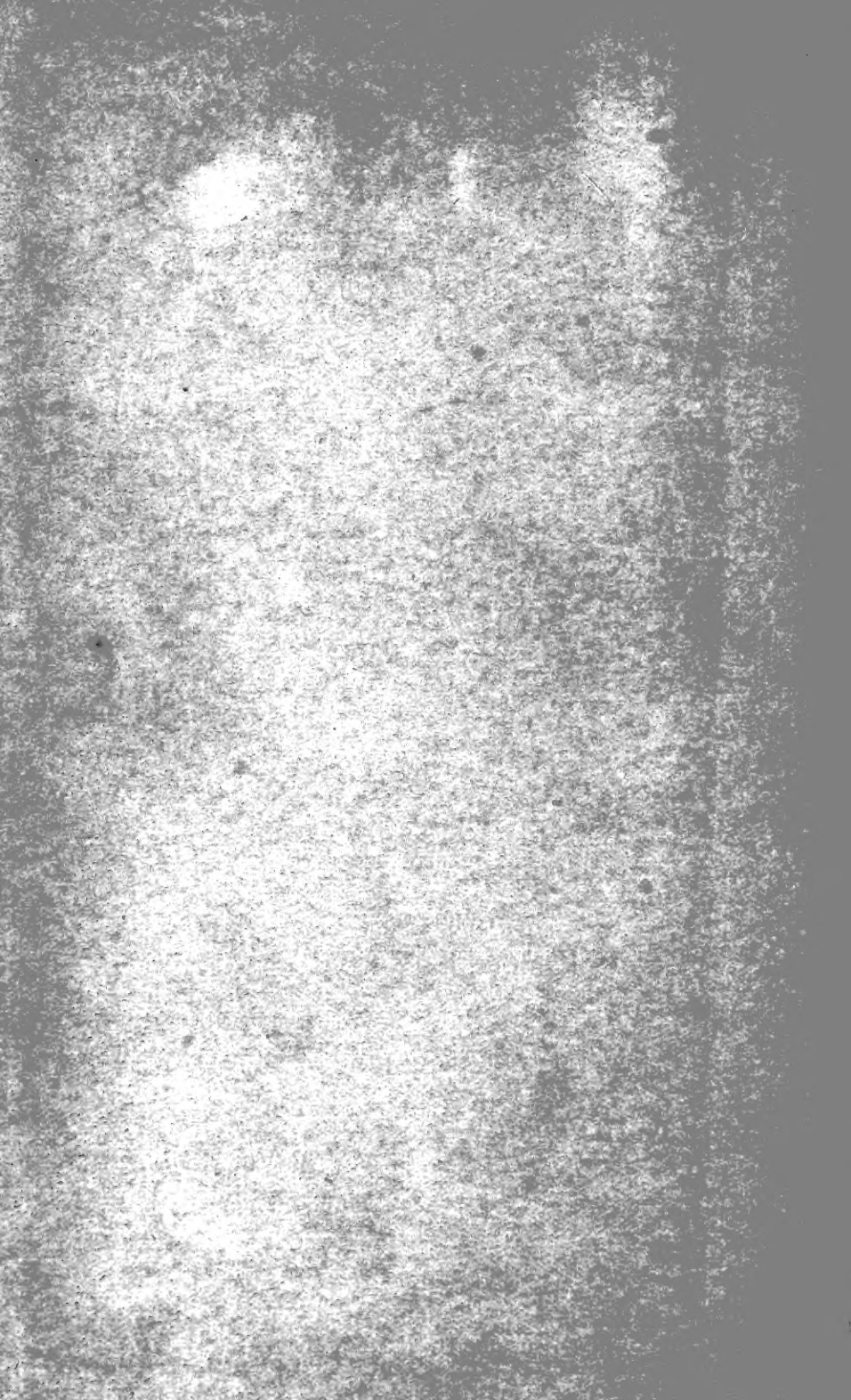
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