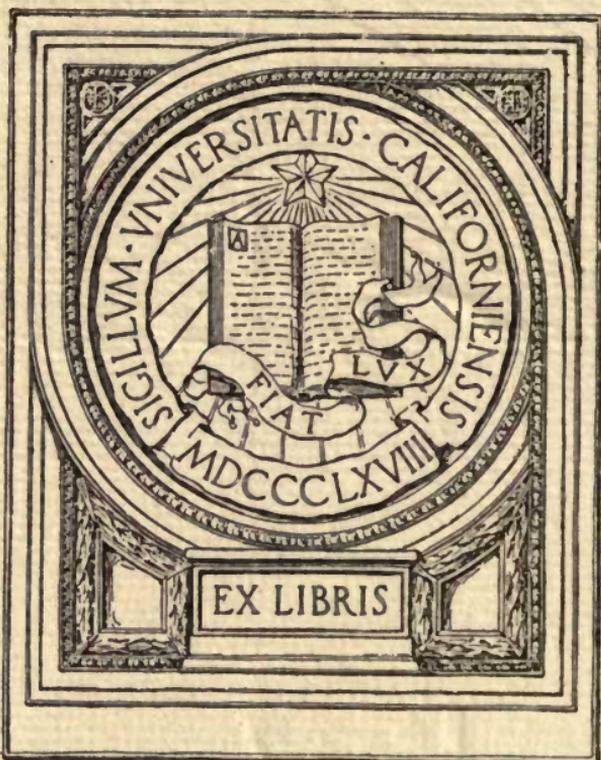


FIELD STUDIES  
OF SOME  
RARER BRITISH BIRDS



BIOLOGY  
LIBRARY  
G





**FIELD-STUDIES OF SOME RARER  
BRITISH BIRDS**



# FIELD-STUDIES OF SOME RARER BRITISH BIRDS

BY

JOHN WALPOLE-BOND

AUTHOR OF

"THE BIRDS OF BROMLEY (KENT) AND ITS NEIGHBOURHOOD"

"BIRD LIFE IN WILD WALES"

AND PART-AUTHOR OF

"THE BOOK OF THE OPEN AIR"

LIBRARY OF  
CALIFORNIA

WITHERBY & CO.

326 HIGH HOLBORN, LONDON

1914

9269  
G7113

BIOLOGY  
LIBRARY  
G

UNIVERSITY OF  
CALIFORNIA

TO

FIVE GOOD FRIENDS

COLONEL EVAN THOMAS (LATE 7TH DRAGOON GUARDS)

GWYNNE WITHERINGTON, ESQ.

ANDREW BIKKER, ESQ.

MAJOR CLAYTON BEAUCHAMP (LATE SOUTH WALES BORDERERS)

WALTER MORGAN, ESQ.

IN REMEMBRANCE

OF MUCH KINDNESS AND HELP.



## PREFACE.

---

TO-DAY we live with nature, and books on British birds are very numerous, perhaps too numerous, since many of them are but a repetition—and often a bad repetition—of their forbears. Possibly, therefore, the sole merit of these essays rests on the fact that practically all the matter contained in them comes from long, personal observation and research. They may, indeed, be described as “Field-Studies of Some Rarer British Birds.” Most of the species selected are really scarce, or, at any rate, extremely local; while one or two—notably the Kite—are very rare indeed. All the same, even by some ornithologists proper as opposed to the casual nature-lover, most rare birds are considered rarer than they are in reality. Of these the Chough affords one good example, the Raven another, the Peregrine a third, the Buzzard a fourth, the Golden Eagle a fifth, and so on.

A long Preface is out of place, so I will merely add that, wherever those dangerous adverbs “always” and “never” occur, they apply to personal observation only. This is as it should be,

## viii. FIELD-STUDIES OF RARER BIRDS

since it is now well-known that in different localities the same species may from one cause or another alter its usual habits materially. In Breconshire, for instance, I once found Merlins breeding in the ancient home of a Crow; in Orkney, Starlings constantly nesting in peat-holes and crannies far out on the open moors; in Sutherland, a Long-eared Owl laying on the ground; while, with regard to several other species similar cases could be cited. Therefore it behoves the naturalist to curb his desire to be over dogmatic.

To many friends I am deeply indebted for various kindnesses, much help and valuable information. Specially do I wish to thank the Rev. John Bond, Messrs. Edward Bond and A. H. Bikker, Major Clayton Beauchamp (late South Wales Borderers), Messrs. J. I. C. Boger, C. W. Buckwell, C. J. Carroll, S. V. Clark, P. Gough, A. Gwynne-Vaughan, J. D. Grafton-Wignall (82nd Punjabis), N. Gilroy, A. Jones, H. Massey, D. H. and C. S. Meares, R. J. Messent and W. Morgan, the Rev. D. E. Owen, Messrs. W. E. Renaut, Morris Rigby, P. B. Smythe, and John, Brinsley and Leonard Sheridan, Major Sparrow (7th Dragoon Guards), Colonel Evan Thomas (late 7th Dragoon Guards), Messrs. B. D. Wenban, Gwynne Witherington, and J. Williams-Vaughan, and last but not least Mr. H. F. Witherby, who, himself a keen and first-rate ornithologist, has bestowed much care and kindly attention on this book in all its various stages.

## PREFACE

ix.

To the Editors of the following papers, *British Birds*, *Country Life*, *The County Gentleman*, *The Field*, and *The Saturday Review*, I offer sincerest thanks for their courtesy in permitting me to reproduce articles which (now, however, appearing for the most part with more or less extensive alterations) have from time to time been printed in their respective columns ; as likewise to Messrs. Hodder and Stoughton for their kindness in allowing me to reprint some of my work which originally appeared in *The Book of the Open Air*. To this also I have added, in some cases considerably.

JOHN WALPOLE-BOND.

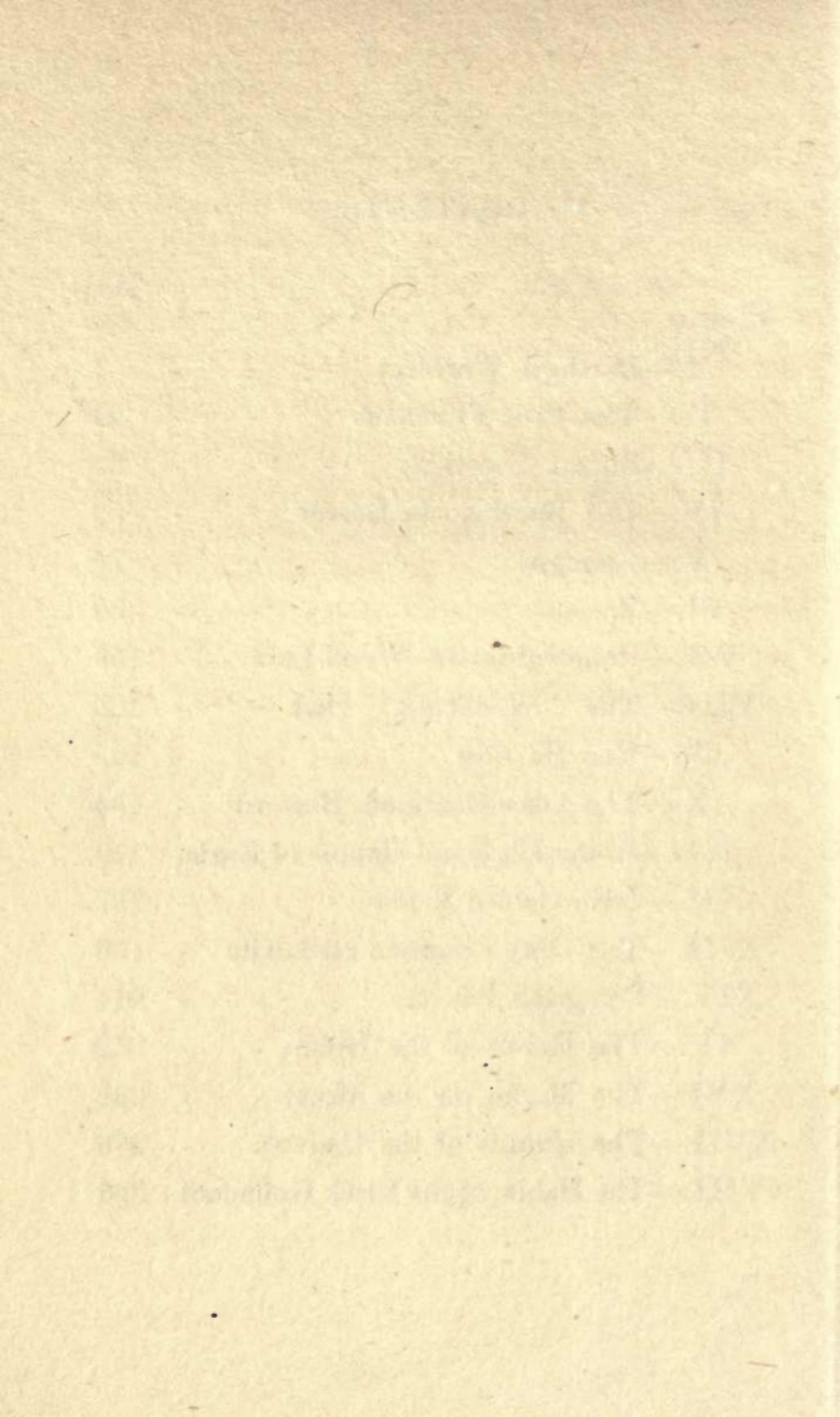
March, 1914.



## CONTENTS.

---

	PAGE
Preface - - - - -	vii.
<small>CHAP.</small>	
I.—Dartford Warblers - - -	1
II.—The Pied Flycatcher - - -	21
III.—Sussex Crossbills - - -	31
IV.—Cirl Buntings in Sussex - - -	50
V.—Choughs - - - - -	74
VI.—Ravens - - - - -	89
VII.—Concerning the Wood-Lark - - -	109
VIII.—The “ Woodcock ” Owl - - -	120
IX.—Hen-Harriers - - - - -	135
X.—The Once-Common Buzzard - - -	154
XI.—In the Highland Haunts of Eagles	175
XII.—Irish Golden Eagles - - - - -	187
XIII.—The Once-Common Red Kite - - -	196
XIV.—Peregrine Falcons - - - - -	214
XV.—The Habits of the Hobby - - -	252
XVI.—The Merlin on the Moors - - -	268
XVII.—The Haunts of the Gadwall - - -	286
XVIII.—The Habits of the Black Guillemot	296



## CHAPTER I.

### DARTFORD WARBLERS.

AT the present day the Dartford Warbler\* is generally accounted as one of our rarest British breeding birds. In reality, however, this rather inaccurate impression has gained ground largely from the fact that many of its best-known haunts, formerly familiar to a few fortunates, have lost its presence—perhaps for ever—as well as to the certainty that even a skilled ornithologist—a being sadly in the minority—may wander through its lines on an unsuitable day, or, in other words, on a very wet or windy, sunless day, without seeing or hearing a single specimen, whereas the whole time it may be comparatively abundant there. The Dartford Warbler has, of course, always been capriciously local in its choice of a haunt. For instance, you get two furze-clad commons or down-brakes, or two wastes of heath dotted with self-sown conifers, situate within a mile or less of one another, and to the human perception equally suitable and identical in every detail. One harbours Dartford Warblers, the other does not ; and nothing will well explain the situation.

\**Sylvia dartfordiensis* Lath.

## 2 FIELD-STUDIES OF RARER BIRDS

The present head-quarters of the Dartford Warbler are undoubtedly parts of Surrey and Hampshire (in one resort I know I have seen twenty-five pairs in two days), but it also breeds in Cornwall, Dorset, and possibly Devon. In Kent, however, it has apparently ceased to nest, while it is very rare indeed in Sussex. There are a few favoured localities in the Midlands, even in the Western Midlands—the species has bred even as far north as Yorkshire—and the bird is a regular *habitué* of Suffolk, and perhaps of Norfolk as well. Elsewhere in Britain it is virtually unknown; and certainly as a breeding species.

Three possible causes—though all three are rather unsatisfactory—have been mooted for the diminution of the “Dartford’s” forces. Certainly the bird *has* decreased in some, and vanished from many, former strongholds: Sussex alone provides plenty of such sorry instances. It has been said—and perhaps with some vestige of truth—that inordinately severe winter weather has thinned its ranks. Mr. W. Swaysland, for instance, who was great on Sussex “Dartfords,” considers that the very heavy snow in the ’seventies of the last century finally exterminated the species round Brighton, where, previous to that, it was quite common.\*

If this “weather-cause” be correct, then surely Nature has played her part poorly in

\*I know one ancient haunt, however, to which it has returned.

allowing a species to winter—the “ Dartford ” is mainly a resident in Britain—in a clime which was ultimately to prove its partial undoing. Anyhow, I can think of no quite parallel case. A second reason assigned to the species’ decrease is the burning—accidental and intentional—of the gorse and heather on down and common ; yet, on this count, surely “ Dartfords ” driven from one spot would speedily accommodate themselves to the nearest suitable locality, as other birds have done before now. Thirdly, to egg- and skin-collectors has been given the credit (discredit would read better) of having banished the bird from many a once-favoured resort. Here, again, only those who have hunted for “ Dartfords’ ” nests will surely appreciate the meaning of the ancient adage of “ looking for a needle in a bundle of hay,” only, of course, for “ needle ” you must substitute “ nest,” for “ hay,” “ furze ” or “ heath ” ; for unless the haunt shows low, scrappy, isolated bushes, the nest is painfully hard to find in more senses than one. Unfortunately, however, the slaughter of the birds would not often be a matter of difficulty.

In autumn and winter, some “ Dartfords,” at all events, relinquish their breeding-grounds to lead a nomadic existence, now visiting fields of “ roots,” now almost any sort of rough ground which can muster a few bushes. At these seasons there seems to be some inclination on the birds’ part to lead a solitary existence and frequent the

#### 4 FIELD-STUDIES OF RARER BIRDS

vicinity of the coast. Moreover, from having on several occasions seen " Dartfords " amongst the hordes of arriving and departing small birds near the coast in spring and autumn, I am tempted to believe that this species is to some slight extent truly migratory. All the same, many " Dartfords " are true to their nest-haunts throughout the entire year, a fact easily verified when hounds are drawing gorse-coverts. Everything points to this species being life-paired: witness a couple frequenting the same spot annually; and although the Dartford Warbler is in no way gregarious, it may, in a sense, be termed social, seeing that, in a favourable district, quite a number of pairs may be found nesting in fairly close proximity.

The nesting-haunts of this Warbler are always (this is a safe " always ") of the same character: they embrace the gorse (albeit not the too luxuriant and lofty gorse) and heath of common-land and down-brake. In the majority of cases there is present ling or heath, which, forcing its way up into the inmost recesses of the furze, affords a site for the nest such as the little fellows love. In some areas the birds frequent large tracts of heath-covered waste, dotted here and there with clumps and irregular battalions of seedling conifers, and bounded and interspersed with real woodlands of pine, hardly any gorse growing there at all. In such cases they nest in the rankest heather available, sometimes a long way from a bush or tree of any

description. Other bird-life is often scarce in a "Dartford" haunt and summer-time affords no exception. Linnets there are, of course, and generally Whitethroats; of course, also, Meadow-Pipits (sometimes Tree-Pipits), Larks, and Stonechats; occasionally a Wheatear, Whinchat, or Corn-Bunting; better still, a Grasshopper-Warbler; best of all, perhaps, a Hobby or Montagu's Harrier.

Your best chance of being rewarded with some insight into the Dartford Warbler's moods and mode of life is to visit, in the spring or summer, some recognised resort of the species. Yet, so shy, so skulking, and withal so sensitive to the elements, are these fascinating furze-sprites, that, on a cold, boisterous day—particularly if the sun has forgotten to shine—you may hang about well nigh from morn till eve without perhaps so much as a glimpse of a single one. Rain and sleet the birds positively detest; wind they disapprove of, though if the sun smiles they will tolerate it. On the right day, however—and the right day is still and sunny—ten hours judiciously spent in the proper place brings ample recompense to the watcher. To begin with, as you approach the tag end of a "brake," you may see a dusky-looking, fragile little form rise flutteringly from the far side of a bush, only to dive into it with quickness extraordinary. Stand stock still, and even then so elusive is your quarry, that a faint rustling from the interior of the bush may alone betoken its whereabouts.

## 6 FIELD-STUDIES OF RARER BIRDS

A little later, and it has threaded its way through several small patches. Then it utters its decidedly harsh call-note of *tirr*, a cry as hurried as its authors flight and habits. This cry is usually delivered twice with a scarcely perceptible interval intervening, though after this there is a lapse of several seconds before it is heard again, and so on. Sometimes it sounds like the slurred, double syllable *pt-tirr*; sometimes, too, it is heard as a single or triple combination. This note is characteristic, and almost unmistakeable. It is well to say "almost," seeing that to anyone lacking full pretensions to ear, the Whitethroat's call of *chirr* is not very dissimilar, while, to make matters worse, the Whitethroat is frequently met with in the self-same gorse-coverts, though naturally until that species' advent into England—until mid-April at earliest, that is—confusion is impossible. Of course, the mistake can only be made failing a sight of the musician. The Whitethroat, however, frequently supplements its original *chirr*—which it is apt to repeat an indefinite number of times—with a rasping *weet, weet, weet*. The "Dartford" never does. This double *tirr*, then, constitutes the normal and characteristic call of the Dartford Warbler. I, for one, can trace in it not the slightest suggestion of the "melodious *pit-chou*" ascribed to the species by several bird-writers. These men must have plagiarized, and wrongly, as it happens, or invented.

Further on—a hundred yards, perhaps—a pair of “Dartfords” scurry from one low gorse-bush into another. They literally dive in: for although there is no actual rising into the air for a headlong-perpendicular or slanting plunge, the birds invariably disappear instantaneously into the heart of the selected hiding-place. Perceptible pause there is none, apparently not even the most trifling of stops. So mysteriously withal do the tiny creatures vanish from sight that they appear to have cleft a passage in the gorse by touching some secret, self-replacing spring, or else there is suggested a magic parting of the furze to give the visitors immediate entrance. This sudden “Jack-in-the-box” trick is a unique accomplishment of the Dartford Warbler: no other species I know seeks seclusion in quite the same way. In fact, it is a wonder that the “Dartford,” from the rapidity of its ingress, does not sometime impale itself upon a spike.

Should the birds have repaired to an isolated bush, you may, perhaps, by repeated beating flush them. If, however, the patch is thick, better give it up, the chances then are all against success. Supposing, nevertheless, you do succeed in driving one from its shelter, the timorous bird will straightway make for any convenient bush from twenty to forty yards distant whence, often alighting momentarily only on the topmost spray, it journeys off to another bush, and so forth, flying

low over the intervening ground and bushes. In heather, of course, the birds are interviewed more readily, and can easily be driven from their retreat. The flight, though inclining to the rapid, is weak, and seldom of any duration, or at a greater height than from three to five feet from the ground. A marked peculiarity of the flight is in the movement of the tail, which is worked up and down, although not too spasmodically. The lengthiest and loftiest flight I ever witnessed (though, of course, when the birds relinquish their summer-camp they must necessarily fly further) was in a crease of the Sussex Downs, when a " Dartford," desirous of vacating a bed of gorse streaking the flank of a natural amphitheatre, ventured to a strip of mixed furze, bramble, and elders, fully a quarter-mile away in the valley below. The flight was then, if anything, weaker than its wont, more wavering and quite top-heavy, as if the rather long tail, held as it was in a direct line with the plane of the back, upset the bird's balance, and retarded its motions. Seen under these conditions, the bird reminded me of a somewhat deformed Long-tailed Tit which had lately been sojourning in the purlieus of an abominably smoky city.

Generally, however, you first exchange greetings with the Dartford Warbler in this way. Drawing near to a ridge of gorse, you suddenly hear the familiar *tirr*. In fact, you generally hear the note before you sight the performer, for the

latter, with its far sharper eyes, detects you first, and in consequence sets up a cry of defiance. Cast round sharply in the direction of the sound, and you shall mark down your quarry perched jauntily and pugnacious-looking, with crest erect and throat-feathers puffed out, on a spike of gorse, very frequently on the highest spike available, as though to command the utmost range. He, however—for it is usually the male which shows up in this way, the female being far more retiring in disposition—is never a good sitter. On the contrary, he is a restless little chap, full of whims and caprices. He must for ever be on the move, always on the alert. First he flies off to another bush fifteen yards away, and alights on its waving, pin-cushion point, when he pauses only just long enough to show you how well he can flick his tail and shuffle his wings ; and he calls incessantly, though never when on the wing. Then, perhaps, after a second brief flight, he finds himself on a peculiarly pointed spur of gorse, where his hold is so slight that a gust of wind fairly catching him, compels him to pivot clean round, when, with sadly ruffled plumes, he takes to himself the style of some villainously-stuffed specimen. His fan-like tail is spread to its uttermost, and even now, as nearly always, it is held fairly erect, though never so erect as the Wren's ; but occasionally it lies little higher than the upper line of the body, seldom below that point. For two or three all too short

minutes you may woo this bird. Then, like a flash, he is lost in the impenetrable tangle, and no matter how patiently you wait in that spot, you will, so far as he is concerned, very likely court solitude.

Under most circumstances in the field, the "Dartford" may be distinguished by its dusky appearance, its rather long tail, and weak, undulating flight. When viewed really close by, or when "glassed" at a further range, it is quite a pretty bird. In a moderately good light, the male's upper-parts look greyish-brown in tint, though grey or brown predominates, according to the point of view; while his under-parts are pinkish, fading to nearly white. With a full sun to burnish his apparel, he is a singularly handsome fellow, since then his head and cheeks assume a clear tint of slatey-blue, his back looks greyer than ever, while the breast glows with a deliciously vivid hue of pink. The female is very similar in appearance, only all her colours are chastened. With both sexes a little white is discernible on the outermost feathers of the tail when expanded. The average book assigns an iris of yellow to this species, but the "Dartfords" I have examined through glasses (I have never yet had one dead in the hand) appear to have reddish-orange irides.

As compared with other song birds, the "Dartford" is an intermittent chorister. On a bright day, however, particularly on a bright

fresh morning, the males burst into constant, if scrappy, music. The song itself is unique—a sweet, gentle ditty (albeit clear and distinct), quite in keeping with the soft, velvety bloom of the gorse blossoms. Its great charm and characteristic is a series of liquid, mellow, bubbling notes recurring at intervals; and in it you shall detect, as it were, imitatory snatches of Whitethroat's, Hedge-Sparrow's, and Stonechat's refrain: yet it is ever sweeter, lower, shorter, and, in fine, altogether better than any of the trio's. It is usually heard as the bird deftly balances on a furze-spray; sometimes from the recesses of a bush, as the musician creeps mouse-like through the undergrowth; sometimes from a tree—even from high in a tree—from telegraph-wires or a post, should any or all of these objects occur in its haunts; sometimes again as the bird, emulating the aerial feat of the Whitethroat, mounts hoveringly into the air.

In anger the *tirr* note is run into the song with fair frequency, and under pressure of annoyance or alarm the *tirr* itself will—for the male—end up with *trui*; for the female with a rattling sort of stammer like this: *tut-t-t-t-t* or *tr-tr-tr-tr*. Another cry, and obviously one of alarm or menace, in view of its frequency when the young are threatened, resembles the syllables *tc-tc-tc*, but it is not quite like that full *tec* or *tic* which is a common attribute of many of the Warblers, nor does it approach it in harshness. I once heard this cry

used in very pretty circumstances. I had just seen a pair of " Dartfords " scurry across a " ride " intersecting a large " brake " of gorse and disappear—magically as usual—into an isolated bush. On my approach the cock—plainly distressed and with crown-feathers erect—at once flew out of it, and half fluttered, though he never actually touched ground, across an open space adjoining. Still agitated for his wife's welfare, I suppose, he speedily returned, when, after sitting momentarily on another bush, scolding me the while with the soft, subdued *tc-tc-tc*, he dived into the patch yet containing his mate and fetched her out. Then both quickly decamped to a ridge sixty yards further afield.

Turning to the nesting arrangements of this Warbler, one is confronted with a perplexing problem, as how best to outwit a wily creature. In parts of the Continent, we are told, the nest, from being built amongst the outermost sprays of even wayside gorse bushes, is conspicuous enough to rider and pedestrian alike. In England, however, I have only once seen a really exposed example, and this literally compelled attention by reason of several long, round stems of grass straggling out from it, making it reminiscent externally of one type of Yellowhammer's nest. Usually, unless the gorse bushes are few, far between, and thinly substed, or unless the nest is in heather (it is by no means easy to find even then), the naturalist's

labours, to go rewarded, must generally attain to the labours of Sisyphus. Watching the birds, unless they are building or feeding young—when success is almost certain—is all but hopeless; while assiduous search—though sometimes recompensed—in and around the spot where you have first seen or heard a bird or a pair previously, as you imagine, undisturbed, likewise has little to recommend it. For the “Dartford” is a provoking little beast, since, except for *tirr-ing*, which it also does religiously, even at seasons when it could have no home, it will vouchsafe you no single or sure indication of its nest’s whereabouts. Watch this male, for instance, on a day late in April or early in May. First seen at a five-yard range, calling excitedly, he retires thirty yards, then again thirty and so on, still *tirr-ing*, till you have quite lost sight of him, and begin, moreover, to wonder what on earth his game is. Naturally, from his proclivity to meander, you can never be quite sure whether he is agitated over his nest somewhere round X, let us say, the point where he was first interviewed; or whether it is at Y—sixty yards on, where he has journeyed to—that his home must be sought. The whole thing looks like sheer bluff. Perhaps as such it is meant. All the same, I rather favour the belief that, if at the *correct date* you chance on a male obviously perturbed, and if, further, he refrains from straying off, but merely drops into covert hard-by, you are somewhere on

the right track. That there is any hard and fast rule for finding the nest I, for one, doubt exceedingly.

Should you be fortunate enough to catch a pair building in gorse, stand still. Stand you must when studying "Dartfords," unless they are in heather; seldom if ever can the bushes be properly commanded from a sitting or recumbent posture. At first, perhaps, the female alone is in sight, poised on a furze-point fairly close by. In her beak is a tuft of Ring-Dove's fluffy down—that white down decorating the base of pigeons' underfeathers. Now, if you are extremely close to the nest as yet unknown, the architect, although in a sense confiding when busy at house-planning, will not actually give her wares away, but will instead keep taking short, quick, spasmodic, and agitated flights from bush to bush, finally copying a feat of the Whitethroat by describing a big reverted arc, and then taking refuge in a strip of covert some seventy yards distant. Now, to make sure that you *are* really close to the nest—stay where you are; and, if you are, ten minutes later back comes the builder, this time with some dark fluffy material. The white down she must have dropped, as birds will with nest-fabric when kept too long from adding to their home. Then the same game as before is played to the letter; a second time the bird departs, and you, too, must make a move to a point which sweeps the place

you have just vacated. Half an hour, perhaps, now elapses before patience is rewarded, and this time the bird again carries an atom of white down. The old spot gained, she slips into one side of a bush, to reappear three seconds later on its far flank: and she is *without* the down! "Got it this time!" you mentally ejaculate. Not a bit of it. Metaphorically you turn that bush inside out, carefully you examine every shred of it, but all to no purpose. Back again to your post; more watching. At last—ten minutes later—she is busy again with a substantial bill-ful of dried grass. Four rather isolated bushes stand in an irregular row. From the furthest of these she glides into the next, through that, and so on in rotation—still she holds the grass—till the fourth and last is reached. In this she remains a couple of minutes before absconding empty-mouthed. Your previous failure does not inspire confidence; but a deliberately cautious search decides that the nest *is* there, skilfully concealed in the very heart of the prickles and about a foot from the ground.

Most nests are in gorse bushes of medium height and size. Never, it seems, are they found in very lofty furze, although the bush selected may be growing in the middle of a tall "brake." Very often a little path or rough natural track leads past the bush; some nests are placed in bushes aligning even a much-frequented road.

The nest itself is almost always at that point in a bush where heath, and often coarse grass, pushing up through the dead base of the furze, joins forces with the lowest live shoots at a height of from one to two feet from the soil, and is usually half supported by the heath, half held up by the furze. Some few examples, however, look for a hold to the dead gorse stems alone. Generally the nest is well inside the bush, but occasionally a small portion of it is visible without any parting of the surrounding foliage. In certain districts, where the birds habitually breed in heather, the nest is placed in a clump of tall growth, generally four or five inches from the ground, caught up by and half resting on, half suspended from, the dead growth decking the interior, and perfectly invisible till the growth has been parted. In such cases, the sitting bird may be beaten off.

Many observers say that the nest is strikingly flimsy, more so even than that of the Lesser Whitethroat ; but, despite the fact that nests for second broods are slightly frailer than first attempts, even these can seldom be termed truly flimsy. In fact, with most specimens you can only just discern daylight through a few chinks in their base. The following description of four nests will give a fair idea of their construction :—

The first has a circumference of 14 in. ; it is  $4\frac{1}{2}$  in. by  $4\frac{3}{4}$  in. across, with an " egg-cup "  $2\frac{1}{2}$  in. across by 2 in. deep. It is compact and quite

substantial, with walls fully an inch thick. Externally it is composed of, firstly, a few fine heather-twigs, some broadish fronds of goose-grass, some very fine *spiculae* of dead gorse, stems of tapering grass and a few pieces of white down, in addition to a yellowish cocoon or so, lined with remarkably fine rootlets and grass stems, a little black horse-hair in strands, two or three Ring-Dove's small feathers and one tuft of rabbit's "fleck."

The second, measuring 15 in. in circumference,  $3\frac{1}{2}$  in. across, with an "egg-cup" 2 in. in diameter and  $2\frac{1}{4}$  in. in depth, is chiefly made of goose-grass, with a sprinkling of fine heath-twigs and cocoons round the rim, as well as with some of the latter just inside the rim, as also amongst the external coating of grass, whilst the lining is of fine roots and two strands of horsehair.

The third—a conspicuously neat specimen—is composed of fine grass-stems garnished with cocoons, the outer rim profusely decorated with twigs of fine heath, lined with very fine rootlets and a small quantity of black horsehair, the inside of the rim being adorned with small, grey, fluffy feathers. Its circumference is 13 in., its external measurements 4 in. by  $3\frac{3}{4}$  in. by  $2\frac{1}{2}$  in.; its internal ones, 2 in. by  $2\frac{1}{4}$  in. by  $1\frac{1}{2}$  in. The fourth,  $4\frac{1}{3}$  in. across, with an "egg-basin"  $2\frac{1}{8}$  in. across by  $2\frac{1}{4}$  in. deep, is constructed of fine heath and grass mixed with wool, lined with a little hair and a few feathers.

Four eggs almost always constitute a first clutch, though three only are sometimes laid. Five is fairly usual with second broods: six I have yet to hear of. More than anything else they resemble certain eggs of the Whitethroat, though even then they may usually be distinguished by their smaller size and greater elongation, as well as by a darker and conciser pattern of markings. Some varieties—to me—suggest a compromise between the Whitethroat's egg and a certain type of that of the Reed-Warbler. Their colour ranges from nearly white to pale yellowish-white in ground, spotted and speckled with brown of different shades, the inferior markings being inky-grey. A correct identification of the owners of any nest with eggs found later than May 10th is imperative, since after that date the Whitethroat's (this bird sometimes frequenting the same type of ground) laying season is in full swing. Of course any doubtful eggs—though the nest should always prove of assistance in the diagnosis—found in April may safely be attributed to the Dartford Warbler.

To the female falls the main onus of nest-building and incubation, which lasts twelve or thirteen days. Generally a close sitter, sometimes is she a marvellously close one, even allowing you to beat the bush containing her several times before leaving her post. On other occasions, however, the moment you get right up to the nest, on which, if you know its exact whereabouts, you may per-

adventure for a fleeting instant watch the bird brooding, she slips off with intense stealth, creeping through the next and succeeding bushes, and seldom showing until she is some yards from her belongings, and then only momentarily. She may then call once or twice by way of warning. So craftily, however, does she go through this performance that, unless you are previously aware of the nest, you would never suspect her existence until she shows up or calls out, so very slight is the movement of the branches she threads through, so faint their rustling; and unless the nest harbours young, greater symptoms of agitation are seldom shown. Then (brooding on newly-hatched nestlings for instance) I have seen a "Dartford" leave her nest not only very reluctantly, but also with a don't-you-see-I'm-hurt sort of action—feeble, fluttering flight low over the heath and fully-expanded tail.

Nestlings, when first hatched, are of a dirty-pink colour, in parts verging into grey, with feather-tracts of a sooty tint: their bill is pale yellow with a dark-brown tip. They are fledged in about thirteen days, but for some time after that are waited on by their parents, for both sexes assist in feeding them, sometimes together, sometimes alternately, though, whether helping or no, the male is usually in close attendance. The old birds are very elusive when visiting the young, though they start calling distractedly when an

intruder is as much as seventy yards from the nest. The young themselves, when quit of their birth-place, lose no time in separating and diving into the gorse or heather on the approach of a trespasser.

The first clutch of eggs is generally laid between April 15th and May 5th, the best average date for a full, fresh "set" being, perhaps, between April 25th-30th, whilst second broods are reared during June and July. Before reading Mr. Ellman's note in Borrer's *Birds of Sussex* to the effect that he had "on April 29th, 1852, seen thirty or forty young 'Dartfords' out of the nest" (the italics are mine), I had no notion that the species was ever such a wonderfully early breeder. Surely that season must have been an exceptionally early one?—for, normally, the *earliest* broods are seldom fit to leave the nest prior to mid-May. Mr. Swaysland, too, tells me of a nest he found with young near Falmer, Sussex, on April 26th, 1872.

## CHAPTER II.

### THE PIED FLYCATCHER.

THOSE ornithologists who aver that the dainty Pied Flycatcher\* is everywhere rare in our islands can scarcely have visited it in its Welsh haunts. Admittedly is the bird extremely local, and, taking Britain as a whole, rare ; and yet in portions of the Principality—in the central portions particularly—it is, though confined to certain districts, a characteristic and common species, being, probably, just there even more numerous than the well-known Spotted Flycatcher is anywhere.

Brecon, Radnor, Carmarthen, Cardigan, Carnarvon, Denbigh, and Merioneth are the great strongholds of the Pied Flycatcher, wherein its chief haunts embrace scenery romantic as it is wild, since the bird delights in making its summer-quarters in the well-wooded “cwms,” even to those penetrating the heart of the hills ; it is in reality a creature of savage country, or at least one of country dubiously cultivated ; it does not revel at all in the homely spots so attractive to its cousin, the Spotted Flycatcher : for although many pairs frequent cultivated districts in Wales, it must

\* *Muscicapa hypoleuca* (Fall.)

be remembered that that term there might denote desolation in most of England's counties. Occasionally, however, the Pied Flycatcher forgets its true love of the wild, not only to haunting the pleasure-grounds of some stately country mansion, but even to rearing its young in an artificial nesting-box.

Without being in any degree a water-dweller, this little bird is, all the same, passionately attached to the neighbourhood of water, and especially to that of fast-flowing water ; nearly all its haunts in Wales—as elsewhere—are the oak and birch woods and coppices decking the rugged sides of the valleys and dingles through which turbulent salmon rivers and effervescent trout streams boil madly along ; or the irregular array of alders and birches fringing their banks, as well as woodlands hanging above lakes. More occasionally an orchard or fir plantation is patronized, though rarely one far from water ; while in one district on the Wye, which I know well, the bird frequents the strips of covert dividing the Cambrian Railway from the river, where it may often be seen at rest on, or fly-catching from, the telegraph wires. To sum up, it may fairly be said that its summer home is seldom any distance from a damp, not to say boggy, tract of ground, close to water of some kind, and to rapid streams in particular—a peculiarity which may perchance take origin from some special, aquatic

fly on which the young would be chiefly nourished. If this be so, that insect must be excessively local, for putting Wales and its border counties aside, the Pied Flycatcher is of abnormal occurrence as a nester till the Peak, Yorkshire, Lancashire, Northumberland, Durham, and the Lakes are reached. Only very few districts in Scotland—where the bird is extraordinarily local—afford shelter to this lovable species, while in Ireland it is practically unknown, and has never bred there.

The Pied Flycatcher generally begins to reach its Welsh resorts between April 15th and April 22nd (April 13th is my earliest record), but the bulk have not arrived until the very end of that month, while up north of course—in Lake-land, for instance—even the advance guard is seldom present before the “twenties” of April. The males always precede the gentler sex, often by a week.

The Pied Flycatcher is a fussy and restless sprite of the woodlands; even when perched it is restless, flicking up wings and tail incessantly. It seldom indulges in lengthy flights, but merely flits from tree to tree with somewhat jerky and weak motions. Although it is prone to procure its insect-diet somewhat after the fashion of the Spotted Flycatcher, it is nothing like so constant either in this respect or in that of returning, after each aerial foray, to that stand from which it started. Indeed, quite often is food hurriedly snatched from off the ground.

Although in no way gregarious, it may yet in a sense be deemed social, inasmuch as not only does it often migrate in small companies—I have frequently seen several together on their first arrival at their summer quarters—but also because a good many pairs frequently nest in the same wood, in which case the birds—and especially the males while their partners are busy incubating—are often to be found in little parties numbering from three to six. I have known over a dozen pairs to breed in one wood of no lordly acreage; I have seen two nests within a very few yards of one another.

This Flycatcher is essentially a hole-breeder; its home must invariably be sought in a hole in a tree, or, sometimes, in one in masonry or natural rock. Oaks are general favourites, but birches, ashes, alders, willows, fruit trees and firs all periodically shelter the abode of the Pied Flycatcher. The selected hole may be at any elevation from the ground: now the nest reposes in a decayed stump only a foot or so from the soil, again it lies in a knot-hole as much as forty feet up in a tree, while Green and Great Spotted Woodpeckers' deserted dwellings are readily requisitioned. I have never yet known a Pied Flycatcher use a hole which only just admitted it, though on the other hand, even if the eggs are visible, the entrance is always sufficiently restricted as to necessitate the cutting or breaking away of wood, ere they can be reached by hand. A small "scoop" is, therefore, often useful.

The birds never enlarge or alter a hole in any way ; indeed, except with the most friable and rotten wood, that would be a proceeding utterly beyond their capabilities. Each pair is constant for life, if one may judge from the fact that the same dwelling is used annually, until, in fact, an accumulation of ancient nests has well nigh reached to the entrance, when a fresh hollow is perforce chosen in its vicinity. For, although vastly attached to its home, the Pied Flycatcher very seldom removes the old nest debris, and from various Woodpeckers' holes—to specialize—I have unearthed these dilapidated tenements to the number of a score. Although I have seen a male gather, toy with, but drop a piece of building-fabric, the female alone constructs the nest, while he serenades her continuously from a branch hard-by, and sometime accompanies her when she goes in search of material.

The nest—completed in from six to nine days—is loosely built, somewhat untidy and rather rough. Its general composition is of dried grass (often cotton-grass) and dead leaves, those of the oak, birch, and alder predominating, lined with finer dried grass. Sometimes a little moss or dead bracken occurs in the foundation, sometimes a little horse-hair in strands in the lining ; but in the numerous nests I have examined, never yet has a single feather been present, despite the fact of many having been within easy touch of a farmstead,

where the builders would have had unrivalled opportunities of gathering those shed by the chickens. On the other hand, nearly every nest of the Redstart—breeding in very similar sites and producing eggs not so very unlike those of the Pied Flycatcher—I have dissected contained feathers in greater or less abundance; a distinction which might prove of service were the owners of a doubtful nest not observed. An average nest measures about four inches across, with an “egg-cup” some  $2\frac{1}{2}$  in. in diameter by  $1\frac{1}{2}$  in. deep; but, of course, its size depends almost wholly on the amount of accommodation afforded by the hole selected.

The eggs, numbering from five to eight—seven is a very common clutch—and even up to ten, are of a most lovely uniform pale blue; and if approaching the Redstart’s in point of size (they are usually smaller), in colour they far more resemble those of the Wheatear. When blown they quickly fade, and the shell is brittle, thin, and slightly polished.

In the lower parts of a “cwm,” and in the true lowlands patronized by this species (for it is by no means found everywhere even in those counties in which it is plentiful), full clutches are frequent between May 17th and 25th, but nearer the source of the hill-streams from the 25th to the 30th is a safer date, while genuine initial attempts are not uncommon in the earliest days of June.

Only one brood is reared in the year, though if the first "set" of eggs is destroyed a second, and if this goes even a third, is produced, sometimes, indeed, in the same nest, if the hole has not been too greatly tampered with. Incubation, almost the sole prerogative of the female, lasts twelve or thirteen days, and although she does not begin to brood till the clutch is complete, she nevertheless frequents the nest periodically while laying is in progress.

Conspicuous though the male is, the home of the Pied Flycatcher is not always found for the mere asking: since, contrary to the custom of most hole-breeders, which—even when their eggs are fresh—often remain brooding till removed bodily, the female quite constantly slips out of her dwelling at her husband's cry of warning, while the intruder is still some way off. Then the surest road towards success will have lain in having accurately marked the spot where the cock was first seen or heard, since he is particularly enamoured of singing very close to his belongings; afterwards, by sitting down quietly in view of that spot. Presently both birds begin to flit anxiously about in the vicinity of the tenanted hole, for there are often—to your confusion—several "possibles" in fairly close proximity. If chary about actually entering it for some little while, they none the less indicate the right hole by keeping remarkably close to it, while from time to time they utter their simple notes of

alarm. Then, in due course, the hen will venture to visit her nursery, but before finally re-settling on her eggs, she is apt to enter and leave the hole several times. Eventually, too, she may even allow herself to be caught on the nest, a happening, indeed, which may have taken place in the first instance with a nest found by looking haphazard, and especially if the eggs are highly incubated.

While the nest is under examination, its owners—and often the male in particular—will frequently approach the disturber of their peace to within a few feet. Then is the time to take stock of the birds' normal notes. These are two in number, either used separately or tacked on to one another. The first—by some naturalists wrongly attributed to the female alone—is a weak *whit*; the second a rather faint, short, and repeated *chic* or *tic*.\* United—*whit-tic*—the cry becomes suggestive of a very subdued Redstart calling, though the latter's cry is more of a *weet* (iterated) and louder, with a fair interval between each utterance, and sometimes augmented by a staccato *tc-tc*. The song of the Pied Flycatcher is pleasing and characteristic. Commencing with a strain, usually twice repeated, slightly reminiscent of certain notes of the Great Tit, e.g., *whit-chichy, whit-chichy*, it terminates in one not so unlike part of the Redstart's refrain. It is generally delivered from a tree, frequently from a lofty if not a dead bough, but occasionally a

\* I have also rarely heard the male call *wee*, iterated two or three times.

telegraph wire or rock-boulder (the latter a common object in most of the bird's haunts) is used as a stage. After the young are hatched the song is of a desultory nature, for the male, though taking no share in nest-building and little in incubation, does assist in feeding his progeny.

Sometimes the Pied Flycatcher's nest is a joint-stock affair. In different homes of this bird I have found eggs of the Redstart (Do these two species ever cross?—because on May 6th, 1903, to particularize, I watched a male Redstart pursuing a female Pied Flycatcher, obviously with intent amorous), Great, Blue, and Marsh-Tits, while in some such instances both kinds of birds have helped to rear the mixed brood. Occasionally a pair of house-hunting Tits not only oust the Flycatchers completely from their quarters, but will even construct their own nest atop of that of the latter, even though it holds eggs. For example, on June 10th, 1903, investigating a Pied Flycatcher's hole, I found a Blue Tit sitting on seven eggs of its own in a nest built over the former's, which, in turn, contained six eggs. This usurping and eviction on the part of other small hole-breeders does not, of course, take origin from any love those birds may bear towards the Pied Flycatcher, but is simply owing to the fact that in some districts there are not enough suitable holes to go round. The eviction one can well understand: it occurs with several hole-nesting species, the weakest, of course,

going to the wall ; but the joint-stock problem is not so easily grappled with, and I can think of no other quite similar examples with small birds, though it is well known that certain of the game-birds will lay, not only in one another's nests, but also in some of the duck tribes'). Some of the Waders, too, will occasionally exchange compliments in this fashion. Anyway, it must be supposed that the Pied Flycatcher, besides being gentle, is eminently easygoing, not only in that it allows this billeting, but also because it is permitted to go halves with its would-be complete usurper.

The adult male Pied Flycatcher can be mistaken for no other species likely to be met with in Britain, but the female and birds of the year, being brown where he is black, may by the tyro in certain lights be confused with the Spotted Flycatcher. On flight, and especially in a good light, such an error would be inexcusable, owing to the then conspicuous white wing-bar being fully displayed ; moreover, the habitats of the two species are normally quite at variance.

The Pied Flycatcher leaves our shores in August and, chiefly, in September, when it often, while thus on migration, occurs in the suburbs of London and elsewhere. I once saw an adult male inland in Cardiganshire on September 29th—a really late date for the bird to be still in its summer-quarters, seeing that even on the coast lines a Pied Flycatcher is seldom seen after that day.

## CHAPTER III.

### SUSSEX CROSSBILLS.

THE period embraced between the late summer of 1909 and the early part of that of 1910 will long be remembered in ornithological circles as one famous for the immense numbers of Crossbills\* which for that time took up their residence in Britain, when, it is safe to say, there was scarce a county throughout the United Kingdom, parts of which at least were not temporarily favoured—far more than their wont, even for winter—by assemblies of these erratically behaved birds. Moreover, a good many nested in districts where, normally, a Crossbill's nest is accounted a great rarity. In this connexion, it is as well to remember that this species' normal and regular breeding-haunts in Britain comprise certain areas of Scotland and Ireland, although it is true that odd nests have periodically been reported from many English counties, while there is no doubt at all that there exist some few spots in England where a small percentage of Crossbills breed annually—as in portions of Norfolk, Suffolk, and Hampshire. It is worthy of remark that, during this 1909-10 invasion, the majority of the nests

\* *Loxia curvirostra* L.

found hailed from the eastern and southern counties, though there was presumptive evidence to show that the birds were breeding, or had bred, in many others besides. They were certainly most to the fore in Norfolk and Suffolk, where I heard of a score of nests having been found in merely a long week-end ; but a good many bred in Surrey, Sussex, Kent, Berks, and Hampshire. Nesting was recorded from Plumstead, of all places, only a very few miles from the metropolis.

Anywhere and at any time is the occurrence of Crossbills regulated not only by the presence of larches and—chiefly—Scotch and Douglas firs, but also by the prevailing crop of cones, on the seeds of which the birds mainly support themselves at most seasons. The nestlings, however, are principally nourished on caterpillars and insect-life, fare which, together with occasional meals off larch buds amongst others, during spring and summer, commends itself to their parents as a pleasing change. Mr. Robinson, of Saddlescombe, Sussex, informs me that he has seen a Crossbill feeding on the seeds of a thistle.

Although Crossbills quite frequently betoken their presence—especially just before quitting one tree for another, and when actually on the move—by their characteristic, metallic, and ticking cry of *chuk*—which, when heard from a flock, generates into a pleasant sort of twitter—they are while feeding unusually quiet. They then frequently give them-

selves away solely by dropping to the ground those cones which they have lopped off, and from which they have just gleaned provision. Otherwise they steal and creep about like mice among the thickly-foliaged tree-tops, where, unless the light plays on them at certain angles, even the showy red males are not always easy to see immediately.

Slightly cumbersome in minor details, as for instance when solidly perching in a tree, when the top-heavy-looking head, the then-apparently-thin neck and erect, stiff posture, all combine to give them a woody appearance, Crossbills, at any rate when feeding, are seen quite at their best, and lack nothing in point of elegance. All their actions are then very pleasant to behold, and, so long as quiet is the order of your going, you shall sit and see at really close range, until, in fact, the birds cry enough of that special banqueting-board. Clinging to the branches in various acrobatic attitudes, they inspect the cones with the eye of an expert, and when, soon, one is detected full of seed, they chop it off cleverly at the base of its short stem with their curved and twisted bill, which is wondrously adapted for such an enterprise; then, securing their booty firmly with one foot, they take their fill of food, after that letting the now worthless husk fall suddenly to the ground. Sometimes a volley of cones fall together from, as it were, a dozen or more marksmen; at others there is heard a regular, subdued *feu de joie*, as one cone after

the other rattles down to the pine-needle-carpeted soil. Occasionally odd birds may be seen clinging to a cone upside down, and extracting seeds that way. I have, too, constantly noted members of different flocks settle in some deciduous tree—such as a beech or birch—lop off a thin twig, obviously for sheer sport, and drop it immediately. It is pleasant, also, to regard a flock, now one bird at a time, now two or three together—a combination of green and drab, red and orange—fly down to some roadside puddle or small field-pond (by some ornithologists it has been erroneously asserted that Crossbills only drink from *flowing* water) to slake their thirst, when to the ignoramus they would appear then more than ever like so many dwarfed parrots let loose on the country-side.

Sometimes, for no suitable or apparent reason, a flock will take sudden panic, whereupon nearly all scurry out of the feeding-tree a short way, but return to their self-interrupted feast almost at once. When at last they decide to go for good, there is generally a greedy straggler or so left behind still eating. Eventually, however, these follow on in the wake of the now fast-receding flock. The flight, though always easily recognised, may best be described as a compromise between that of the Greenfinch and Hawfinch, albeit not so liting as that of the latter; nor, indeed, is the Crossbill anything like so gross or thickset as the clumsy Hawfinch.

The Crossbill's usual, metallic, *chuk*-ing cry—to be heard from flying as well as stationary individuals, and uttered either fairly slowly, or, on the contrary, very fast indeed—has already been touched on. It is an extremely characteristic note which, once heard, can never be forgotten. Another call is a regular *chik*, quite distinct, I find, from the *chuk*, and one, possibly, peculiar to the female; certainly *she* gives vent to it in addition to the latter note. Allusion has also been made to the twittering—perhaps a modification of the two cries just mentioned intermingled, and so, from being heard from many throats together, now in unison, now in doubtful harmony, leaving a suspicion in one's mind as to whether it is a unique production—from flocks of Crossbills. Remains for discussion, however, the real song of the male, which may be rendered as *chip-chip-chip-gee-gee-gee-gee*. It may hardly be termed loud, nevertheless it is articulated very distinctly, and, on a still day, penetrates to some distance. Although, to me at any rate, it is pleasant, it possesses no melody proper: indeed, it is on the harsh side, especially with regard to the iterated *gee*. In point of time and the number of notes contained in it, passing comparison may be made to the song of the Reed-Bunting, while to a certain extent, the *timbre* of that bird's voice, as well as the chirping of the House-Sparrow is implicated. At least, so I think: but then no two people hear quite alike. Anyhow,

the song of the Crossbill is perfectly characteristic, and one impossible to confuse with that of any other species ; so much so, that the very first time I heard it I exclaimed : “ that’s a song new to me, and a Crossbill’s, I believe.” It was . . . The Crossbill generally delivers his ditty from the very summit of a larch or fir, or from some well-elevated, protruding branch of the same, but very occasionally from the air, as he describes a circle or so above the tops of the trees he is frequenting. Indeed, at most times is the flight of the Crossbill higher than the plane of the tree-tops. The young, when nearly fledged, have a sibilant chirp, which, however, soon becomes a distinct *chic*, something like that of their parents.

Turning now to the nesting of the Crossbill in Sussex in 1910, it was after all, and quite apart from the special irruption of the species into Britain, nothing so very marvellous to find the bird breeding there. As, although since 1904—the first year I started exploring the county systematically—I had never met with a nesting Crossbill, though I had constantly seen a few *during winter*, and once a single bird in April, I had always looked upon the outskirts of our grand fir forests of St. Leonards, Tilgate, Worth, Balcombe, and Ashdown, as being ideal spots for the possibility of such an event. A few meagre records in fact—more or less ancient, without details and so valueless—from different sources had indicated as much.

Primarily, I made the mistake during March—the Crossbill's *great* breeding-month—of hunting for nests in the downland plantations of fir. These seemed likely enough, since not only do they stand high, but are in addition wild and wind-swept—the sort of place, in fact, one would have pictured the species patronizing for nursery-quarters down south ; the birds, too, had I knew been there on and off since the preceding July. No luck awaited me, however, and it was not until April 9th, with for a companion that superb field-naturalist, Mr. Percy Smythe, who, incidentally, taught me much concerning the nesting of Crossbills, that I determined to find out what the weald would produce, though it should be noted that in two days spent in seemingly suitable country round Parham and Pulborough during March I had seen no sign of Crossbills, except for cones which they had dealt with and dropped during the foregoing months.

Our first "beat" was the edge (for nesting Crossbills mainly affect the *margin* of a wood or spinney, and—only more so—belts, rows, and clumps of firs by a roadside ; the interior of woods and forests they detest, save for purposes of feeding) of a large wood of Scots firs—part of the forest of St. Leonards—bordering a bye-way. We had not been there long before we heard a Crossbill singing. Some sixty paces ahead, following up this clue, we came face to face, so to speak, with the musician, gorgeous in his livery of crimson,

poised at the very extremity of a long, upwardly-projecting bough, some thirty feet from the ground, where the sun, shining full on him, rendered his already beauteous garb doubly beautiful. The nest—as it so happened—was on the selfsame branch, about four feet from the parent stem, and therefore easily accessible. It looked quite ready for eggs. This tree, although standing in somewhat of a clearing, was a good thirty yards from the margin of the wood, and further inside covert than any tree I have yet seen containing a Crossbill's nest.

As I climbed to it, the male—who at first had flown off—and female, joined by a third Crossbill, were all very excited, and the owners of the nest especially approached me very closely indeed, attitudinizing on the adjacent branches and *chuk-ing* their displeasure vehemently and persistently. The hen in particular came very near, and let me admire her dull, greenish-drab garb, which was only relieved from absolute dowdiness by the yellowish-green colour of her upper tail-coverts.

Revisiting this nest on the 14th—when it should have held a complete clutch of eggs—I was disgusted, but not surprised, to find that squirrels had forestalled me: fragments of shell alone reposed in the cup of the nest. Externally, this example boasted—as have all the nests I have examined—a quite pronounced and projecting, though rather

loose, platform-like foundation of small fir twigs, mainly dead ones, with a few flakes of wool adhering to them ; then, on top of this came the nest proper, which was composed of a little dried grass and many thin strips of Scots fir bark, lined sparingly with tufts of wool, a few Ring-Dove's feathers, and a twist or two of string. This is the only nest I have seen containing *many* bark-strips.

Reverting to April 9th, not 150 yards from this nest, Mr. Smythe found a second about fourteen feet from the ground, and right at the end of a dependent bough of a Scots fir—one of a small cluster decking the roadside. This nest did not look wholesome, however, the lining all being fluffed up and untidy generally ; and, as a fact, it never matured. It had far fewer twigs than No. 1, and was largely made of dried grass with here and there a dead leaf and a few chicken's feathers, finished off with tufts of red and white horsehair and a piece or two of thin cord.

Half a mile on, perhaps, as we approached another wayside clump of firs, we heard amidst a babel of angry bird cries (seemingly some marauding bird or beast was being severely rated, though we saw nothing of him), the voices of two clearly excited Crossbills. After we had located them, both flew across a field, and alighted on the summit of a tall larch, finally flying off to a big wood. Mr. Smythe again was the one to discover their home, again in a roadside fir (Crossbills

mainly build in Scots firs, but sometimes in spruces and larches, very occasionally in some deciduous tree), and again out on a projecting bough some six feet from the stem and about thirty feet from the ground, further, being situate on the field flank of the tree. It contained four nestlings, perhaps five days old; in any case their eyes were open. At this juncture it may not be out of place to describe young Crossbills.

Well then, they are hatched blind; and at first the dull, darkly flesh-tinted body is scantily clad here and there with plumes of softly-tinted, greyish-brown down. The bill, which is quite straight, though chubby, is yellow round the edges of the mandibles, a tint which shades into greyish-green on the upper one, to flesh-colour on the lower. The interior of the mouth is very noticeable, being a combination of vivid carmine and purple. The tongue, however, is flesh-tinted . . . . In their first full plumage, acquired when about a fortnight old, they sport the following dress—*Upper-parts*: head, dark brown with a buffish edging to each feather; back, dark greyish-brown with similar facings of buff or fawn; rump, quite decided buff streaked with dark-brown; wings, dark greyish-brown with *faint* edgings of pale fawn. *Under-parts*: breast, buffish; and belly, nearly white, the whole striated with dark brown. Legs, leaden pink; claw nails, strong and grey. Bill, still *quite straight*, but large and full, with

the point of the upper mandible distinctly hooked, the hook, however, having a straight-cut face, not a curved one; and the upper mandible is brownish-grey with a tinge of green about it, fading into yellow along its edges, the lower one greenish-grey and paler altogether, also fading into yellow along the line where the two mandibles meet. The interior of the mouth is an intense shade of carmine, the tongue crimson. The irides are dark hazel. From ten days to a fortnight after leaving the nest the young begin to acquire the crossed mandibles—which do not always cross from the same side—and take a week exactly to obtain this doubtful ornamentation. Just at this period the base of the mandibles is very loose, and the little fellows—probably to help on the “twist”—now especially love to lay hold of and tweak viciously any conveniently sized twig or piece of wood. Moreover, I have seen Crossbills—young and old—aid their progression amongst the branchlets by the use of their bill, as is a habit of young Herons and Long-eared Owls.

Return must now be made to the promising quartet. It was noticeable that their parents never came near the nest as we were examining it, nor did we hear them calling anywhere—traits I have noticed with some other pairs with young; though nearly always over eggs, and even with regard to an unfinished nest, the birds are excessively agitated, and, withal, extremely tame. For

instance, when on the 14th of the month under notice I spent some time watching these nestlings being fed, I was struck by the cunning, stealthy way in which their parents came and went after administering to their wants; not a note was heard, hardly a flutter of wings, as the pair—generally one at a time—slipped through the fir branchlets to the nest and out again. In the sense that they have no objection whatsoever to the very near presence of human beings, then Crossbills are extraordinarily confiding and bold.

On the 15th, working another area of the forest, I found other three nests, two of which contained four young apiece, both broods being under a week old, the third holding five eggs (an unusual clutch with the Crossbill, which usually produces three or four only) on the point of hatching. Here I stroked the sitting hen, moreover—and stranger still—after she had been induced to leave her charge, which she did with the utmost reluctance, she actually ventured to perch on my fingers as I examined her treasures. Her husband, too, came very close, and both fairly swore at me.

All three nests were in Scots firs, out on a projecting branch near the summit of the tree, and between twenty-five and thirty-five feet from the ground; and all were in trees adorning a roadside, and (as were the nests of the 9th) close to a farm or cottage. One of these nests was, externally,

largely composed of wool felted into living and dead fir-twigs ; but in all three cases the main nest was fashioned of moss and dried grasses, finished off with a scant supply of wool, hair, and a few curly feathers. Two of this trio I found simply by searching, no birds having been observed at all ; but as to the third, I received help by noticing a pair of Crossbills frequenting for some time a particular line of firs.

It is said that, even in the Crossbill's customary territory up north, flocks and parties of apparently unmated, adult birds are prevalent all through the spring and summer ; and certainly this assertion is partially borne out by what I observed here in Sussex. Taking as examples the 14th and 15th of April, I saw on those two days alone quite 150 birds in gatherings of from fifteen to thirty, leading their usual winter, gipsy existence. What were these Crossbills doing? Did they intend to disband later and nest then? I think not. In any case one thing is certain : if they did, it was not in Sussex ; or, were they birds that had bred very early in the year—January and February, since it is well known that Crossbills do sometimes nest thus early? If so, it must be presumed that on occasions the young keep to themselves : certainly there were no real immatures in the flocks I saw. Surely they cannot have been *all* non-nesters?—and especially as in every company the sexes were very evenly divided, most of the cocks, too, being

in gorgeous red habiliment, which, it is averred, betokens that the bird is *fully* adult. If this be so, then the Crossbill not only—and obviously—takes nearly two years to gain its perfect plumage—and possibly longer, but also, at any rate on occasions, breeds in half-and-half dress, since the male at one of the nests I found was a brown bird merely slashed with red on breast and rump, while cases of males breeding in orange garb have been put on record. It is significant that a good many of these flocked males were singing capitally; and granted that these birds had not bred, and did not intend to breed, it becomes then a fact that only a small percentage of this “irruption” nested at all, in Sussex at all events.

The next entry from my diary of any import bears date of May 3rd. From what I saw on that and subsequent days up to the 25th, I have every reason for believing that some few Crossbills are *genuinely* double-, if indeed not triple-, brooded. The books, I know, speak of the species as *single-brooded*, but then some of the books also tell you that many small birds (amongst which may be mentioned Goldfinch, Linnet, Twite, Corn-Bunting, Wood-Lark, Grey Wagtail, Meadow-Pipit, Chiffchaff, Willow-Wren, and several of the Warblers proper), which are almost habitually double-brooded, only occasionally, or even never, rear more than one family in the course of the year. As a matter of fact, with about fifteen exceptions,

all our really small birds are genuinely double-, and a fair number triple-, brooded. Going a little further in point of size, how many ornithologists are aware that the Nightjar quite frequently rears *two* families during its stay with us? I have proved it conclusively. Why, then, should the Crossbill be but single-brooded, more especially as it is always an early, and sometimes a notoriously early, starter? As a proof that it is not always so, witness those nests now and then found in *summer* by competent observers, the late Mr. Ussher for one, Mr. Carroll for another, both in Ireland; also the one I discovered in Sussex on May 25th with *fresh* eggs, which will be mentioned later. The fact is, very few naturalists trouble to look for second broods of any species which general opinion—generally wrong—has decided must not raise more than one family during the season. Old superstitions die hard. Too much faith is placed in the average book, which is often written by one who may well be described as a “week-ender” with Nature. Give me the Willoughby Verners, the Abel Chapmans, and other *real field-observers* who have, and many others besides who have never yet, put pen to paper on the subject.

Coming now to my own experiences in the matter, on May 3rd, working for part of the day the same ground as on April 9th, I found, not sixty yards removed from the tree where she had four young virtually fledged on April 15th, a female

Crossbill sitting (the male seemingly never "sits") on four slightly incubated eggs. Her nest was only about fifteen feet from the ground, in a tree forming one of a clump of firs by the road, but, for all its low elevation, it was difficult of access by reason of its lying almost at the extreme end of a bough, which was not only projecting, but also perilously dependent. It was poorly and loosely composed, first of a few fancy conifer twigs, then of moss and fine and coarse grass intermixed, lined with fine shredded dry grass, while a small feather or so ornamented the rim. The eggs, although not very dissimilar to those of the Greenfinch (as indeed is the case with all Crossbill's eggs) were, as is fairly constant, decidedly larger and bulkier than that bird's as you would but expect; the grain of the shell, too, is much coarser. The markings of this "set" (which were chiefly in the form of spots) were in the main evenly, albeit sparingly (as is customary), distributed over the entire surface, and some of the spots were very dark . . . All the same, most careful identification is required—generally a remarkably easy task, seeing that the Crossbill is practically always a very close sitter, besides keeping extremely near the intruder after being compelled to leave its nest—for Crossbill's eggs found after about April 18th, because not only does the Greenfinch sometimes begin laying just then, and not only are the nests and eggs (as has been seen) of the two species some-

what alike (though the Greenfinches' home seldom exhibits anything like so marked a platform foundation of twigs, while the "egg-cup" is *perceptibly* smaller and neater generally), the nest, too, often being in the same position in a fir, but the females of both kinds are, also, *to the tyro*, not excessively dissimilar.

The male sang one or twice in the vicinity of this nest, but did not appear interested as I examined it. The female, however, sat very closely, brooding until my hand was within a short foot of her. Then she flustered off to an adjoining tree, but returned almost at once, and kept fluttering all round my head with dancing actions and noisy motion of her wings, or else creeping in attitudes on and along adjacent branchlets. She did not, however, call much.

To-day I saw flocks of adults no more; but merely lots of from three to ten in number, as well as one or two broods of young out of their respective homes. Another nest I found had four young in it just ready to fly. This example was in the usual site in a Scots fir growing about a dozen paces down a field-hedge running at right angles to a road.

On May 4th, visiting the locality where I had found two sets of young on April 15th, I met with both pairs of adults, one couple with their progeny in an orchard, the other by themselves. These latter birds were very amorously inclined,

though I could find no fresh nest ; one I did discover at the end of a fir bough not forty yards from their first venture, and which might have belonged to them, proved later to be owned by Greenfinches.

The 11th saw me once again in much the same district, where I encountered but one party of three adults. Otherwise, pairs, or "singletons," was the order of the day. Beyond a nest from which young had obviously flown (how dirty; with their droppings, nestling Crossbills make the edge and sides of their birthplace!) I discovered nothing fresh. This nest was largely felted together with dried grass and an abundance of white fowls' feathers.

On the 18th I saw but one pair of Crossbills all day, and an empty nest in a typical position which may have been theirs ; but on the 25th I did find a Crossbill's nest containing two eggs. Eventually it held five. This belonged, I believe, to the pair which had young fledged close by there between April 22nd and 25th, though it is to be imagined that they had had an intermediate attempt destroyed, as the interval was curious. That very day I found yet another nest—clearly the work of the couple which had young hard-by on April 15th, seeing that it was not twenty yards from the old tenement. This held four young, not above three days old.

Later than this, and up to the end of June, I saw few Crossbills, such as there were chiefly consisting of family parties leading a nomadic life; while in July I hardly saw a bird. The "irruption" subsided and disappeared almost as magically as it arrived. When will the next "irruption" be?

Now more than ever do I think that those nests found with young even as early as April 15th were real second broods, not only because the Crossbill is often such a phenomenally early nester, but also because a close search round the spots where I found these revealed, in some instances at remarkably close quarters, obvious Crossbills' nests from which young had just as obviously flown. If this surmise be correct, then a few pairs appeared to be triple-brooded. Witness the nests with young and the one with eggs discovered during the latter half of May in spots where it was known broods had already been reared during April.

## CHAPTER IV.

### CIRL BUNTINGS IN SUSSEX.

ALTHOUGH the Cirle Bunting\* is by no means a rare bird in Sussex, it cannot be considered at all a common one: for despite the fact of its being met with at intervals from the extreme east to the extreme west of the county, its almost exclusive haunts embrace the environs of those villages, together with their surrounding country, which lie at no great distance from the coast, and which are nearly always on the sea side of the South Downs. When found to the north of them, the bird practically always confines itself to a point only just beyond the hills or to some valley inciding the range, as at Lewes, and Steyning. In the Weald of Sussex proper it is a very rare bird indeed, even in winter; in fact, I possess but a single record of its nesting there, and that rests on the identification of an egg taken some years ago at Nuthurst by a gentleman residing in Horsham.

In spite of its quite broad distribution to the south of the Downs, the Cirle Bunting is, with small reason, it seems, capriciously local. To

\* *Emberiza cirrus* L.

prove this point conclusively, you have but to put in some steady work during summer in the vicinity of a series of villages, all adjoining, in the right line of country. In some, Cirls are tolerably abundant (I have occasionally met with a dozen pairs in one day); in others, they are conspicuous merely by their absence, or are, at any rate, remarkable scarce. It is unnecessary to specify every place in Sussex where the species occurs, but I may just add that I have encountered the bird in a number of spots, amongst which the following centres may be notified: Hastings, Eastbourne, Lewes, Brighton, Steyning, Worthing, and Chichester. It is certainly commoner from Lewes and Brighton on west than it is in the east of the county.

In the right district the Cirle Bunting is a frequenter of country roads and lanes, as well as, *though in a very minor degree*, of certain lower slopes of the Downs which luxuriate in a good mixed growth of gorse, brambles, and thorns, and which are bounded by a rough road or well-used track; or, again, those portions near the valleys which are under cultivation and which boast "shaws," or irregularly planted trees. Trees, indeed, are practically indispensable to the species. It loves civilization far more than its cousin, the familiar Yellowhammer; really wild country it sedulously shuns. So fond, apparently, is the bird of man's vicinity, that in any "Cirle region" there is almost

always a certainty of a pair being found nesting close to each scattered farm or homestead. Even country seats can sometimes boast a pair of Cirls in their pleasure-grounds during summer; more, I have found the nest in Worthing itself, and have heard of others in the gardens of similar big towns—Chichester for one, Eastbourne for another. The Cirl evinces a marked liking for elms: in nearly all its haunts elm trees form a distinct feature of the scenery. One cannot help thinking that this special love of the elm must take origin from some species of insect or caterpillar haunting that tree, and on which the nestlings are chiefly nourished. Yet I can think of scores of places rich in elms where Cirl Buntings are never seen!

The normal nesting-haunts of this species in Sussex are close to the beaten track, those dust-ridden, motor-ploughed highways, the hedges of which droop and pine away soiled and jaded beneath a sad, khaki cloak of grit, an utter abomination to all who pass that way; as well as hedgerows—with trees, even if but a few, in or near them—aligning railway-embankments. Nevertheless, I am familiar with one specially charming summer-resort of the Cirl, where a narrow and ever-narrowing ribband of lane winding from an old-time village wends its way well nigh to the instep of Chanctonbury Ring, there losing its identity in an insignificant downland track.

The entire route is beautiful, but in no part more so than where between lofty and, in places, almost perpendicular banks of marl—in summer a motley mass of mixed greenery, here clusters of ivy, there a profusion of flowering grasses and nettles, there again clumps of woodbine, ferns, and hazels, the whole touched up with the more vivid hues of various flowers—the slightly sloping path is shut in secluded and unseen. At intervals this nature-picture has effectively borrowed a warmer and more solid tone of colouring from the red tiling of some quaint, half-dismantled farm hugging the margin of the path, whilst, until recent years, lofty elms—now mainly represented by mere stubs and unsightly where not overgrown—reared their lusty limbs towards the sky. This lane is a paradise for small birds: here Whitethroats of both kinds, Willow-Wrens, Chiffchaffs, Goldfinches, Chaffinches, Pied Wagtails, and Spotted Flycatchers find congenial nursery-quarters; it is also a noted haunt of the Cirl Bunting.

The Cirl generally first attracts you by its song: as you saunter (an ornithologist should nearly always saunter, unless he feels obliged to race time) some summer morn along the highway or byeway, there suddenly assails the ear from somewhere high up in a leafy tree a monotonous, if somewhat musical, trill which resembles to no small extent the letter *t*, or else the word *tut* or *tehr* (just as fancy dictates) repeated loudly and clearly from

nine to a dozen times, but so sharply as to defy any effectual attempt at imitation. If the naturalist is only in his budding stage, or should perchance the specialist lack real pretensions to "ear," he will probably put away "Cirls" from his mind, if indeed he contemplated them at all. Rather will he regard the utterances as the broken effort of a Yellowhammer spun out in a slightly different key than usual—as is, of course, sometimes the case—and wanting the final *wheeze*; or else, perhaps, as the hurried ditty of a Lesser Whitethroat. In fact, quite a number of good ornithologists insist that the song of the latter bird—provided the low, warbling prelude is missed by them or omitted by the musician—is indistinguishable from it. This notion, however, is totally incorrect, as is also the assertion that the Yellowhammer's refrain, when minus the concluding *ease*, can be definitely mistaken for it. I say "definitely" advisedly, since some few Yellowhammers pitch their tone in quite a "Cirl" key, and often dispense with the final, prolonged *ease*—facts which may give rise to momentary, but merely momentary, confusion. Oddly enough, however, although you may sometimes, for the instant, lay the Yellowhammer's song to the door of the "Cirl," you can never reverse the order of things. Once a real "Cirl" is heard singing, there is never the least doubt about him, at least not to me.

Dealing with the Yellowhammer—"Cirl" question first, it can safely be said that, while the exact difference is rather difficult of definition, the songs of the two species are almost always pitched in keys of sufficiently different character as seldom to warrant more than transient qualms concerning their identity to the trained hearing of the expert ; for the "Cirl's" song is ever more trilling, more penetrating, and more metallic than the Yellowhammer's, and, for that matter, than the Lesser Whitethroat's. Beyond this, it must be remembered that the Yellowhammer more often than not terminates its persistent dirge with a prolonged note, at least two tones higher than the preceding part of the refrain, whereas the "Cirl's" "tune" generally comprises but one note from start to finish. I say "generally," because on rare occasions—and it is a fact which hitherto appears to have entirely escaped the observation of every writer-naturalist—the song ends with an abrupt *weck* or *weet*, which sounds exactly as though the musician were hiccoughing softly. Moreover, it is squeaky and slightly base (as compared to the preceding portion) if rapidly rapped out, as compared with the full, rather prolonged and somewhat ascending finish of the Yellow Bunting's song. This termination, however, is rare, or appears to be rare : anyhow, you must be really close to the performer to realize it at all, so feeble, so half-hearted is it. The novice, in fact, chancing to notice this finish

without a glimpse of its author, would in all probability put it to the credit of a Yellowhammer gone to seed, even though he had, from the previous part of the song, inferred that the songster was a "Cirl." The old hand, however, should scarcely fall into such an indiscretion.

As for the Lesser Whitethroat's song, no confusion should exist over that, even though the listener lacks "ear." In the first place, because the loud, trilling portion of this Warbler's song—which is *the* part generally heard, the first instalment merely being a pleasing sort of babbling whisper—resembles the syllable *twee* (rather than *t*, *tut*, or *tehr*), quickly iterated; in the second place it is more hurried as to its delivery, albeit rather in consequence of the bird's restless behaviour than in point of actual speed; whilst, thirdly, this species not only repeats its song from six to twelve times per minute—and generally nearer the latter mark—but is, in addition, a wandering minstrel, flitting from tree to tree as it sings, seldom indeed remaining in quite the same spot for more than one stave at a time. On the contrary, the Cirl Bunting, if undisturbed (if disturbed it makes for another tree and recommences there) rarely produces its song more than four or five times to the minute, and sometimes sings for half an hour on end, then perhaps ceasing for a similar or even a longer period. Now—and as a further distinction—the Lesser Whitethroat is apt to be intermittent—that

is, it is not so consistent in its performances or pauses. Although both birds love to sing from tall trees, the Lesser Whitethroat seldom recites from an elm, preferring oaks and lofty, untrimmed hedges. The "Cirl," however, as previously noted, greatly fancies an elm, and sings from one very often indeed. Finally, it should be recollected that the Lesser Whitethroat is migratory, not usually reaching Britain until towards the end of April, its song therefore seldom being uttered until the very end of that month or early in May, and ceasing just about mid-July; whereas the "Cirl," being a true resident, starts singing sometimes as early as February and continues till late September.

The Cirl Bunting, then, particularly delights in reeling out its monotonous "tinkle" from a stand in some high timber tree, often indeed from an elm, and often from quite a respectable elevation. There, during the summer the dense foliage screens it effectually from prying eyes; in any event it is nearly always difficult to detect one so shrouded. On the other hand, one will sometimes sing from very low down in a tree, from a hedge, fencing, a bush, or telegraph post or wire. A singing "Cirl" is wont to adopt striking attitudes: the head is thrown slightly back, and the whole body, but particularly the tail, quivers with the exertions and emotions of the singer. Although in a sense confiding—I refer to the bird's habit of so often nesting close to houses and much-frequented

roads—"Cirls," in common with many other species which exhibit a similar trait, dislike being too shrewdly inspected. For instance, should you detect one singing, or even if it fancies that you have it under observation, the performer will at once fly off, perhaps for as much as a hundred yards, though more usually for from thirty to fifty, when, alighting in another tree, it "tunes up" afresh. All the same, after a lapse of some minutes it may venture again to the selfsame and favourite perching-place. I have ascertained that there are nearly always one or two trees in any given haunt which, for some reason patent only to the birds themselves, specially commend themselves to a "Cirl" as splendid stages for its vocal accomplishments: and a Cirl Bunting, so long as it imagines itself unobserved, will sing, all unheeding and with maddening persistency, from a tree at the base of which you are reclining.

The "Cirl," then, is not always to be interviewed on really familiar terms, and especially does this apply to the female who, except when flushed from eggs, caught building, or feeding young, is comparatively seldom seen during the breeding-season: she shelters so much in the big, leafy timber trees, and, naturally, does not betray her whereabouts by song.

I have dealt at some length with the song and singing-habits of the Cirl Bunting, not only because the ditty seems to cause quite unnecessary confusion

to a number of even very competent ornithologists, but also because it is often by the song, and song alone, that even the expert first becomes aware that these birds are inhabitants of a district in spring and summer.

With the cock temporarily not in voice and when the hen is not incubating, you may often chance on the pair feeding together, very frequently in some field not far from a road-hedge, and sometimes quite a good way from their nest-haunt. Even now the birds are reluctant about being approached too nearly: if you attempt it, they are prone to recompense you by flying off altogether, perhaps clean out of sight, or else they may seek immediate seclusion in any adjacent tree. Exceptionally, however, you shall obtain, and linger delightfully over, a good view of one perched all unconscious of your presence on a hedge-top, fence, or log of fallen timber. If disturbed now, the shy creature makes off with dipping flight straight along the hedgerow for some distance, and generally, too, on the far side of it, especially should you have claimed the road, before seeking cover. Often when a "Cirl" takes refuge in a bush it drops to the ground suddenly, before settling on a spray at all, not usually, however, in the tangled interior of its retreat, but on any available open space between two distinct growths.

In autumn and winter Cirl Buntings form into flocks of from, roughly speaking, six to sixty,

when a possible preference is displayed for marshy ground, or at any rate for quite open country. They are then somewhat nomadic, but pairs are formed—and the same nest-haunt is patronized yearly—early in the year, sometimes by mid-February, commonly during March, always by the birth of April. “Cirls” do not seem to care much for rick-yards, where, during the inclemency of autumn and winter, Yellowhammers, with other stout-billed species, congregate galore in search of grain.

Neither is the haunt, nor—even with that found—the nest of the Cirl Bunting always easy of discovery. As to the first count, the bird, in addition to its love of secreting itself in the thickly-foliaged trees (it is far shyer than the Yellowhammer)—with the consequent chance of its escaping attention, so far as actually seeing it goes—is inclined to spasmodic music. Thus, some males remember their voice most early in the morning and again towards evening: I have, for instance, sat for hours on end close to a known nest, without seeing or hearing the male once. This being so, it is sometimes extremely easy to wander through a “Cirl” district without ever knowing it, or at best to locate one pair in an area where all the time there may be six or more. Some males, of course, sing at intervals all day long.

On the second count, while freely admitting that the male often sings close to the nest, he

equally often has—from your point of view—an irritating habit of “trilling” at some distance from it. Consequently, you may fritter away hours looking for a nest which never was; you may search, in fact, until the wretch suddenly elects to take himself off a hundred yards or more. There he recommences singing; and then the hunt starts afresh, this time perchance with better luck.

There is a certain amount of variety about the situation selected by the Cirl Bunting for its home, which is practically always somewhat off the ground, generally from a few inches to two feet, though sometimes up to five or even six, above it. *The* favourite site, however, in Sussex at any rate, is an ordinary quickset, roadside hedge, while the lower and scrubbier it is, the better the builders seem pleased. A bramble, however, is not a very uncommon position, either one in a hedge or in a “shaw”—which signifies a longish and narrow planting of trees and bushes, sometimes engirt by hedges; I have also found the nest in elm hedges, or in the centre of one of those bushy bunches of self-sown elm-“suckers” which are so prevalent round the base of the parent tree. Again the nest is in a small conifer or shrub in some “nursery” or enclosure, especially when such an one borders a road; while I have seen several examples in a small embrasure in the side of a haystack, notably one on May 27th, 1911, near Brighton, and

another on July 11th of the same year near Lancing. Nests in gorse bushes are not unheard of, and in some districts the bird builds in a high hedgerow-bank, where the nest may be either rather away from the slope and kept in place by any such plant as ivy or catchweed, or on some stump overgrown with wild clematis or what not; while I have notes on one nest which was on the field side of a stone wall and amongst ivy mantling it. This nest was further protected by a peculiarly dense hedge which ran the entire length of, and was virtually touching, the wall. Most nests are on the *field* side of a hedge bordering a road or track of any description, and some few are conspicuously exposed in some slight opening of the cover they are in, though in the main, even if the nest is visible at all, that will merely apply to a small portion of it, and then perhaps from one point of view only.

As has been seen further back, odd pairs of "Cirls" evince a liking for the shrubberies and gardens of country seats (where Yellowhammers seldom if ever breed), especially should they encroach on a lane or roadway. In such cases you never quite know where to begin to look for the nest: it may be anywhere. I have vivid recollections of hours pleasantly, if barrenly, spent in hunting for a nest of this description. I never saw the female once, but the male was very much there. He sang almost mockingly, and with marked persistence—

indeed, I have never heard a "Cirl" sing so well or for so long—first, from the topmost, shivering spike of a lordly cedar ; then from a lowly fruit tree ; anon, from the scented greenery of a walnut ; while once, for no apparent reason it seemed, he tried on the don't-you-see-I'm-wounded dodge, fluttering and fussing along the ground in and around a bed of newly-sown peas in the kitchen garden, trailing a pinion and dragging his broadly-expanded tail. I must have been remarkable close to the nest then, but I never found it. As an afterthought, I believe it was on a flat branch of the cedar hard-by, where at the moment I never thought of looking.

There is practically but one method of finding a "Cirl's" nest : that is by beating out and searching all the likely cover in and around any spot where the male sings regularly. If there are two people in the game, so much the better, since you then have an operator on each side of the hedge, quite a necessary precaution when it is recollected that any bird—especially one flushed from eggs—is prone to pop out of a hedgerow on the opposite side to that on which you are working solo. This means that, although you will certainly hear the rustle, you seldom get a fair view of your quarry, if indeed you get one at all. In one way, however, all the Buntings are straightforward in their tactics ; I mean they one and all, when flushed from their nest, crash right off into the open. They

never slip off secretly and creep through the adjacent undergrowth, as many of the Warblers and the Hedge-Sparrow are so fond of doing.

The nest itself is distinctly reminiscent of the Yellowhammer's, though there is nearly always *more moss* about it, while the frontage, or sort of platform, which is frequently so marked a feature of the latter's home, is seldom much in evidence. Most examples are rather neater than the commoner bird's belongings. The subjoined description of six nests will amply demonstrate their workmanship:—

*Number I* is  $15\frac{1}{2}$  in. in circumference, 6 in. by 5 in. across, with an "egg-cup"  $2\frac{1}{2}$  in. in diameter by nearly 2 in. deep. It is fairly substantial, and is fashioned externally of coarse grass-stems, a good deal of moss—especially in the foundations and round the rim—and a few withered leaves, lined with finer grass-stems, rootlets, and a few strands of white horsehair.

*Number II* can only show a circumference of  $14\frac{1}{2}$  in., it is  $5\frac{3}{4}$  in. across, with the "basin"  $2\frac{3}{4}$  in. across by  $1\frac{7}{8}$  in. deep. Outwardly, moss, a dead leaf or so, bents, coarse roots, a piece of decayed wood, together with some small bits of honey-suckle "trailer," find a place; while the interior is of dried grass and some patches of red and silver horsehair.

*Number III* is somewhat straggling, and possesses a slight frontage. It measures  $16\frac{1}{2}$  in. round, and is 5 in. across, with an "egg-basin"  $3\frac{1}{4}$  in. in

diameter by 2 in. deep. It was almost on the ground, being built up from it in a rough sort of cone shape—as are many nests of the Corn-Bunting—to a height of  $5\frac{1}{4}$  in. It is principally composed of extremely coarse grass, lined with finer grass and black and brown horsehair in strands.

*Number IV* shows a big frontage and is altogether a large, untidy structure. It was built very loosely in a bramble about  $2\frac{1}{2}$  feet from the ground. It is mainly made of hay, collected from a rick close by, although the foundations (which, as in the preceding specimen, are cone-shaped) exhibit withered leaves and moss; and its lining is a quite plentiful layer of coils of black and white horsehair, on which chequered matting the rich and darkly-marked eggs hardly showed up at all. A few small dried leaves adorn the rim. Its measurements are: circumference  $16\frac{1}{2}$  in., (external diameter 5 in., height 3 in., and “egg-basin”  $2\frac{1}{2}$  in. across by 2 in. deep.

*Number V* is rough and straggling externally, measuring 15 in. in circumference, 5 in. by 6 in. across; then, “egg-cup”  $2\frac{3}{8}$  in. by  $2\frac{1}{2}$  in. by  $1\frac{1}{2}$  in. deep. It is made of dead flowering plantains (heads and all), other varieties of weeds, a little dried grass, one bit of straw, and a fair quantity of moss in the foundations with a “gick” or so, lined with fine grass, black and white horsehair in strands, and one or two small pieces of wool.

Lastly, *Number VI*, measuring 14 in. round by  $4\frac{1}{2}$  in. by  $5\frac{1}{2}$  in. across, with the "egg-cup"  $2\frac{3}{8}$  in. across by  $1\frac{5}{8}$  in. deep, is chiefly composed of moss, bents, and dried grass, lined plentifully with hair (tufts as well as strands), a bit of wool, with a small whitish feather worked into the rim.

Sometimes the finished article remains empty for a few days, and once I knew *eighteen* days to elapse between the completion of the nest and the depositing of the first egg.

The eggs are from three to five in number, usually three or four. A "four" is very general with first clutches, but, contrary to the custom of most double-brooded small birds of producing an egg or two more in their later nests (unless they are very late ones), the "Cirl" is very fond of a similar number for its second attempt, or even but a trio. A "five" is very rare indeed; so it is with the Yellowhammer, in some districts at all events, though the Reed- and Corn-Buntings frequently produce this number, the former almost constantly even for a first brood.

Fortunately, even unidentified eggs of the "Cirl" are almost always distinguishable from those of the Yellowhammer (the only other sort with which they could possibly be confused), not only by their generally white or *very pale* bluish- or sea-greenish white ground (those of the Yellow Bunting usually showing a pink or purplish cast),

but also by reason of their infinitely richer and bolder pattern of markings. In ground, then, the "Cirl's" eggs range from dull white to the faintest imaginable of bluish- or greenish-whites, whilst the streaky and blotchy markings—which, excepting a few inferior ones of lilac-grey, are very dark sienna or black—are generally more numerous and, even with poor specimens, far and away bolder, coarser, and broader than the comparatively thin and tortuous pencillings, scribblings, and hieroglyphics generally to be seen on the eggs of the Yellowhammer. Even with those few examples which possess the suggestion of a purplish or pinkish cast (sometimes you find a couple of eggs of this rare type in a nest containing other two of the normal colouring), and which might, if viewed unlabelled in the cabinet, give rise to indecision, this dashing disposition of markings should preclude all confusion and error. Of course, your really careful oologist will always take stock of the *owners* of a nest, even though he harbours no doubt as to its true identity.

This brings me to the issue of how best to distinguish the Cirl Bunting from its first cousin the Yellowhammer. Happily the differences are not complex and may readily be grasped. To begin with, the adult male "Cirl" sports at all seasons a black chin and throat. The cock Yellowhammer does not, his bib being, instead, of a peculiarly telling and rich shade of chrome. Seen back on,

the former shows a quite *reddish*-brown cloak ; that of the latter is of brown alone of a far more sober cast. The female " Cirl," however, lacking the dusky chin-spot, is besides a much dowdier person (though she has got a touch of reddish-brown on the back) not only—and naturally—than her husband, but also even than the hen Yellowhammer. She may, however, be separated from that species in a moment by the *olive-green* tint of her rump (a distinction also shared by the cock " Cirl," though *not*, as has been confidently asserted, by nestlings in their first full plumage), as against the bright chestnut upper tail-coverts of both sexes of the more familiar bird. The rump is admirably displayed as either bird flusters off its nest. There are, of course, other and minor differences, as for instance the fact that the small feathers on the shoulder-joints of the female " Cirl " are greenish-grey, as contrasted with the brown lesser wing-coverts of the hen Yellowhammer ; and yet the leading indications prescribed above are all sufficient for the *field*-naturalist. The flight of the " Cirl," too, is more dipping and volatile than the Yellow Bunting's.

Glancing at the young for a moment, these are, when newly hatched and for a few days subsequently, pink-skinned with a tuft of sooty down on the head, and with similar plumes of greyish-white (still inclined to sootiness) on the feather-tracts of the body ; the cere is yellow, the interior of the

mouth cerise. When fully fledged the upper-parts are brownish-buff, each feather being streaked with blackish, as is the rump, *about which there is no suggestion of olive whatsoever*, while the primaries are dull greyish-black. The head and neck are of a paler brownish-buff, also striated black; the breast is pale buffish-brown—inclining on the abdomen to yellowish—likewise duskily streaked. The bill is dark grey, the cere yellow, and the legs pinkish-lilac. They remain in the nest from twelve days to a fortnight, but even after leaving it they are waited on by their parents for some little while. After that they disappear from the nest-haunt altogether, while the old birds are busy with further domestic cares. What then becomes of them is a mystery (the same may be said for the first broods of a good many other species, and notably for the first broods of the Yellow and Corn-Bunting), since nowhere can I recollect meeting with during summer, let alone at the breeding-resort, parties or flocks of young, fledged Cirl Buntings.

Incubation, solely performed by the female, is of twelve or thirteen days' duration (most books hold that nearly all the small birds take a fortnight to hatch, whereas—and on the contrary—nearly all sit for thirteen days at the outside and frequently for a day or two less. For instance, I have known a Lesser Whitethroat hatch-out in ten days), and first clutches are prevalent between

May 24th and 31st. On the other hand, I have found "Cirl's" eggs in the first half of May, though not commonly; and I have seen a good percentage of fresh eggs—for genuine first broods, I think—up to June 15th. Second nests should be sought in July, according to the date of the first laying: for example, if a "Cirl" begins to sit about May 27th, she will, if all goes well, have reared her first family and have a second nest and eggs by approximately the first week in July; while fresh eggs in August and even—though rarely—in early September are not without precedent. This, however, is not very strange, seeing that most of our Buntings are proverbially late in carrying on their reproduction.

Sometimes it requires more than one stroke with a stick to move a "Cirl" off her eggs, so closely does she brood in her often admirably-hidden home. Then she usually flutters out rapidly with tail well spread, at first, if she can, flying downwards in a more or less deeply inverted arc (according to the situation of the nest), for twenty yards or more, before rising abruptly and whipping over the fence, then seeking seclusion in the nearest tree. She may now keep aloof for as much as half an hour, so long, in fact, as you remain near the nest, or, on the other hand, she may return to the charge (especially if a clump of trees is close to her belongings) almost at once, and all unnoticed save by the keenest observer. She often brings the

male back with her, if he has not already preceded her. Then both birds are apt to give vent to their alarm-cries (sometimes one or both will do so in the neighbourhood of the nest *before* it is found, and even if it contains nothing), though this is not invariable, even with young in the home. The cries are (1) a rattling *tehrrr* or *trrrr*—almost always the cock's prerogative; (2) a whining, squeaky, and rather indrawn *week* or *weet*, somewhat reminiscent of, only weaker than, a cross between the normal squeaky call of the Robin and that of the Hedge-Sparrow; and (3) a somewhat more forcible *chit*—rarely heard. The first two notes need special mention, seeing that it seems as if a repetition of number one constituted the song, and as if the second were the sometime abrupt termination to it. I took some little time thoroughly to realize these facts (though with a good many other species I have very quickly noticed that their calls, or at least some of them, very often indeed play a prominent part in their song proper), since a note repeated singly with an appreciable interval between each utterance is apt to sound very different to one and the same cry heard as a quickly-iterated, tinkling "trill"; while the *week* is not at first prone to occur to you as forming any element of the song at all. In any case, once the song has been thoroughly mastered, the *tehrrr* cry needs no comment; but the squeaky *week*, when utilized as a call, sounds rather different to what

is, apparently, really the same expression used occasionally as a *finale* to the ditty.

To return to the habits of the "Cirl" at the nest, at another time—only you must be at least twenty-five or thirty yards distant—the female, after installing herself in some tree not far from her home, will every now and again fly down secretly to some point—a bush or a hedge-spray, for example—in its vicinity ; yet she will scarcely ever dare to venture right into it until the intruder's back is turned, or unless he is hidden very nicely indeed. In fact, few species are warier in this respect. All the same, the moment the timid creature considers the coast clear, back she goes.

When there are young in the nest, however, their parents *may*—even now some pairs are extremely shy—forget their innate love of caution, even to approaching the trespasser examining their babies to within a few yards and full in the open ; now they settle on the ground, frequently crouching in an attitude suggestive of the acutest alarm or pretending to be partially disabled ; again, they flit restlessly back and fro, to and from the field to any convenient fence, wire, hedge, or even a rick, should it be present. Oddly enough, the male is often the more agitated. The female appears to undertake the bulk of the feeding of the young, while, at intervals, the cock cheers the entire family with song. In some districts—but they are very few and far between—where "Cirls" are tolerably

numerous, Yellowhammers are correspondingly scarce. Indeed, *very occasionally*, I have known the former to outnumber the latter: and, in any case, even with both species frequenting the same area, each sort often seems to possess certain vested rights in a particular spot, though sometimes I have found the nest of both kinds within a few yards. On the other hand, I have still to find two pairs of "Cirle" breeding in really close proximity (I once knew of two nests within 150 yards, though, of course, this is not really close), as is often the case with the Yellowhammer. Indeed, I have often discovered two Yellowhammer's homes within a very few yards.

In conclusion, it has been said that the "Cirle" never appeared in Britain until about the year 1800. This I refuse to believe, though I can well imagine that it was overlooked until that epoch; in which event, Gilbert White—good observer though he was—must have failed to separate the "Cirle" from the Yellow Bunting, since at the present era the former species is well represented in and around Selborne: but, of course, the bird *may* have found its way to that district since his time. Naturally, the Yellowhammer was there always.

## CHAPTER V.

### CHOUGHS.

TIME was when the Chough\* is said to have inhabited almost all our maritime cliffs. Now, however, to be found in any numbers it must be followed to the wild, rocky littoral of the Green Isle. The Green Isle—or rather parts of it—must now be reckoned as the bird's head-quarters, though the Chough still occurs, albeit in far smaller numbers and much more scattered, on the sea-cliffs of Cornwall, Cambria, and the west of Scotland, as well as inland in certain mountainous Welsh retreats.

To assign a satisfactory reason for the banishment of the species from so many an ancient fastness, affords mere guess-work. By some it is held—and with tolerable fairness—that the ruffianly Daw has been responsible for the expulsion of its aristocratic cousin; by others, that the princely Peregrine has played hard and fast with not a few. Nevertheless, these two factors alone are not commensurate with the wholesale thinning of the Chough's ranks, and, wonderful to tell, man may take no blame, so that it would almost seem

as if there were at work some baneful agency, which carries off a large percentage of the young. To cite one special instance, I may refer to a certain district in Ireland where, out of quite sixty nests annually, half a dozen at most are takeable, even to an expert cragsman. There, moreover, Jackdaws are notable for their absence ; while an examination of the Peregrine's shambles shows that few Choughs are snatched by those stately marauders. Consequently, most broods should reach maturity. Apparently, however, they do not: the Chough scarce increases at all, and the subject offers a wide and interesting field for investigation.

The haunt of the Chough is invariably a rocky one, and maritime rather than mountain cliffs—unless the latter are in full view of the sea—are infinitely preferred in this country: the Chough must now be sought amidst the desolate grandeur and savage beauty of the Atlantic-bound sea-board—a region of striving seas breaking with baffled fury and thunderous roar against unyielding ramparts of basalt and limestone. It is a region of Rock-Doves and Seals, Falcons and Hooded Crows. Here the Raven finds safe harbouring, here the Sea-Eagle may yet linger.

In appearance the Chough is one of our most attractive species. Its elegant poise, dainty manners, purplish-green-glossed ebon plumes, rather long decurved red bill, and stockings of vermilion

all help it to an air of special distinction. It is decidedly sedentary, inasmuch as it clings to its haunt at all seasons, and trees it shuns altogether. Its food, which, amongst other delicacies, comprises beetles, spiders, grubs, and certain sorts of worms, it obtains in the open: yet, as opposed to the example of most creatures which affect exposed places, it is often extremely confiding: feeding Choughs may sometimes be cautiously approached to within the simplest of shots. Sometimes a pair, or even a solitary bird, is encountered feeding; sometimes a flock or small party mess together. The Chough delights in loose and sandy, or, at any rate, friable soil in which to delve for prey, where its curved and sensitive bill is specially adapted for the work, and particularly for being wormed into crevices and crannies. A pair feeding in company is a fascinating sight. At first both birds are close together. Then one of them runs nimbly for several yards, stops, preens its glossy plumage, and finally beckons to its mate with a clear *kwaar* of welcome, flicking up its wings and tail simultaneously. At this point the other starts by walking towards it sedately, halting at intervals. Presently it indulges in a few big leaps, and now, side by side, both birds, with bill slightly open, pluck greedily at the loose turf, either with rapid, business-like, pickaxe strokes, or with sweeping, sidelong scoops. At each action the soil flies up in miniature showers. If a slit or

hole in some detached lump has to be explored, the upper mandible is inserted into it to act as a prise, while, to steady it, the lump itself is often tenaciously grasped by the foot, and generally the left one, as is the custom of hawks, owls, and parrots, amongst others. Food is variously procured amongst scrubby heather, from the rocks, the shore, from any plots of dubious tillage within reasonable hail of the bird's haunts, as well as from meadows. Those writers who aver that this species never alights on grass have only too evidently relied on their imagination. How unsafe a word is "never," and, for that matter, "always!"

At all seasons Choughs are frolicsome. Where the bird is still (happily) plentiful, it is nothing unusual to see from thirty to fifty besporting themselves above the cliffs. Their antics are then full of interest. As they all wheel—yet each pair keeps rather apart—one suddenly tumbles over on its back like a Raven, another spins over from side to side, while a third, rising obliquely for thirty or forty yards, dives rapidly down again. In the breeding-season some of their play is peculiarly diverting. Witness this pair close to their nest dashing about low down over the slopes, or along the face, of the cliff. Their flight is far quicker than its wont, they twist madly and erratically about, as if for the nonce bereft of their senses: again they climb high into the heavens and sail round each

other in slow, stately spirals, or soar head to wind, in this way mimicing a favourite habit of the Raven and many of the *raptors*.

Coming to its normal flight, the Chough employs two distinct modes. One is where it progresses by a succession of leisurely flaps and glides; the other, which is frequently a continuation of the first, by a series of big, spasmodic dives or inverted arcs, the wings being most tightly shut at the bottom of each dip. On the ascent of the curve the bird nearly always cries *kwaar*, and from time to time, especially during a slanting dive of several hundred feet to the cliff beneath, a leg is dropped hurriedly, as if balance had momentarily been lost. Choughs are most noisy and active towards evening.

Although at a distance the Chough's flight *slightly* recalls that of the Jackdaw, especially to the tyro, it is ever more buoyant, soaring and vigorous. The wings are longer and more curved, while the primaries all stand out more distinctly; and, of course, once the characteristic, diving flight is witnessed, confusion is impossible and unforgivable. Moreover, although the two species sometimes inhabit the same area, they certainly rarely breed on quite the same range of cliff, though in co. Waterford I have noticed such a peculiarity. On the wing then, the Chough — to me — is suggestive of a miniature Raven fined down in every conceivable way, a likeness which is further

intensified when the two species are seen in the air together. There are some who say that the Rook gives points of similarity. This, personally, I fail to see utterly. It is interesting to add that in Ireland the Chough is almost universally called "Jackdaw."

Whilst it is a fact that Choughs are very socially inclined, inasmuch as they frequently feed in companies and otherwise consort together, frequenting, too, favourite eating-grounds much about the same time daily; and inasmuch as the young birds flock when fledged, I have never—I know districts, too, where the bird may fairly be called "common"—found any indication whatsoever of their breeding in even scattered colonies. Some of the books assert that they do so habitually, but their writers must have vivid imaginations! It is true, however, that I *once* found two nests within a few yards of cliff.

Usually, however, in an unbroken chain of cliff, a mile-long range will accommodate three or four pairs at the outside, sometimes one only, the state of affairs depending almost wholly on the paucity or plenty of the bird in the neighbourhood. Exceptionally, I have known eight or ten pairs in a mile of precipice, though this is an event of comparative rarity. All the same, the birds often return from their feeding-grounds in force, each pair, however, falling out of the ranks and diving straight to its quarters with a farewell *kwaar*, as

the troop passes merrily over and along the lines. Even during building operations—usually the work of the early morning—the birds are frequently absent from their homes for a long period, and, while one is incubating, its fellow may be away for an hour or more.

Both sexes assist in nest-building, and it is quite fascinating to watch a pair at work. They delight in gathering the wool-tufts which, torn from the fleecy flanks of passing sheep, cling tenaciously to the wiry heather on the breezy mountain sides, and the loving couple will return unerringly, be it a mile or more away, till the store is exhausted, or until they cry "enough." Standing at early dawn on the steep slope of a majestic mountain, I have watched Choughs take material to their citadel in a distant, frowning cliff. That very morn I saw Chough, Peregrine, and Raven in the air together, a spectacle which took me back to the day when Kite, Buzzard, and Raven greeted my eyes in the ever-changeful grey of the Welsh sky, and to when I beheld Short-eared Owl, Merlin, and Hen-Harrier in a similar position above a northern moor. Red-letter moments, these, to the keen bird-lover.

Choughs are affectionate and amorous. Long after the eggs are laid they pay court to one another. For instance, a pair settle on a boulder or bare patch of soil on the cliff. Then one—and presumably the hen (both sexes being similar in

plumage) will pirouette, fluttering well-extended wings, and giving vent to a curious "chackle," while the male rubs his beak against hers, or even seizes her lower mandible and waltzes round her in crouching attitude. Sometimes they caress like this in mid-air.

The nest is always in a covered or partially-covered site, and that generally in a cliff, though not necessarily in at all a lofty one. Occasionally, however, one is found in the shaft of a disused mine or in some ruined tower or other building. In the former case, a site is selected in a hole, a slit (horizontal or perpendicular, sometimes in a deep crack between an outstanding pinnacle or boulder and the main cliff, and so sometimes entirely visible from above), a small, oven-shaped recess, or—and *very often indeed*—in a fissure or on some protected shelf inside, and generally near the roof of, some gloomy, wave-washed cave or cavern, either near its entrance or right at its far back in complete shadow. When in a mine or tower, a joist-hole, or a hole caused by the dislodgment of other woodwork or masonry, provides a position for the nest.

Unlike many of our sea-birds proper and maritime land-species, the Chough appears to evince no decided preference for the upper or lower half of a cliff. Caves it admittedly loves. These are, of course, at the very ankle of the precipice; but *suitable* caves are not always found for the

asking, and I have seen many nests in any situation, from one very near the summit of the cliff indeed to a point pretty close to its base, only, of course, one well above high-water mark. Whatever the situation, the Chough, if it can get it, simply revels in a spot which is fearsomely overhung, by reason of which, combined with the fact that the nest is sometimes as much as six feet in in the selected site, many nests are absolutely untakeable ; while, of course, the majority of those in the roofs of caves can only be uncertainly reached with a long ladder at low tide. On the other hand, to and from some nests in very ordinary cliffs, I have descended and ascended with ropes in a very few minutes. I have seen one nest which could be reached from the top of the cliff by merely lying flat and leaning over. This example lay in a small embrasure behind a flapping sod of turf, which had but to be lifted to reveal the entire structure, eggs and all. This, however, is very unusual. A partiality is often evinced for a precipice composed of big boulders and turf-covered slopes and ledges. Some pairs breed on little, high, detached stack rocks close inshore ; a few nest on larger rocky islets as much as six miles from land ; but the majority make their home on the cliffs of the " main," or on those of islands of considerable size. Colonies of sea-fowl Choughs detest as next-door neighbours : sometimes, indeed, the Chough is practically the only species nesting on a range of cliff. All

the same, I have seen a Chough's nest close to that of a Black Guillemot, and to those of a few Herring-Gulls. Quite often, however, a "Hoodie," Kestrel, Rock-Dove, or Shag (sometimes all four) has its home close to that of a Chough; sometimes a Peregrine or Raven is a near neighbour.

The nest itself, not invariably built at the extreme end of the selected cavity, though rarely quite visible from the entrance (unless, of course, you are looking at one on a ledge inside a cave), is composed of sticks or heather (and chiefly fine heather), or both, according to locality, withered rush-grass, and occasionally a flake or so of moss, lined with rather fine rootlets, and then masses of wool with occasional scraps of hair or any fur that is procurable: in one nest I found quantities of fox's fur. I have, however, on one occasion only found odds and ends—to wit, a fragment of sacking—adorning a nest: Jackdaws, it will be remembered, almost habitually litter their home with such rubbish. The whole structure, if rough, untidy, and rather flat, is compact and firmly wedged into its site, and considering, for the bird's size, that remarkably small fissures or cavities are often chosen, the amount of material used is sometimes marvellous. Once, however, I found a tenanted nest fashioned of lining alone, yet close by—indeed, well nigh touching it—was the alternative site, which was of normal construction. Paired for life, Choughs frequently patronize the same nest year

after year, and although there exists at least one other alternative—generally close at hand—this is normally only called into play when the favourite domicile has been badly tampered with.

The eggs are from three to six and even seven in number, but clutches of four and five are most frequent. In ground-colour they range from pale creamy or yellowish-white to dirty-white with a faint tinge of green, whilst the blotches, spots, and streaks are browns of different shades, fawn, and grey; on some specimens a few nearly black marks or lines occur. One type is zoned at either end, another is evenly marked over its entire surface, a third is scantily but boldly blotched, while a fourth is curiously streaked and lined, being altogether not unlike an impossible Nightjar's egg. On some few examples the grey underlying markings predominate, and, as a rule, eggs in a "set" are not all of one type. Incubation, chiefly the duty of the female, lasts, for one egg, seventeen or eighteen days, for the Chough frequently sits on its first egg. The Chough is nearly always a close, and sometimes an abnormally close, sitter, especially in really turbulent weather. Occasionally, indeed, one will remain on her nest, or, if there is enough space, behind it, as you sway on the rope in front of the hole: quite often may a gun be discharged—once at any rate—without inducing the sitting bird to quit. More frequently, however, a smart hand-clap—particularly from a

party—is all sufficient to send the frightened bird scurrying from out the rock-face *kwaar-ing* excitedly. Then is she frequently joined by her mate if in earshot, though sometimes, of course, he is already on the spot, and may thus have signified the approximate site of an unknown nest. He has one or more recognised “look-outs” on some pinnacle or ledge, from which he is fond of sallying forth periodically to fly round and about with playful, diving flight. Occasionally I have seen *both* Choughs leave their nest-hole, even after incubation has commenced. When flushed, the pair fly up and down above the precipice. Now they leave it momentarily, making short excursions inland; now they return with redoubled cries; and, if great quiet be observed, even if the intruder is close by, one may actually revisit the nest. I have, too, seen the sitting bird, when first disturbed, fly off and fetch up its fellow, as if it might assist in repelling the invader.

The Chough's breeding-season starts in April, and, very exceptionally, eggs are forthcoming in the first half of that month. Normally, however, full “sets” are prevalent between the 20th and 30th, though some pairs are habitually later and have not laid until mid-May. In co. Waterford, for instance, this tardy laying obtains, whereas, on the Kerry, and even on the Mayo coast, eggs may confidently be sought at the end of April. Only one brood is reared in the year.

The Chough's cries are rather of the Jackdaw order, but are far clearer, more metallic, more melodious, and shriller. The ordinary note is a single *kwaar*, *kœar*, or *kwar-ar*, the corresponding cry with the nestlings—used as a summons for food—being more modulated and sounding more like *jaar*, quickly iterated and resembling the mewlings of a litter of very juvenile kittens. Other of its notes are *chow*, *kwow-wow-wow-wow*, *kwuk-uk-uk*, a sharp *quek*, and a short, subdued, tremulous, and guttural *quarr*.

The adult Chough's plumage has already been described, but quite full plumage is not, I think, obtained until the bird's second autumn-moult. Anyhow, with a pair kept captive, the really red bill and legs had not been acquired at the age of nearly a year, those parts then still possessing the orange-wash of immaturity ; and as it is a fact that I have still to meet with or hear of a pair of *breeding* Choughs lacking the full *insignia* of totally red bill and legs, one may fairly conclude that the species fails to breed until nearly two years old. Moreover, in some Chough districts, I have certainly seen parties of the birds in nest-time out of all proportion numerically to the recognised breeding-stock. Assuredly, some of these suspected non-breeders have had *orange-red* bill and legs.

When first hatched, young Choughs are blind, remaining so for four or five days. To begin with

they are naked and pink-skinned, with leaden markings down the feather-tracts; their irides, when eventually visible, are hazel. At this age the bill is quite short, perfectly straight, and of a pale horn-colour, the legs are of a pinkish-flesh tint, while even now the little fellows possess a plaintive, chirping cry. After another fifteen days, the birds being then just short of three weeks old, the beak has become slightly decurved, and its colour has changed to leaden-black, except for the tip, which is reddish-horn, fading at its extreme point into pale horn-colour. The gape is creamy-white; the interior of the mouth, purplish-flesh tint, the soft membrane beneath the tongue being of a lighter shade. The shanks are leaden, with here and there faint traces of orange-yellow in longitudinal streaks; the feet are dusky orange, though of a brighter tone on the soles. The claws, which are remarkably strong and sharp, are nearly black, with whitish tips, their under-sides, however, being greyish-white. The irides are greyish-brown. By now the general plumage is well developed, and is sooty, with a decided green gloss in certain lights; while the curious dusky bristles under the lower mandible near the chin deserve special mention. The creatures themselves are very compact and muscular; like all the crow birds they emit a meaty smell. In another three weeks the legs are red more or less; the bill, orange-yellow. The autumn-moult (I speak of Choughs in captivity)

does not commence prior to the first week in August, and continues for two months and a half, though, by the third week of August, small patches of glossy feathering show up well on their otherwise dowdy garb. By early September, the beak, though still orange in the main, has turned red at its base, while the legs, which are very scaly, now assume a rusty orange tinge.

Choughs are plucky fellows. They will fearlessly mob Eagles, Ravens, Gulls, and, in short, any bird but the Peregrine Falcon. This I have seen well exemplified when watching a party of Choughs circling and cackling above the cliffs ; a Peregrine has winnowed its way through them, when without a sound they have scattered like chaff, and dispersed instantly.

I have never seen, or heard of, wild Choughs eating carrion or attacking small birds, and yet a pair I had once in partial captivity deeply resented the presence of any little bird, while, on one occasion, I was only just in time to rescue a winged Thrush from their evidently murderous onslaught. Still, in captivity, birds are prone to change their habits. Barring this most unusual trait, the Chough is charming, docile, handsome, and fearless. May he live long and prosper in his surviving haunts !

## CHAPTER VI.

### RAVENS.

ALTHOUGH in the category of British breeding birds the Raven\* may be labelled "uncommon," many more survive in our islands than is popularly supposed. Were it not for the ruthless slaughter that thins its already shattered forces annually, and were it not that the bird is extremely jealous, not only of its nest-haunt but also of its hunting-beats, which it is prone to patrol daily at practically the same hours, there cannot be the least doubt that it would soon increase.

As things stand, however, many ancient sites are tenantless, the Raven knows them no more; and even where the bird is tolerably plentiful, two tenanted eyries are seldom met with less than two or three miles apart. All the same, in a certain area which shall remain nameless, I have visited and stormed five used nests in under six hours, and these were not on a range of sea-cliff, where the task had been easier. Where the Raven is scarce, ten miles or more often divide two couples.

Turning to its present distribution, it is good to know that, at irregular intervals all along the

\* *Corvus corax* L.

sea-cliffs of Dorset, Devon, and Cornwall, as well as in one or two inland districts there, and to the extent of a pair or so in Somerset also, the bird well holds its own. Wales can give a better account still, from iron-bound coast and hills alike. In fact, it is not far short of the mark to say that the Raven is commoner in Cambria than anywhere else in Britain, probably because it is least persecuted there. Again, parts of Yorkshire, the "Lakes," and one or two contiguous counties still know the sepulchral croak of "the bird of Odin": while, although in the highlands of Scotland, and especially in the central highlands, the Raven is decidedly rare—at any rate, as a nester—such is far from being the case on the western littoral with its groups of outlying islands, and this, too, despite incessant harassing. In the Orkneys and Shetlands, also, the bird has a home. In Ireland it is still found in suitable localities, but it is nowhere common, and is, it is said, decreasing. Elsewhere, excepting the Isle of Wight, where one, and perhaps two, pairs try to breed yearly, the Raven is of very rare occurrence, especially as a nester. In Sussex we had an attempt at breeding in 1911—the first since 1895; rumour speaks of a few fairly recent cases in Essex; while not many years since a pair reared them a brood in Warwickshire. Otherwise, the best that the other midland, southern, and eastern counties of England, the lowlands of Scotland, and the north generally,

the flat areas of the west, Wales, and Ireland can show, are the trees in which Ravens once nested. Once, the Raven was quite a common bird.

The Raven's haunts surely show as fair a face as any spot in Britain. Unless the site is by the sea-side — and sometimes even then — mountain peaks, often snow-capped till early or even late summer, are always an accompaniment of the panorama. In the valleys between, silvery streams tear down from the heights to join somewhat sedater rivers which, now gaming boisterously with gigantic, engulfed boulders, now sliding in smooth currents, race their never-ending way, first through deep, smooth-cut gorges, then through bog and doubtful meadow, to the far-distant ocean. It is a land of rocks, rivulets and clouds, a spot beloved of Dipper and Grey Wagtail, of Sandpiper and Ring-Ouzel, the last three in spring and summer only. In different areas, it is the fastness of Kite, Buzzard, Eagle, and Peregrine, the whole place a paradise to the ornithologist.

In appearance and character alike, the Raven is one of our most striking species. Its bold, dignified, sturdy independence, ebon plumes, and majestic flight, all lend an unwonted animation and charm to any aspect, however fair; while cowardice is to the Raven almost an unknown quantity. In fact, it stands pre-eminent amongst the crows, as the Peregrine does in the hawk

world. Sometimes, however, for all its magnificence, the Raven exhibits distinct clumsiness, especially for about fifty yards before alighting on the rocks: for then it may drop its legs limply and raise its wings above its back so obliquely that they almost touch; or else, elevating its tail and lower-quarters generally, it decurves its head and neck, when it altogether resembles a large and curiously-contorted S turned over like this ∞. It then looks ungainly to a degree.

The Raven is usually a very high flier (you often hear its bass croak before you see it), especially when crossing a valley or enclosed lands. It doubtless fears some fancied ambush: for which reason, except at the nest or in a mist, it is seldom shot. It is poison that has thinned the Raven's ranks. This high-flying propensity, combined with the creature's rather curved, quite sharply-pointed and comparatively narrow wings, and decidedly wedge-shaped tail, not to mention its habit of soaring like the big hawks, all help to identify the bird at a range when it looks no larger than a Jackdaw. The species easiest to confuse it with—but then only at a moderately long distance or in a mist—is the Carrion-Crow. The latter's flight, however, is quicker, its wings more rounded . . . The Raven's flight, while being measured, purposeful, and vigorous, seems to me to be out of the straight; in other words, the Raven ever appears to hold a slightly diagonal

course through the heavens. Of course, at any reasonable range, the bird's huge, Jewish nose and bulky figure let you into its identity immediately ; and its croak, once heard, can never be forgotten, or confused with the cry of any other " courier of the air."

Omnivorous in its diet, scarce anything edible fails to whet the Raven's fancy—from shell-fish, sea-refuse, carrion, and garbage generally, to wounded, and even unwounded, small mammals and birds, particularly the " cheepers " of game-birds, which it swallows whole. But it seldom lets its thoughts stray to the dainties of the poultry-yard. Mutton, however, and very particularly mutton, may be included in the bill of fare, and it is to be feared that many an ewe could tell a piteous tale of a fatal shadow, dusky, flapping, wings, and a bill of iron savagely applied to her new-born lamb. The ewes themselves, too, when in difficulties, either during the dread moment of parturition, or if foundered hopelessly in a cleft of the rocks, do not escape its unwelcome attentions, in which latter case at any rate, long ere death from starvation ensues, the tired, frightened eyes are gouged out to become daintiest of morsels to the Raven. For this atrocity the bird is cordially detested on most sheep-walks, where it is generally vouchsafed little protection, but is, on the contrary, poisoned, trapped, and shot under any and every pretext. Some keepers and shepherds,

however, recognising what a veritable gold mine is afforded by the young birds, take these from the nest when nearly fledged and experience no difficulty in getting for them a pound apiece.

“ Once upon a time ” British Ravens nested in trees as well as rocks, just as circumstances dictated, for many a pair had their ancestral home in the heart of some midland or southern village : but, nowadays, very few branch-nests exist in Britain, and preferably, I am sure, is the Raven a frequenter of the crags. Witness the state of affairs in Wales, where, although cliffs and woods alternate on the sides of many of the “ cwms,” the former are invariably patronized.

In common with many other species, the Raven is constant to one mate for life, but although the same haunt is frequented the year through, the same nest is by no means always used annually. Sometimes there are as many as five or six eyries dotted about on a wide stretch of cliff, a couple of which are generally so decrepit with age as to be considered past repair, while the remainder are utilized in turn. Again there will be but two or three nests extant, now all within from a very few yards up to a hundred yards apart on the same crag, now as much as a mile or even two miles separating them on two distinct rock formations. Exceptionally, however, the same home is used year after year for an indefinite period, especially in a restricted area of cliff which boasts few suitable

sites. Sometimes a completely fresh nest is built atop of one or even several old ones. Still, whatever the number of nests, it should be noted that on the approach of the breeding-season, several, if not all, of them are more or less partially refitted, though long ere that event the eyrie intended for the coming brood is indicated by the old birds resorting to it the most, and roosting in its vicinity. I have seen a Raven brooding in her empty, unrepaired nest even in the bleak, cheerless days of November, as though guarding it for future use.

Hardy fellow that he is, the Raven remembers his love very early in the year. Even amidst the chilly rigour of the northern mountains, with the ground inches and even feet deep in snow, full clutches of eggs are nearly always general by mid-March, while nests in more southern latitudes—as, for instance, in Devon and Cornwall—usually contain eggs by March 2nd, or even sooner; I have heard of young there at the end of February. Even in Wales I have seen eggs in the latter half of that month, though there the Raven's great laying time (full clutches, I mean) is between March 1st and 20th, and generally between the 4th and the 14th. Individual hens sometimes commence laying to a day annually. As a very distinct exception, however, where, from the bird's noticeably small size and a similar pattern of egg both years, I had every reason for supposing that the

female was the same, on March 10th, 1906, I examined a nest containing six nearly fresh eggs, whereas on the same date the following year, I found in the same cliff, and not thirty feet from last year's home, an eyrie holding five newly-hatched Ravens, and two unhatched eggs. This bird must have begun laying about February 10th, but then the weather had been extremely hard; for it is a noticeable, not to say strange, fact that, in *hard* springs (or, rather, late winters) Ravens are apt to be forward with their domestic affairs, in *open* seasons, backward.

Late in January, or early in February, an ancient nest is frequently taken in hand, or a new one started, though in really northern latitudes the event is usually postponed for fully another fortnight. Sometimes, for no ostensible reason, since they have already several serviceable structures awaiting repair, a patriarchal couple will suddenly begin the erecting of an entirely new home, which is completed in a long fortnight; but an old one is patched up in a week or ten days, sometimes in less. In any case, however, it may, after completion, remain empty for some little while.

When the nest is—or rather was—in a tree, one was usually chosen which commanded a wide look-out. It might be in a wood, a plantation, a clump, or even in an isolated forest giant, and the nest itself was securely built in one of the highest available forks. I have one such nest in mind in

a hill-side wood which was at different times the nursery of Raven, Kite, and Buzzard.

When in rocks—the nest generally reposing in the upper part of the cliff, sometimes, indeed, only a few feet down the steep, and perhaps by preference in a quite bare precipice, as opposed to a wooded one (which the Buzzard likes so well), and usually on a ledge devoid of herbage—the site select is either a well-overhung ledge or platform, a big crevice, or cavernous recess (I once saw a nest in an ivied cliff in a hole only just large enough to contain it), the flat space behind some tree springing from the crags, or, sometimes, a mere projecting snag of rock. This is occasionally so insignificant that the wonder is that the builders can make a start on it at all, or that so bulky a concern can, from its own weight, lodge there a moment. Conceive also the shaking it must receive every time its owners alight upon it, and especially when the nestlings, waxen large and lusty, indulge in much movement. A slight touch from the fingers on its outermost edge, as one hangs by the knee-joints head downwards from a sapling oak just above it, sends a nest in such a perilous position hurtling, eggs and all, to the valley below. The nest of which I am thinking was over a yard high, and its foundations were of the rottenest, and white with age. Since that mischance, it is interesting to note that the Ravens have never yet tried another nest there. The cliff

selected is usually thoroughly exposed, so commanding an uninterrupted view all round; but now and then a nest is found in a narrow gorge or dingle whose precipitous sides are only a matter of yards apart. A westerly aspect is preferred to all others. Although I have climbed to a good many mountain-nests without tackle, some indeed having been in quite ridiculous places, the average home of the Raven to reach requires a rope. Some examples are in ghastly spots. The nest itself is a large, rough concern of sticks, branchlets, twigs (those of the mountain ash and oak being general favourites) and heather (in some treeless districts, heather alone is used), somewhat loosely interlaced, but further fortified by great lumps of moist turf or peat, which in time produce a species of cement (though the Raven may hardly be said to really plaster its home like the Magpie), copiously and smoothly lined, first with moss, leaves, bark-fibre, grass-tufts, and wood-rush (living and dead), and then fur, hair of almost any kind in tufts, and quantities of wool, some of which usually projects over the rim of the nest, and often festoons its exterior. Occasionally, a good deal of moss shows up here and there in a finished but patchy lining of these animal substances; and often a few feathers from the sitting bird become embedded in it.

The size of the nest varies somewhat, not only according to its site, but also according as to how often it has been built upon and renovated

generally. Some examples assume immense proportions, becoming a yard or more in height, as much as thirty inches across, with an "egg-basin" from twenty to twenty-four inches in diameter by eight inches deep. An average specimen, however, ranges from one to two feet in height, spans from eighteen to twenty-four inches, while the "egg-cup" is between thirteen and sixteen inches across by six or seven inches in depth. Sometimes, from its position, the nest assumes a slightly oblong shape, in which case, the "egg-basin," which is beautifully smooth and elastic, has, naturally, one of its cross-diameters considerably longer than the other. I remember one such nest, whose "egg-cup," while being eighteen inches one way, was only fourteen the other.

Both sexes assist at nest-building. Together they arrive with material, together they depart for more. At all seasons are a pair of Ravens greatly attached to one another; much of their spare time they spend together.

The Raven produces for its clutch from two to seven eggs, usually four or five, though in some districts a "six" is far from uncommon. A "seven," however, is admittedly rare, so is a "two." In fact, when only two eggs are found incubated, I suspect accident has played its part in the picture. All the same, in some areas genuine "threes" are fairly frequent, generally being, one can only imagine, the produce of very old females, though

it must be remembered that the food supply during the period of conception, and even before that, might, in the case of any hen, materially affect the issue.

For their owner's size the eggs are, by comparison, perhaps the smallest of any British egg. Usually they are inclined to be narrow and somewhat elongated; moreover, they are comparatively thin-shelled, while on many specimens curiously-indented lines, and other flaws are noticeable. In colour they exhibit every imaginable shade of bluish-green, greenish-blue, and even bluish- or greenish-white as a ground, mottled, blotched, speckled, smeared, spotted, streaked, flecked, and scratched with olives, browns, greens, and greys of many tints, whilst occasionally almost black marks occur. On the whole they are pale-looking eggs, that is, showing more ground-colour than markings, though heavily and richly blotched examples—particularly one or two in a “set”—do occur. One type is splashed and smudged over its entire surface of dirty-green with greenish-brown and grey; another possesses bold blotches of very dark brown, olive, and lilac-grey on a bright bluish-green ground; a third is pale greenish-blue, freckled, mottled, and streaked with greenish-ash and brownish-grey; a fourth, very pale bluish-green (sometimes of so pale a tint as to look whitish), sparingly flecked with rusty and yellowish-brown, the underlying markings being purplish-grey.

Rare varieties are spotless, or nearly so, or else the markings show a decided tendency towards reddish-green, while it is not very abnormal for an egg in any clutch to be zoned at one end. In fact, eggs all of the same character in a clutch is a quite unusual event, though frequently four or five are very similar, the fifth or sixth, as the case may be, being paler or darker. Coast Ravens generally lay the finest eggs in every way, especially those in the south-west, but Welsh eggs are on the whole not only poorly marked, but also small—even for a Raven's egg—some being, if longer, scarcely larger than a fine Rook's or normal Crow's. Indeed, I well remember once showing an abnormally small "set" to a capital ornithologist, at the same time saying "What eggs are these?" "Rooks," was his answer. I have, too, seen a clutch from Yorkshire which would have passed muster for Rook's eggs anywhere. Incidentally, I may add that, in point of size, Cambrian Ravens are very inferior: some pairs I have seen were little larger than Crows.

The eggs are not quite constantly—though the event is very rare—dropped on consecutive days, though incubation—principally the business of the female—generally starts with the first egg or two laid, in which case its duration purely depends on the number eventually produced. The first egg, however, hatches in nineteen days. If the first clutch is taken before it is very far gone—and

sometimes even then—another, and even a third (if evil overtakes the second) is practically always produced, sometimes, too, in the same nest, after an interval of about three weeks. That is, the fresh set is completed by the end of that period. I remember one Raven which laid eleven eggs in succession, first a “five,” which was taken, then a “six.” Only one brood is reared in the year.

The Raven is decidedly variable as to the closeness of its sitting, though this depends not a little on the position of the nest. Usually great reluctance is shown about returning to it, so long as the explorer is anywhere visible. Sometimes, by approaching the site from above and then by leaning cautiously over the cliff, you may for a fleeting instant watch the giant crow brooding; but more generally, no matter how you approach it, and long ere this, sometimes even while you are still a great way off, the angry barks of its partner “tumbling” and diving through the air above the haunt have sent the sitter hurriedly flapping from its rocky retreat. The non-incubating bird is seldom far off or long absent from its citadel, but either patrols the valley or moorland in its vicinity, or else takes up a position on some crag or pinnacle hard-by, which commands all approaches from below and, if possible, those from above. Once or twice, however, even with the sentinel thoroughly aroused, I have had

to clap under the rocks containing the eyrie, before the brooding bird would deign to leave ; rarely, in the shades of evening or in a mist, I have won to within a few yards of a brooding Raven, whose nest was in a broken-up mountain side or diminutive precipice ; but I still have to hear of a Raven sitting remarkably and really close.

The "sitter" having been flushed, both Ravens dash about with a quicker flight than usual—a regular winnow in fact—alternating this display by tumbling angrily and sometimes by, from an immense height, indulging in stupendous, headlong dives with fast-closed wings towards the ground. They vent their displeasure in no measured terms by a great variety of croaks, amongst which the syllables *croc*, *cruc*, *pruck* (a singularly metallic sound) and *whiur*, all find place, besides other notes impossible to describe on paper. Sometimes they will—the male particularly—dash close past an intruder as he gets near the nest, on rare occasions so close in fact that an ordinary alpenstock could touch them ; or, again, one or both will settle on some boulder within a few yards of the inquisitive cragsman, ruffling their hackle-like neck-feathers and gruffing their remonstrances. Such behaviour is, however, quite unusual, as is the excess of fury displayed by individual Ravens which, when their eyrie holds young (once I saw it happen over eggs, only then the birds tore up lumps of turf from the ground), will perch on any adjacent tree sprawling

from the crags, and snap off the smaller branches and twigs. Hence, no doubt, arose the fairy tale, told by an indifferent observer, of Ravens pelting with sticks those who trespassed on their premises.

On the other hand, some Ravens at their nest are remarkably easy-going, even when they have nestlings, and disappear from the scene entirely, only showing at long intervals on the sky-line ; they may even disappear entirely ; whilst, at other times, the sitting hen will slink away, leaving her gallant lord and master to do battle with all comers, not to return till the threatened disturbance has passed. Rarely the male forms no part of the picture.

After all, it is against passing birds that the Raven is most bitter, especially when a human being invades its privacy. Even one of their own kind may be rudely intreated should he venture on sacred territory. On sea-cliffs Gulls are often repugnant to them at the best (Ravens, by the way, love the eggs of sea-birds), and aerial combats are frequent with—as they occur—Crows, Daws, Kestrels, Kites, Buzzards, Eagles, and even my lord Peregrine. Lusty fellow though he is, the Raven is no match for this falcon, and yet the loss of a few feathers is the sole result of an encounter which proves bloodless. On the other hand I have seen clumsy birds—like the Buzzard—actually struck, and Jackdaws sometimes escape the Raven's terrific onslaught by the narrowest margin, while

I possess one reliable record of an infuriate Raven killing "at one fell swoop" a Kestrel which had foolishly dared, once too often, to "let the wheels of its chariot tarry." Were the Raven a trifle more agile, deaths would be frequent, but most of its assailants and would-be victims being enabled to turn the quicker, usually save themselves from perdition, since the *cigfran's* (the Raven's Welsh name, meaning "meat crow") attack is meant for no *brutum fulmen*, or idle caution to trespassers.

The young, when first hatched, are singularly helpless and ugly-looking creatures. For eight days they are blind, and until their true plumage appears, they are pink-skinned, tufted here and there with pale greyish down. Even at their tenderest age the bill is very pronounced and not beautiful. They remain in the nest for fully six weeks, and on first quitting it are very clumsy on the wing; and for some time after this event they stay with their zealous parents, who teach them to cater for themselves before finally driving them away. For the first few days after quitting their birth-place they may be approached very closely as they sit on the rocks, and on such occasions their parents' antics are full of interest. Now they try to entice them out of harm's way as they flop about within the easiest of shots; now, failing in such kindly endeavours, they literally drive them further afield.

Despite its large size, a Raven's eyrie—on cliffs

—is not always easy of discovery, and especially on a *wooded* cliff, or on one composed of broken-up outcrops of rock and turf-covered slopes, or bare screes, alternating, as contrasted with a sheer precipice. For in the former cases the bird is apt to be a far lighter sitter, while, in any case, the sticks employed in the construction of the nest harmonize marvellously with the rocks. The surest road to instant success lies in marking the male carefully when first observed on or over a likely spot in the cliff. At this stage he is tolerably sure of revealing the approximate site of his home, either by standing on a ledge or pinnacle in its immediate neighbourhood, or by busily driving off any intruding bird in the air above. The hen may then be viewed stealing away—and for so large a bird she relinquishes her treasures very quietly—keeping close in to the rock face for some distance before swinging up and thoroughly revealing herself; but should she be missed, there only remains a careful scrutiny, either through the glasses, or by climbing about the crags, if their formation permits of it, always recollecting that many splashings of “whitewash” down the rocks generally betoken the near presence of the secret.

It does not seem quite clear why the Raven is so early a breeder, because in many respects it is closely akin to the Carrion- and Hooded Crows, both of which species are generally, for the larger

resident birds, comparatively late in going to nest. Now, as a rule, a particular form of food for the expected young governs to a large extent the time a bird chooses for the rearing of a brood. Were the crows not carrion-feeders, it would be evident that the Raven nested thus early, so as to come in for the thick of the lambing season in April, during which month and the first part of May its young are in the eyrie. I am disposed to think, however, that the Raven is *more* of a carrion-eater than the crows, especially in regard to "mutton," on which the young are largely nourished, a fact which amply accounts for the bird's early breeding: for, putting aside the lambs, there is always a greater mortality amongst the ewes during the early spring, from parturition and other sources, than at any other time of year.

Ravens, both young and old, eject through the mouth the indigestible portions of their food in the form of pellets, as in the manner of hawks, owls, and some others—and, indeed of all the crow tribe.

A sentence or so on the Raven's aerial tumble, and I must conclude. It is a peculiar exhibition. The performer turns a half somersault sideways, generally from left to right, closes its wings, and actually drifts along on its back for a short distance, resembling, when so behaving, an aeroplane gone wrong; but the recovery, or return to normal flight, is effected like lightning. Sometimes a

complete sideways somersault is executed without any intermediate halt or drifting. I do not think that these antics are performed—as some assert—while the bird rids itself of parasites, but, firstly, from sheer exuberance of spirits; secondly, as a parade for the female's benefit—it being usually the male who indulges in them; and, lastly, in anger. The last two beliefs are materially strengthened from the fact that the tumbling is seldom much in evidence until the breeding-season, while the best exhibition of it is given when an intruder threatens the bird's home.

Altogether, then, the Raven is a fine fellow, and I, for one, should view with feelings of the keenest regret its complete extirpation in the British Archipelago.

## CHAPTER VII.

### CONCERNING THE WOOD-LARK.

MANY books on British birds hold that the Wood-Lark,\* if rather local, is nevertheless widely distributed throughout our islands. As a matter of fact, however, it is not only a very local bird everywhere, but is also in very many places one of extremely rare occurrence, as a breeding species at any rate. In England its chief nesting-resorts are *said* to extend from Kent to Cornwall in the south—practically none, however, now nest in Sussex; I know of but one breeding-haunt in the county, and that boasting but a couple of pairs, and this, too, after eight years of patient search in likely spots—and thence northwards through Gloucester and Hereford of the western Midlands to Norfolk and Suffolk of the eastern; in which two latter counties it is—locally, of course—tolerably plentiful. Further north than this, the bird becomes quite rare, till in Scotland it is well-nigh unknown, except as a rare straggler. In Cambria, however, it is found in local abundance in Brecknock, Radnor, Cardigan, and Carmarthen, particularly in the first-named shire, one of its

\* *Lullula arborea* (L.)

favourite haunts there being some of the lower, sparingly-wooded slopes of the Eppynt Hills, whilst the Radnorshire side of Builth Wells is another noted resort. It is, however, scarce in the remainder of Wales, as also in the Isle of Erin.

It is in the often-rasping days of February that the Wood-Larks, first becoming mindful of spring's advent, disband once again to seek their former breeding-haunts. Before then, all through the long autumn and winter, little parties are formed—often composed of the parents and young of the last-reared brood—which wander about all round the country-side. Should the weather turn really severe these small gatherings are apt to be augmented by similar batches, a small flock sometimes being the result, though Wood-Larks are never seen in anything like such large flocks as Sky-Larks. Now and then, however, a few of the former mingle with an "exaltation" of the latter.

The winter-haunts of the Wood-Lark are essentially the lowlands, as indeed are the majority of its breeding-haunts, for all that many of these resorts in Wales are close on 800 ft. above sea-level, and a few are above the 1000 ft. limit. The bird is, however, not really a creature of the uplands proper, seldom being seen in bare, treeless districts, and never (this, I should say, is a safe "never") on the barren solitudes of the moors. Indeed, during winter many Welsh Wood-Larks

relinquish even the vicinity of their spring- and summer-quarters, migrating either to the lowest-lying grounds of the Principality, or even penetrating far into the Marches.

Whilst the Wood-Lark usually evinces a partiality and preference for warm, light, dry, and sandy soils, some of its breeding-spots—this being particularly noticeable in Wales—are of the very reverse order, the ground there being spongy, cold, and more or less moist. I have, indeed, on several occasions chanced on the nest in the dubiously-driest part of a swampy field decked here and there with tussocks of rushy-grass, and in one regular resort, with which I am intimate (a real marshy meadow, it is), Snipe breed as well. All the same, a favourite and normal situation—especially in Cambria—is a gently undulating hill, or the lower declivities of a loftier one, the sides of which luxuriate in bracken, boulders, and brambles, and which are here and there ornamented with clumps of trees, straggling trees, woods, or plantations. In such a spot, besides Wood-Larks, I have found breeding Nightjars, Tree-Pipits, Meadow-Pipits, Wheatears, Linnets, and once a Cirl Bunting. On lowlier ground, meadows bordered by trees, or even meadows with a few trees only in their hedgerows, are patronized; the outskirts of a wood, or a well-timbered park; while elsewhere, heaths and commons studded with trees are in favour with the Wood-Lark. In

parts of Norfolk and Suffolk very noted spots are those grassy strips bordering the lines of pine trees which engirt the warrens, or newly-sown spinneys of saplings and bushes close to the same, in which case the nest is frequently placed right at the base of one of the seedlings.

Whatever the haunt, trees seem indispensable to the species, and if the site is on a slope, a westerly, sou'-westerly, or southerly aspect is, as a rule, selected. The same haunt is in vogue each succeeding year—a habit which suggests that the species pairs for life—but not invariably the identical spot in that haunt, though, all the same, this year's nest is frequently within a hundred yards or less of that of last season.

Although not gregarious during the breeding-season, the Wood-Lark even then evinces so much sociability that it is comparatively unusual to encounter solitary pairs: in fact, oftentimes from three to six pairs frequent a favourite area, though, even then, so local is the species that the next recognised breeding-haunt may be miles away. I know of one or two highly favoured localities where from twelve to twenty pairs nest annually inside the radius of not many acres. Even in such a rare case, two nests are seldom found really close together, each pair possessing, as it were, a vested right in a certain small portion of ground. Nevertheless, in haunts like these, where the bird is plentiful, it is nothing unusual to see and hear

from nine to a dozen males singing in the air in close proximity, the circles described by one often bisecting those made by the next, and so on ; or for one pair to pay another a fleeting visit ; while, if a nest is under inspection, a passing Wood-Lark will nearly always stop momentarily to add its agitation and alarm-cries to the laments of its neighbours.

Nest-building, at which both sexes assist, though the female is ever the most assiduous, commences on an average between March 10th and 15th, and the nest itself is completed in six or seven days. Sometimes, however, it remains empty for a day or so longer. The position chosen for it is somewhat varied, though it is practically always on the ground. Generally—in Wales at any rate—the nest is placed under the lea of a tuft of withered bracken, but a small bramble may arch over it, or, again, it is barely concealed by a spray or waving bunch of grass or rushes. Although some nests are admirably hidden, others escape detection from their very openness, being wedged in the centre of a scrubby grass-tussock, or at the base of low heath. Some nests are so very open that their contents are liable to catch the glance of every passer-by. Occasionally, too, a nest is found jambed between several short stalks of dead bracken, or on a low hummock of soil.

In construction, the nest—for which a scratching is first fashioned in the earth—is of the

simplest. Dried grasses, a little dead bracken, a fragment of moss, and sometimes a few rootlets, constitute its outer portion and foundations; for the lining is reserved finer dried grasses, and now and then a few withered leaves and fine rootlets. Sometimes strands of horsehair are employed in the lining, but many nests, lining and all, are entirely composed of dried grass. In the foundations of one example I found a piece of rabbit's "fleck," in another a few flakes of wool. Usually the nest is rather bulky, albeit somewhat firmly wedged into its site, nor is it particularly neat. Specimens placed in very exposed positions are not only the smallest, but also the most compact. An average nest is 5 in. across externally, with an "egg-cup"  $2\frac{1}{2}$  in. or 3 in. in diameter by 2 in. in depth.

Although the Wood-Lark always rears two, and often three, broods in the season—each one, of course, in a fresh nest—it is not a very prolific bird, seeing that three or four eggs—one often being addled—form the normal clutch. A "five" is uncommon, a "six" very rare. Occasionally, I have found two only, though in these cases I suspect some accident to at least a third egg. Many first "sets" laid during the boisterous days of March are deserted: I have several times seen heavy snow drifted right over a nest I already knew of; while, in any case, the mortality amongst the young must be very severe, since little or no

increase is perceptible in the bird's numbers, even in districts where the species is tolerably numerous.

The eggs are very characteristic, and cannot well be mistaken for those of any other British species (incidentally, however, the Wood-Lark and the Tree-Pipit often give rise to quite unnecessary confusion and error, and that, too, in parts of Britain widely separated). The ground-colour varies from creamy-white or white with a buffish tinge to the palest of greenish-whites—the two former types being by far the commonest—while the markings, which usually take the form of speckles, small spots, and freckles—blotches being rare—are pinkish-brown, reddish-brown, and umber, with inferior markings of grey and lilac-grey. Two very distinct types occur: in one the markings are scattered fairly evenly over the entire surface; in the other they are more or less confluent at the larger end, the lower half being sparingly freckled. Rare varieties are zoned, or banded round the middle. All the eggs in a clutch are generally of one type. The distinct ground—for the markings are never heavy enough to hide much of it—combined with the general pinkish-brown appearance, serve to distinguish this Lark's eggs at a glance. Incubation, performed solely by the female, lasts twelve or thirteen days, and the nestlings remain in their birthplace for a similar period.

Full clutches of eggs may be found by March 15th, or, exceptionally, earlier, but the best average date for a fresh, complete "set" lies between March 25th and April 1st, though some pairs are habitually later. Second clutches must be sought during the latter half of May, though I have known them in the first week of that month, whilst eggs—third broods—are not uncommon at the end of June and throughout July. Once, indeed, I saw young in the nest as late as August 21st.

Unless dropped upon accidentally, the home of the Wood-Lark, even though the haunt is known and a familiar one, is often hard to find, since, like several other small, ground-breeding species, the bird is prone to sit lightly, running off its eggs in elusive fashion while an intruder is yet as much as seventy yards distant, especially if he approaches from down hill: then let the latter find the nest, if he can. That means assiduous searching, and more especially when the bird has not been seen running in the first instance. For the Wood-Lark, although tame enough to the extent of allowing a near approach, is very wary at the nest, and, equally chary about visiting it—even though but half-completed—while a human being lingers in its neighbourhood. If there are young in the nest, however, things are different: then, five or ten minutes' patient watching generally suffices for the revealing of the secret. Nevertheless, some

Wood-Larks—and especially those whose nest is in fairly thick grass or bracken (the light sitters usually possessing a very open home) sit very closely indeed, when, as you beat out the haunt, the affrighted bird flutters off underfoot, often trailing along the ground with expanded wings and tail, and as if hurt.

After being flushed, the hen, frequently joined by the cock, alternately stands on some ant-hill, mole-heap, or other slight eminence of the soil, and runs along the level, occasionally indulging in short, circular flights close past the trespasser, uttering repeatedly the flute-like and musical alarm-cry of *tee-i-u*, which, with variations, is used as a call-note in winter. Sometimes a pair at their nest will keep well away, and evince no concern for its welfare at all. With young there, however, agitation is always shown. Then male and female both fly round an intruder crying distractedly. From repeatedly visiting their nest—I mean in the ordinary way—especially when it is in bracken—the birds form a regular “creep” or “run” to it, though I have never seen one of these “paths” leading up to a nest containing eggs only, unless, of course, there has been rain.

Although it is a fact that in some of its southernmost English haunts the Wood-Lark may be heard singing in nearly every month of the calendar, this is seldom, if ever, so in Wales. There the delightful refrain (which can be imitated

exactly by the human lips) has never gladdened my ears before the latter half of February, till by the first week of March all the songsters are in full voice at their breeding-grounds. To my mind the Wood-Lark is easily the *primo musico* amongst British song-birds, not even excepting the Nightingale, though to some its music is open to the objection of lacking variety. The bird is often a late singer, its matchless melody of sweet, rich, liquid notes is frequently to be heard far on into the watches of the night. To hear, as I have heard, several singing together far up in the dusky cobalt of a June evening is a concert to be envied and cherished perpetually. It is well worth going miles to listen to. The song is generally uttered from high in the air, as the musician flies in wide circles, hanging and drifting at intervals, but it is not unfrequently delivered from some hillock or rock on the ground, or from the branch of some tree. It is, however, at its zenith when heard from the heavens.

At a distance, the Wood-Lark's rather undulating and jerky flight—which reminds me of a compromise between that of a bat and that of the Lesser Spotted Woodpecker—combined with the marked shortness of its tail and its unmistakable call-note, all serve to identify it immediately. At closer quarters it will be more than ever noticed that it is distinctly smaller and more squat than its cousin, the Sky-Lark ; its plumage is of a warmer

brown than that bird's, its bill is finer, while the superciliary streak is more pronounced. The song, of course—once heard—can never be forgotten, or mistaken for that of any other species.

Finally, a somewhat curious habit of the Wood-Lark should be referred to—I mean in connexion with the way in which the bird collects food for its young. Many species—as is well known—gather insect after insect or caterpillar after caterpillar, the while retaining in the bill those already culled ; but not so the Wood-Lark, which I have often watched depositing a bundle of “prey” on the ground on each occasion that it caught a fresh victim, then add this to the “roll,” and so continue, till a sufficient quantity has been gleaned.

## CHAPTER VIII.

### THE "WOODCOCK" OWL.

LATE in the month of "chill October," and early in "drear November," about the time the Woodcocks come, there reaches our eastern shores an Owl which is familiarly known as the Woodcock-Owl, probably because both birds arrive on our coast much about the same time. This is the Short-eared Owl,\* and seeing that it appears, as if purposely, at a time when rats and mice are swarming, it should—if for no other reason—be willingly welcomed.

Considering that this species visits us every "fall," often in considerable numbers, to disperse over the country for the winter, its breeding-range in Britain is curiously restricted, and especially when we remember that, although mainly a winter-migrant, it does nest with us regularly, and that its diet of small mammals and birds is similar to that of allied species. A certain small percentage, then, frequent the broads and fens of East Anglia for breeding purposes, as in Norfolk, Suffolk, and Cambridgeshire, while a few pairs usually nest annually in Wales, as well as, here and there, in

\* *Asio flammeus* (Pontop.)=*accipitrinus* (Pall.).

the north of England and in certain portions of Scotland, inclusive of some of the big groups of islands lying off the north and west of that country. Except that the bird is sometimes an abundant, albeit local, breeder within our realm during periodical and peculiarly severe plagues of field-voles, when it may be found nesting in districts where under ordinary conditions it is seldom seen, the only spot I know of in Britain where it can always be called common is the Orkneys, and maybe the Shetlands. To go back for a moment to the special and some-time breeding-irruptions of this Owl, these are almost certainly due to the fact that many of the winter-visitors, enticed into an unwonted sojourn in a strange land by an abnormal supply of food, elect to stay and rear their young on our moors. Strange to say, never yet has an instance of this bird breeding in Ireland been reported, though it is well known there every winter; and elsewhere in our Islands it may always be accounted a rare and irregular nester.

The appearance of the Woodcock-Owl affords two points worthy of reflection: the first is that light, which is usually more or less repellant to Owls, in no wise seems to affect it, indeed it often hunts happily and unheeding in the full glare of the noontide sun. The second point is that, shunning hollow trees, belfries, and the deserted abodes of other species which make stick-nests in trees, it

lays its white eggs on the ground, either amongst the heather and rushes of the moors, or in the sedges of the fens and broads, a fact which is all the more anomalous when it is remembered that most birds—with the exception of the Harriers and the majority of the duck tribe—which produce colourless, or nearly colourless, eggs, deposit them in a more or less covered or gloomy site. In this respect the Short-eared Owl resembles the Harriers. Like them, too, it is a lover of open expanses—fields and any kind of rough ground during winter; in spring and summer, as has already been seen, the fens and moorlands.

Although on their arrival these Owls sometimes get enmeshed in the long and deadly flight-nets set at intervals regularly every autumn along the east coast in the direct line of the migrating armies of birds, comparatively few meet this fate, since, when "on passage," the majority fly fairly high. Some now stay near the coast, others make off inland. These latter, after a brief rest, then scatter over Britain far and wide, though in Cambria this species is comparatively rare at all seasons.

When the grip of winter has slowly relaxed, most Short-eared Owls depart whence they came; yet in some districts, as, for example, in the Orkneys, these birds, or some of them at any rate, seem to be constant residents. Even there, however, some of those hatched the previous summer may migrate, for I am reliably informed that their visible num-

bers remain much about the same (mortality might account for this) at every time of the year, except, of course, for a month or so after the owlets have abandoned their birthplace in the heather, when, naturally, they are more abundant.

It is in the Orkneys, on those wind-swept and altogether desolate islands, that I have become best acquainted with the home-life of the Short-eared Owl. There, their haunts are seldom indeed on the summits of the gently-rising hills, but are rather on the broken gradients leading up from the valleys, as well as in the extensive valleys themselves, where a luxuriant rankness of unchecked heather, and riotous, golden rushes derive nourishment from the barren peat. Here they divide honours with the Merlin and Hen-Harrier ; their sanctuary is shared by Red Grouse, Plovers, and a few Curlews ; while, if we pass over the sturdy natives cutting peat, the occasional keeper, and the wandering naturalist, these birds hardly know the sight of man.

On a fresh morning in May, as the heather and rushes unwillingly surrender a path, there appears suddenly, and as if by magic, about thirty yards ahead of you, a large, pale brown, mottled bird. It is a male Short-eared Owl. Without a moment's hesitation he flies straight towards you, so to speak giving you challenge. Fearlessly approaching to within a few yards, he smacks his wings above his back by way of menace. From this peculiar

action, as well as from his excitedly erratic flight, as he rolls over grotesquely in mid-air, rising gradually as he nears you, you may safely infer that a nest is not far away. His flight somewhat recalls that of the Barn-Owl: indeed, under certain conditions of light and atmosphere, some specimens appear almost as pale as that species, when on the wing; but the Short-eared Owl's primaries are markedly longer, and seem to be braided with dark brown, with an orange splash above the dark pointing. The bird on the wing at a long range is pale buffish-ochre in colour; at a very long distance there is created an impression of uniform creamy-white, especially as the creature floats over the dark slope of a heathery brae. When, however, the Owl is on the ground very close to you, this tint is seen to be nicely patterned and streaked with brown. Curiously enough, when the bird is on the ground, within a moderate distance of you, it assumes a decidedly greyish cast, out of which sombre shade its pale face and ruff—the former with the glaring yellow eyes set in a dark, circular frame of stiff feathers, the latter with its frilling of black and fawn—show up almost uncannily. The poorly-developed ear-tufts (seldom exceeding  $\frac{3}{4}$  in. in length, and generally less), although now fully erected under pressure of annoyance, are hardly discernible. You should notice that, when the bird is thus at rest on the ground—generally on a tump or hummock of soil,

or on the rounded, pincushion top of a clump of spiky heather—far from standing erect, it holds itself on the slant at an obtuse angle, crouching low on its natural pedestal ; and elongating itself it assumes an even slimmer pose than it really possesses. Now, full in the open it is easy to see : it is only when the bird is partially concealed in long, rough stuff that it becomes difficult of detection.

Although the wings, from being raised slowly and almost vertically at each flap, are, as if to restore retarded action and lost balance, flicked down sharply and quickly, the whole flight is nevertheless beautifully smooth and buoyant. After the Owl has been flushed—especially should the nest hold young—it often settles repeatedly, on each occasion with a slight tremor of the long wings as they are neatly folded across the back and stubby tail, beyond which their extremities slightly extend. Every now and again it returns towards the intruder. Again it varies its flight with brief hoverings, or it may hang in the air motionless head to wind, albeit seldom at at all a lofty elevation when the " nest " is menaced. All the same, when sportively flying out of sheer pleasure—especially towards sundown—a single bird or a pair will ascend to a considerable height and soar—drift would perhaps be a more apposite term—in slow and incomplete circles. Then, for no apparent reason, the two friends will enter upon a sparring match, one buffeting the other playfully

with softly-hitting wing. Next moment, however, with surprising suddenness both will cease their horse-play and drop earthwards, descending in nearly a straight line: their headlong rush is only checked a few feet before they gently alight.

It is one of the joys of the moorland to watch a pair of these Owls hunting. They do not hunt all day, however, even when a large and hungry family anxiously await their return with prey; but, of course, the larger and lustier their progeny become, the more are their parents' endeavours unremitting. Rising softly like fluffy phantoms—yet phantoms alertly alive—and each one taking a different course, though frequently not very far apart, they begin quartering the limitless moorland—usually the slopes and valleys of it, seldom the summits. Their flight is low and perfectly silent, and they proceed alternately by flying and gliding. So gentle is their every movement, so dreamily active are they, that they appear to be governed by no exertion of their own. It seems, in fact, as if they have made a temporary, unconditional truce with the wind, and they resemble nothing so much as enormous tufts of sandy thistle-down purposely propelled by the breeze. Occasionally, however, they move with greater energy, especially when turning abruptly—as they often will—as though they felt that their previously slow progression might hardly lend them sufficient strength to carry them round on the backward trail.

Frequently — indeed very frequently — they patrol the same area several times. Their fierce amber eyes take in every detail; truly they resemble winged cats in many respects, and their local name of "catoface" is appropriate and expressive.

Presently a prospective victim is sighted—a vole. The Owl stays stationary for an instant, then drops noiselessly down, at the same moment expanding its ample wings to their fullest and dropping its legs—hitherto held straight out beneath the tail—forward and vertically. Plunge head downwards the bird dare not from so low an elevation: remember, it seldom hunts at a greater height than five feet from the ground; instead, it lowers itself gently and horizontally. Now, if you are near enough—on several occasions I have been within a very few feet of a successful hunter—you shall hear a vole's thin-drawn squeak of anguish—the herald of a taloned death; you shall hear, too, the crisp rattle of claw and pinion against a bristling tangle of heather and rushes; and as the bird rises you may see a roll of brown fur tightly locked in tenacious talons. Naturally, the Owl misses its mark—sometimes. Small wonder, too, if you consider the nimbleness of its quarry.

When the Woodcock-Owl has eggs only, the nest is not always easy to find, especially if the breeze is boisterous, as is often the case up north;

for then—and particularly should the eggs be nearly fresh—the male, instead of rising alertly and coming to challenge you, as he will when the young are hatched, frequently waits to be kicked up, and then flies low and straight away. Even if he should stay close after you have luckily flushed him, he will frequently be indifferent to your presence, thus giving you no clue to the position of his home. If you can put him up, practically the only course open to you is to patiently patrol the ground; but you should bear in mind that even now he may be as much as a hundred yards from the brooding hen. Of course you may, as I have done ere now, move the female from eggs by sheer luck, as you strike a line across the moors: but if you really wish to find the eyrie you must place no great faith in that “chancy” method.

A dog is always a useful aid towards success. Firstly, because the Short-eared Owl sits closely—until, in fact, almost trodden upon—whether incubating eggs or brooding over young, and my experience convinces me that Short-eared Owlets are covered by one of their parents—and that generally their mother—up to a more advanced age than is the case with the young of other British Owls. Secondly, because a dog gets over more ground than half a dozen men; thirdly, because he often catches the Owl’s wind; and, lastly, because a Short-eared Owl always exhibits greater

antipathy towards a quadruped of this kind when near its nest than it does towards a biped.

Take a typical instance. Here, this 20th of May, you are in a spot where, whenever you have passed that way, a male "Short-ear" has always been in evidence. To-day you have with you a dog. The Owl is soon up—how often a male "Short-ear" appears suddenly, as if from nowhere—and turning quaint somersaults in the air, like some Tumbler Pigeon. Presently, as the hound hunts the tall tangle, he hurls himself at him, actually striking him, thereby eliciting a shrill yelp of pain and terror, and chiefly the latter. You know at once that the nest is not far off. Almost immediately, with undignified haste, there whirls up under the dog's very muzzle a second Owl—the female off her nest, which is—as usual—in an open circular space at the roots of the rough growth of heather and rushes. This space measures 17 in. by 15 in. across; but the nest proper—if a shallow depression under the lea of the surrounding stiff growth, which is 2 ft. high, deserves such a high-sounding epithet—only spans 8 in. by 8½ in. In it, besides four owlets (a remarkably small brood), two being about five days older than their fellows, the eldest perhaps eighteen days old, are some chipped remnants of egg-shell, a few bits of broken rush and some desiccated moss, while on all sides are scattered "pellets" and droppings. Leading through the

## 130 FIELD-STUDIES OF RARER BIRDS

rushes from one side of the "nest" to a "sheep-drain" is a sort of run, about 9 in. long and 5 in. wide, in which one of the owlets timidly crouches.

Now examine this promising quartet. They are delightful creatures—a mingling of softly-blended beauty and seeming demureness, yet in reality, if too familiarly patronized, fiercely fluffy, and showing a sort of "touch me not" expression in their savage looks, well expressed by sundry snappings of their mandibles. Their garb is plain yet pleasing. Above they wear a soft covering of buff plush, each down-tuft being barred towards its centre with soot, and tipped with white. Below they sport chemises of pale buff. Their kittenish faces are clothed with stiff, blackish feathers whitely frilled, which, from being peculiarly fine and dense, suggest bristles. Their well-developed legs are gaitered with delicate, buff-coloured down almost to the claws, but the bare skin between these leggings and the claws is of a curious leaden yellow. Their toes are leaden grey, their soles pale chrome; their staring irides are of a lovely clear yellow, their hooked bills of a leaden cast of grey.

Handle them if you will, but look out for sharply-striking claws. Seemingly sedate and harmless when first viewed in their befouled and trampled couch, when picked up, or even if only stroked, they immediately degenerate into whirlwinds of ferocity. Meantime, their parents are becoming greatly

enraged. For a while the male—recognisable by his slightly smaller size and paler plumage—keeps away, coasting about angrily at a good distance, but his wife is by no means so tame a combatant. Time after time she fairly stoops at you. In sooth, as you sit caressing the owlets in your lap, the fiend-bird frequently passes over within two or three feet of your head. Your friend, who is standing back-on to her rushes—for she always attacks from the one side—she actually strikes on the nape with her wing, and more than once. You she will not hit, simply because you face her. Although each stoop is in itself quite noiseless, once or twice, as the bird flings round suddenly preparatory to a fresh onslaught, there is produced a regular swish of fast-beating wings.

Both birds expostulate with you, the male with hoarse *kwaks*, usually repeated six or seven times, and a single, weird utterance of *kwe-ow*; the female, who has less leisure for remonstrance, with a short, sharp, *kwow* or *wow*. Not till you have retreated some way will peace reign once again in this pleasingly-pugnacious moorland family. Usually the Short-eared Owl is a comparatively mute species.

Most nests must be sought in the valleys, or half way up the braes, amongst a medley of tall rushes and heather, or in rushes alone. A few, however, are found in heather only—though rarely in quite short heather—especially in a long-since

disused, overgrown peat-cutting ; and in any case they are often close to a " sheep-drain." No nest proper is ever made, such at least is my own experience. The goodly accumulation of broken rushes, heather, or moss sometimes found—for this is all the material you will ever find, generally in small quantities, in a shallow scrape in the soil, often, I believe, no scrape at all, but merely a slight hollow caused by the weight of the sitting bird—I always attribute to a chance scratching in of the surrounding growth. In nearly all nests a few down-tufts of a greyish tint cling to the materials therein, as well as to the adjacent growth, while it is worth noting that in the majority of cases the actual nest is placed in a corner of a large, natural platform, which measures from 11 in. to 2 ft. in diameter, though the eyrie itself seldom exceeds 9 in.

The eggs number from four to twelve, but a normal clutch consists of from six to ten. I heard of one case, where, by the judicious removing of an egg or two at a time, though always leaving one or more in the nest, an unfortunate Owl was prompted to lay thirteen—an unlucky figure for it, as thirteen is supposed to be for anything. Their colour is white with a tinge of cream, and the shell, though smooth and very faintly glossed, is minutely pitted all over, and in addition often exhibits strange, hollowed lines. They are laid at intervals of two days, but sometimes after

several have been deposited in this way, an interval of as much as a week may elapse before the production of a fresh batch. The first egg laid is frequently sat upon.

Some books state that laying does not commence till May: this is wrong. The first egg is generally dropped during April, sometimes, indeed, early in that month; consequently some nests are destroyed by heather-burning. Occasionally *full* "sets" are found early in April or late in March. Fresh eggs discovered after, say, May 10th, are, I imagine, nearly all second attempts consequent on accident to the first clutch, though I suspect that occasionally a genuine second brood is reared late in the summer (witness the eggs found in June and July), as I have proved sometimes to be the case with the Long-eared Owl.

The same haunt, though never, it seems, the same nest, is in use annually, and despite the fact of no sociability being evinced, several nests may often be found fairly close together. Even in these cases, each pair keep much to themselves and to their own particular beat.

Merlins mob the Short-eared Owl with spirit, but I once saw one of the latter harass a Kestrel which chanced to be passing by the former's home, while small birds, no doubt recognising its power to kill, keep well out of this Owl's way—if they can.

In the Orkneys, as indeed elsewhere, this

species' principal fare consists of voles, varied by young rabbits in their season, and small birds, such as Meadow-Pipits. That it ever interferes with the "cheepers" of grouse, I for one utterly disbelieve. The three largest "castings" I have measured were individually  $3\frac{3}{4}$  in. long by 3 in. in circumference,  $3\frac{1}{4}$  in. long by  $3\frac{1}{4}$  in. round, and 3 in. by  $2\frac{3}{8}$  in.

## CHAPTER IX.

### HEN-HARRIERS.

ABOUT sixty years ago the Hen-Harrier\* was a familiar moorland bird in the West Country, in certain parts of Wales and the "Lakes," in many of the wilder mountain districts of Ireland and Scotland, including the Hebrides and Orkneys, as well as in the fens of East Anglia. Nowadays, it has been banished from most of these haunts by trap and gun. A few pairs, however, linger in Cambria, in the Green Isle, possibly in Cornwall, Dorset and Devon, and particularly in some of the larger islands off the Scottish coast. It is doubtful if any exist—as breeders—in Scotland itself.

The Hen-Harrier—the male, at any rate—is no mean ornament to the few spots it still frequents. It is a real moorland gem, and a shy creation of heather-clad hill and misty mountain-side, where Short-eared Owls, Merlins, Grouse, Plovers, and Curlews find a home: appropriately might it be termed "Mountain-Harrier." Its present head-quarters, however, comprise no majestic heights, but merely show a series of squat,

\* *Circus cyaneus* (L.)

square-sided hills, with plateau-like summits, none reaching to more than 800 ft. above sea-level; while, on the braes and in the long, sweeping vales beneath, you shall behold a swaying sea of breeze-tossed heather and riotous rushes, which often reach to the height of the waist. Such is the present home of our dwindling *resident* stock of Hen-Harriers, for during autumn and winter occasional specimens crop up in even the most unexpected spots. At those seasons nearly every county in England can periodically claim an example or two, chiefly immature birds, which are even seen by and passing over woodlands.

Owing to the remoteness of its haunts as well as to its great scarcity, comparatively few British naturalists are really familiar with the Hen-Harrier. Therefore, come with me to the breeziness of a northern solitude. As you reach the moor this May morning a pair of Harriers, one behind the other, the female a plain brown bird, the male resplendent in pale blue and silver mail, sweep along the face of a hill. They are not hunting now: the two seldom, if ever, hunt in company. Then suddenly their paths diverge, the Ring-tail (as the female is frequently called) gliding off to quarter the rough growth in the valley below, the male, like a small cloud of silver tinsel, drifting along the flank of the brae. As the former crosses the dip formed by the brae side and valley, she at first flies fairly high, her long wings, of which the

primaries are slightly separated and upcurved at their extremities, beating rapidly. At intervals she rises and falls in her flight, and beneath you her white rump (from which she derives her Welsh name, *bod tinwyn*—White-tailed Kite) is peculiarly noticeable. If you must liken her to any other species, then the general effect is that of a Buzzard which has adopted a slim figure and long wings, though, of course, the Buzzard never has a white rump.

Now she is easily seen ; but wait till she is flying low over the vale beneath; then she is not so easy to follow, unless of course the white patch above the tail catches the eye ; for, large though she is, her brown form harmonizes wonderfully with surrounding objects. Her flight is then a mixture of swiftness, leisure, and instability. On the whole it is fairly rapid; yet periodically she slackens, only to shoot ahead with a wavering if rapidly erratic rush, and she turns from side to side alternately. The whole flight, however, is buoyant and devoid of all apparent effort. Certainly she is a faster flier than the male, and hunts, too, in a different fashion to him—more straightforwardly, with quite rapid, if erratic and skimming, flight low over the ground. Nor do I think that she hunts so long or so assiduously as he. Naturally the male is ever more noticeable, and for all his striking attire is less wary than the female. He at once attracts attention and compels admiration by the gull-like perquisites of his apparel—here

his pale, slaty-blue back and mantle set off by the black of the primaries, there his delicate grey throat and upper-chest and under-parts of snow. Indeed the tyro might well mistake him for a Gull, though in reality, if he is like one at all, it is the Kittiwake, which you do not encounter quartering moors, though some other species of Gulls do so almost habitually, at all events in spring and summer. The expert, however, even at a great distance, recognises directly the characteristic Hawk-like flight, owing to the fact of his wings being not so bent at the carpal joints as any Gull's, not to mention his totally different method of quartering ground. At long range he might pass muster for a male Montagu's Harrier; but at any reasonable distance his white rump precludes any such error, the rump of the male Montagu being grey; besides, he boasts no dark bars on his wings. Moreover, the breeding-haunts of the two species are usually dissimilar.

Now watch the male bird hunting. Whether it is that his pale plumage warns his intended victims, or whether it is that he indulges in it for mere sport, no hawk is more persevering or seems to hunt longer for a meal. Regularly about the same time every day a favourite beat is patrolled, and at first the grey bird works along the mane of the hill in leisurely fashion, some thirty feet from the ground. This is hardly hunting, and next moment he hangs against the

wind, stationary yet barely hovering; then he soars by a succession of small spirals to a slightly higher plane. Presently, however, he drops slantwise to a patch of scrubby ling, and now deliberately, though very dexterously, works for his daily bread, generally keeping but a few feet above his uncertain board. He scarce glides at all. When he does the gliding is of short duration. Instead, he flaps his wings noiselessly, regularly, slowly; there is no appreciable effort about the flight of the Hen-Harrier. All the time he eagerly scans each and every vole-run. Now he twists deftly, first this way, then that; his fully expanded, grey, white-tipped tail acts as a rudder. Sometimes, but half satisfied, he patiently patrols the same patch again and again, crossing and re-crossing it in a maze of slow, beautiful figures; or, after zigzagging over a plot like this, he will execute several low, circular measures, which often intersect one another. Thus he quarters the patch to its very edge. It must be a clever vole that escapes his keen yellow eye.

Next minute he may be seen scouring the valley in wide, erratic arcs, though still sedately, or he is, as it were, borne by the breeze in one long, uninterrupted sweep along the flank of the brae; and although he flaps his wings, he sways gently from side to side, as if to acquire a nicer balance. This I have often seen Peregrines do

when gliding, seemingly to mature the way they have already gained. Like Peregrines, too, and indeed, all the birds of prey, Hen-Harriers carry their yellow legs straight out beneath their tail, though periodically one or both are dropped limply.

Often the male quarters a whole valley without success—a fact hardly to be wondered at when we consider the nature of his quarry, which, here, mainly consists of voles, as timorous and cautious animals as you will find anywhere. Cautious they must be, too, for, besides the Harriers, they have to run a daily and nightly gauntlet of many Short-eared Owls. Return to the Harrier: at length, of course, patience is rewarded. Down he drops with sufficient force, one would imagine, to shatter himself on the hard ground. In reality, however, there is no harsh contact with the soil, no rebound at all; and if your glasses are good, you will see that when he rises there is often a limply-hanging brown roll tightly clutched in his cruel talons. That roll is a field-vole.

Turn to another picture. At long range you may watch a female Harrier "beating" the vale. As she works up the easy slope to the brae above, a pair of Curlews, which, like Peewits, lose no opportunity of harassing Harriers, have at her, each in turn taking up the attack by repeated and decisive stoops, though they seldom if ever touch her. At each effort the big hawk slips aside,

describing, while so doing, curiously contorted figures, which are like the coil of a cork-screw, held now perpendicularly, now horizontally. That her nest is somewhere there is certain. Witness the bird's distressed actions. At one time she settles on the ground—always a good sign, at the proper season, of a nest; at another, she flies back and fro at a fair elevation; and from both positions she chatters repeatedly. Soon the male joins her. He, too, is distraught. Then one or the other drifts across and up the valley, and soars at a fair height. Once, as the female journeys down dale a male Merlin dashes from a heathery bank far up the brae side with lithe, eager, galloping flight, and stoops fiercely and like lightning at his larger relative, who avoids his onslaught with difficulty. Presently both Harriers are back in that hill-side corner, and if you are wise you will visit them; for, although, in the main, shy, wary birds, they frequently cast caution to the winds, when, as now, near their nest, and will then approach you really closely. The male, indeed, will then constantly come within a few yards (I have actually had one within six feet!), as he keeps on swooping and stooping at you with closed pinions. Each time he charges, it looks as if he meant business, for he only shoots up when within a very short distance of you. His tail is not expanded now, as when he is hunting; but with widely spread tail the female cuts out circles in the

void, chattering incessantly. Sometimes, if you lie down, both birds will settle on the ground, the female (ever the wariest) from eighty to a hundred yards in front of you, the male directly behind you, perhaps but fifteen paces distant. Both now call spasmodically, one taking up the querulous refrain immediately the other ceases.

The Hen-Harrier's cries are surprisingly feeble for a bird of such imposing mien. Those of the female may be aptly likened to a rapid, quacking chatter, sounding like the syllables *quik-ik-ak-ik-uk-ik*, the *ik-ak* sometimes being the quickest, while sometimes there is a trifling interval between that and the preceding *quik*. It is not pitched entirely on one note, but runs riot among those of an octave. Occasionally it sounds like *quer-ik-quik-ik-ak-ik-ik-ak-uk*, and I think it very slightly resembles the chattering trill of the Dabchick. Exceptionally, a single sharp *chek-uk* is heard. The male has two distinct notes. The first, his normal one of annoyance at the nest—elsewhere, both sexes are generally quiet—is not very unlike that of the female, but it is not so prolonged, and is pitched on one note, thus, *quek-ek-ek-ek-ek*. The second is a squealing wail (which seems to have escaped the notice of every writer-ornithologist, as has the difference between the ordinary cry of the two sexes), only heard in the breeding-season, a single *squee*, *queal*, or *quee-ow*, though

occasionally it is repeated several times, with an appreciable interval between each utterance. It suggests a compromise between the " mew " of a Buzzard and the ordinary wail of the Herring-Gull. Rarely you will hear this cry run into the usual chatter, the former, however, always being delivered first.

Unless found by accident, few nests, especially when incubation has commenced, are harder to discover than the Hen-Harrier's, since the female—who is alone responsible for hatching—is usually a very close sitter, while the male is constantly far away from his home. One method of circumventing the wily bird is to repair, armed with trusty glasses, to some tall clump of heather, half way up a hill which commands the *whole* of a valley which you know harbours a Harrier's eyrie. You may have to abide in cramped patience and posture for well nigh an entire day without so much as a glimpse of the male. Then at last he appears, and, if he makes a quarry, he may reveal the secret by visiting and feeding the sitting hen. Either he will straightway settle down beside her for half a minute, or else—and this is very pretty—rising above the nest to some height he will drop his victim, which the female, leaping up to meet, adroitly catches ere ever it reaches ground. Now, if you have marked the precise spot (not so easy as it sounds, seeing that objects first seen through glasses at, say, half a mile, appear totally different

when viewed by the naked eye), you may walk straight up to the nest. All the same, you will be remarkably lucky if at first asking you hit the exact spot and light on the home of the Hen-Harrier. The female, remember, often broods very closely indeed ; until disturbed several times, she often waits to be literally stumbled across before rising, though, of course, there is always the chance that a few tufts of white, fluffy down, clinging to the barbed stems of the heather and rushes, and so arresting the eye, may betray the position of the eyrie.

Another way to find the nest, only there should be three of you at least in the game, is to beat out the heather and rushes in sections, that is, without any previous watching ; but, concerning this method, there is an immense element of chance, unless, of course, you know the site of last year's nest.

Again, you may watch the female, who has been off duty for a while, return to her charge, though this she will not do so long as you are at all near to it : or, possibly, you may catch her building, as I did once. The following description comes straight from my diary of May 23rd, 1907 : " Reaching a certain hill in full view of the sea, I soon saw, down on my left front, a pair of Hen-Harriers mobbed by Curlews. I sank down in the long heather at once, and soon the blue male, after his wife had rushed at him playfully once or twice,

vanished round a corner of the ridge, but the female settled on a bare patch of ground about a hundred yards from me. Sometimes she walked rather clumsily for a short distance, sometimes, partially raising her wings, she would jump curiously into the air; otherwise, she indulged in low flights of a few yards and alighted again. Eventually, she tore off a thin rod of ling, then flew by a circular course, low down and in rather guilty fashion, to a certain area of tall heather, into which, hovering momentarily above a particular spot, she let herself down gently. Four times she repeated these tactics to the letter: four times did she drop into the same patch; but just before the fourth instalment of 'laths' was deposited, the male soared over the valley and called her away. Naturally I had the line of the nest exactly, but, as must often happen from lying on the same level with it, when it came to walking to the place, I found that I had under-estimated the distance by thirty paces. The nest itself, as yet not quite finished, reposed on a bare space amidst yard-high heather fringing the hem of a raised oblong of ground adjoining an ancient peat-cutting. Two days later there was one egg, and when I was about a hundred yards from the nest, the female rose chattering from the ground. Scrambling up the slippery slope above, I watched for two hours, but because I was in the open, the bird refused to visit her nest. Instead, she settled in its vicinity, every now and again

taking short, restless flights. Each time after alighting she shook out her entire plumage and kept moving her tail up and down—this is a frequent habit of Harriers when on the ground. Presently an impudent Hoodie, on mischief bent, deliberately altered his course to tilt at her. Neither bird called out, but the Harrier, fearing for her egg, I suppose, rose immediately and hung about just above the nest until the 'grey-back' was an indistinct speck on the sky-line.

“ Seldom is a Harrier's nest a work of art, but this particular one, probably because it was undoubtedly a second attempt, was by far the most slovenly affair I have ever seen or heard of. It was simply a haphazard accumulation of a few heather branches arranged in rough circular form, and the lining—if it deserved that epithet at all—consisted of seven wisps of cotton-grass, half a dozen bits of broken rush, and a fragment of moss. The 'egg-cup,' measuring 6 in. across in a whole of 17 in. by 15 in., was only  $\frac{1}{8}$  in. lower than the rim of the surrounding structure, and a good deal of down adorned the nest as well as the adjacent heather.”

Other nests, however, which I have examined, have been more substantial, the largest usually being those built amongst tall heather. Most nests are in the valleys, right at the base of the hills, amongst mixed heather and rushes of medium height; sometimes in heather or rushes. Many

—especially those on level ground—are on the brink of a “sheep-drain” (obviously to provide for drainage purposes during heavy rain), as those miniature cuttings in the peat are called. Some nests, however, are half way up a brae in shorter heather ; or even in a mere depression in the soil, where, at some time or another, a peat brick or two have been removed. Nests on the hill-tops are rarities indeed.

If a sufficiently open space does not exist in the spot selected, the bird tramples down the adjacent growth of heather and rushes, so forming a rough, circular patch of from 20 in. to 25 in. in diameter. This provides a site for the nest which is made of heather, the finest twigs being reserved for the lining, further augmented by a little dead grass and often rushes. Some nests, indeed, are quite thickly and neatly finished off with broken bits of dead rush right up to the rim, a fact which has been doubted and denied by every ornithological writer. In such cases the effect of the pale eggs lying on a yellow matting is distinctly pleasing.

The nest is always shallow. Two more examples I measured were respectively  $12\frac{1}{2}$  in. by 13 in. across, by  $1\frac{1}{4}$  in. deep, and 15 in. by 17 in. by 1 in. deep. All the same, as incubation advances, the whole structure is augmented daily, as is the custom of Eagle, Kite, Buzzard, and Sparrow-Hawk.

The eggs may vary in size, even in the same clutch: and, for the size of the bird, they are always rather small. They are from four to eight in number, generally from four to six, while a "three" is sometimes found in a second nest. Their colour is, in the main, a dull white, or very pale bluish-white, an effect produced by the bright green interior of the shell, which, faintly amalgamating with the white, chalky external covering, causes some specimens to take on the tint of "skim milk." The shell is thick and coarse, devoid of gloss (except when the eggs are highly incubated), and curiously pitted. An egg is laid only every other day. The chalky shell readily absorbs stains. Consequently, specimens are often met with blemished with brown, yet genuinely rusty-marked eggs do occur occasionally, though these markings are usually few and faint.

The female is often a marvellously close sitter, so much so, that you may pass within a yard or two of her and yet fail to flush her: but, of course, the closest sitter is that bird which has its nest in thickest cover. If, however, the bird has been disturbed several times, she is apt to rise from ten to twenty yards away. At first, often chattering weakly, the Hen-Harrier literally flutters off her eggs, awkwardly as any fowl, her yellow legs dangling for some moments before being whipped up under her expanded tail. Then, after hanging round for a few seconds, she slants up and climbs

the air in immense spirals, till she becomes an insignificant line, and perhaps disappears altogether. Or—and this is customary—after the prelude of rising diagonally, she circles round and returns to the fray, sweeping boldly over the intruder's head, quacking angrily, while now and then she may settle on the ground.

On these occasions the male is usually nowhere near; but at intervals, and especially at early dawn and again at sundown, he attends the sitting hen, poised statuesquely, often on one leg, on some adjacent tump of ground or heather. If you can catch him *at these hours* by slipping suddenly over the brow of a hill, you may sometimes discover an unknown nest; but you must keep your eyes well ahead, for he is vigilance personified, and the moment you appear he is up and off, drifting down dale with a vehement squeal or so, or with a mournful chatter. You must recollect, however, that your chance of catching him napping depends absolutely on whether any one else has passed that way at all previously; for the Hen-Harrier is the essence of wariness, and will not even brook the near presence of the indefatigable peat-cutters, whom it must see daily.

Often before the nest is found, sometimes indeed after it is discovered, the female, if off, or when flushed, flies about excitedly in short dips, curving up and diving down like a switchback; or else, half closing her wings, turns a somersault sideways,

after the fashion of the Raven, righting herself the moment the normal position is recovered. Sometimes, too, she swings over abruptly from side to side, at the end of each stroke momentarily holding herself sideways on in mid-air.

At other times a pair frolic close to their nest. The male, half shutting his pinions, flies and glides along, looking like an anchor; or, still with half-shut wings, he may hang stationary with tail held strangely erect, and again sometimes he rolls over curiously in the air. By way of variety he rushes at his wife playfully, though more often she rushes at him, not, however, with tightly shut wings, but with sweeping, inverted arcs and her normal mode of progression. Then perhaps she rises to a great height and soars (usually Harriers, even when playing, keep fairly low), when the tips of her wings assume a sickle-shaped appearance; or else she floats and drifts in small circles. Suddenly she sinks lower, moving with stroke and glide, or dives excitedly up and down, yet never pressing her wings to her body. Lower she slants and lower, still "switchbacking," till at length, after one long coast, she alights on a raised patch of ground.

Generally solitary, towards evening especially the two sexes are frequently seen together, particularly in the vicinity of the eyrie. Although by no means social (witness the onslaught made by a pair on a passing Harrier), I know of one hill

haunted by four pairs of Hen-Harriers, two breeding on its east flank, two on its west. These nests are about one-third of a mile apart. Very often a Short-eared Owl or Merlin has its eyrie close to that of a Harrier. Once, within twenty minutes I found nests of all three species. That was a red-letter day.

The Hen-Harrier's diet mainly consists of voles and half-grown rabbits, varied by a few young Grouse in their season and other birds, which are pounced upon suddenly as they squat in the heather. Rarely does a Harrier pursue a winged quarry, though I once saw a male chase a Twite for some fifty yards unsuccessfully. Eggs are also devoured. When a rabbit is the victim, a good deal of "fleck" is torn off it, before the "breaking up" takes place, while the legs are neatly skinned as far as the "pads."

In common with all the birds of prey and some few others, pellets, composed of the indigestible portions of food, are ejected through the mouth. An average "casting" measures from  $1\frac{3}{8}$  in. to  $1\frac{1}{2}$  in. in length by  $2\frac{1}{2}$  in. in circumference. Recognized "boards" are resorted to regularly, and these, seldom very close to the nest, are generally on a hillock of solid ground, on a round of stiff, dense-growing heather, or on a mound, thick with moss and lichen.

In very hard, snowy weather, the Harriers forget part of their wariness and pay fleeting visits

to the vicinity of the crofts, to pick up what they may: while sometimes, even in spring and summer, one will steal down from the uplands and snatch a young chicken just outside a crofter's cot, and since I gather that, in bygone days when the bird was commoner, this petty larceny was a favourite practice, perhaps the bird's at present rather ambiguous name of *hen harrier* is explained.

The prevalent idea amongst most ornithologists is that the Hen-Harrier does not lay until the end of May or in June. This is nonsense. The first egg is sometimes deposited late in April (a full clutch in that month is on record), frequently early in May: in fact, most Hen-Harriers have complete "sets" between May 11th and 24th. Nests later than this are usually second attempts, while fresh eggs found late in June or early in July must surely be third ventures! In any event, however, only one brood is reared in the season. No time is lost between a first nest (taken or destroyed; since sometimes a clutch is trodden on by sheep or cattle) and a second. I have known five eggs taken on May 11th, and a second nest constructed and four more laid by May 22nd; but, of course, a nest, and especially a second one, is rigged up in three or four days. The same nest is never, I believe, used twice, though the approximate site is patronized yearly.

During winter a pair frequently patronize a special roosting-site in very long ling, which,

though eminently appropriate for sleeping purposes, seldom commends itself to the birds as a suitable nursery.

Were the Hen-Harrier not so easily destroyed at the nest, it would be a hard fowl to entrap. That is why it has become so rare (though in one not very large area in 1907 I met with eleven pairs), and unless steps are taken to preserve the few left in their chosen haunts, it needs no long time before we shall look in vain, even on the wildest northern moors, for the buoyant flight and graceful form of the Hen-Harrier.\*

\* As this book goes to press I read, regretfully, a well-known ornithologist's statement that last year there was only one pair of Hen-Harriers left to the mainland of Orkney.

## CHAPTER X.

### THE ONCE-COMMON BUZZARD.

WERE the average nature-lover asked the present-day status of the once-Common Buzzard\* in Britain, he would probably aver without hesitation that it was, if slightly more prosperous, in much the same pitiable condition as the Kite. Not so long ago, in fact, a good ornithologist, in one of his books, included the bird amongst our vanishing species. As a fact, however, the Buzzard is happily very far from being extinct, nor is it ever likely to become so, though, admittedly, it is extremely local, and—taking our islands as a whole—distinctly rare. It would be safe to reckon it in the first score of our regular but scarce breeding species.

Taking England first, a good few pairs are still left to the Lake District, where it is certainly *not* decreasing, while possibly Yorkshire can still show an eyrie or two. Thence 'tis a far cry to the bird's next regular haunts—the woods and sea-cliffs of Dorset, Devon, Cornwall and Somerset, and perhaps some of the hills and woodlands of Monmouth, Hereford, and Gloucester as well.

\* *Buteo buteo* (L.)

The eastern, midland, and southern counties know it no longer as a nester, though until fairly recent years the Buzzard was a regular habitu  of the New Forest, and still sometimes breeds there.

In the highlands of Scotland, however, matters are a little better, though even there, in some districts, the bird is destroyed at sight, and Ireland appears to have lost its stock of breeding Buzzards for good and all. To Cambria, then, is reserved the distinction of providing the bird with its head-quarters in Britain. There it still deserves to be called common. A census would show at least two hundred and fifty pairs, and—Anglesey excepted, and possibly Flintshire—it nests in every county, though most abundantly in Brecon, Radnor, Cardigan, Carmarthen, Merioneth, and Carnarvon. Further, to indicate how numerous the bird is, I need only add that in various parts of the first four of those shires—and especially in Cardigan and Carmarthen—I have periodically visited over three score different eyries, some of them for several years in succession, and, then again, I know the whereabouts of quite another fifty. Taking from every source then, there is small doubt that throughout the British Isles the Buzzard's strength may be safely gauged at something over four hundred and fifty pairs; moreover, in some Welsh districts the species is increasing. Let me cite a good instance: on one

carefully protected estate of not very many square miles in extent there were in 1901 five tenanted eyries, in 1902 six, while in 1903 there existed eight. This looks as if Buzzards breed the first spring after being hatched.

So numerous is the species in certain parts of Wales that during walking tours of three or four days only I have seen upwards of fifty; this, too, in early spring: while if the best country be traversed, it is nothing unusual to meet with twenty or more in the course of a single day. This great plenty is due in no small measure to the fact that many pairs resort to the miles of barren solitudes in those rugged hill-regions, which are given over to sheep, and sheep alone, with no game-preserving in force, and hence none of the accompanying butchery of so-called vermin. There a man of leisure may wander for days during summer in unalloyed contentment, never to chance on a soul, perhaps, save for the ubiquitous shepherd and his foxy-looking, white-eyed collies.

Any moment, as you top some rise of the undulating moorland, a huge hawk with rather owlsh, not to say lumbering, flight, may flap with unseemly haste from the decaying carcase of a sheep. That hawk is a Buzzard, and, even if you are no ornithologist, you will surely stay your steps and gaze. As this bird climbs the air, another—almost certainly its mate—may join it

from the "cwm" yonder, when a master display of wingmanship commences. Each great creature—the Buzzard is fully four feet across the wings—takes a reverse course, both float up with effortless exertion in glorious spirals. Their rhythm of wing is so measured that one is fain to believe it a preconcerted exhibition. Their ample wings are raised almost vertically, of which the primaries stand out separated and distinct, like the digits of a hand; and the broad, slightly-rounded tail is fanned to its fullest. Now the sun burnishes the brown of back, wings, and scapulars; now—as a half turn is described—the pale feathering of the belly and under side of the wings glint like silver sheen. Higher yet and higher they wind, till the eyes are almost pained with vigil so intent; further and further away till you begin to wonder if the specks are animate or mere creatures of your imagination.

That is the characteristic flight of the Buzzard at any time of day in the vernal year, as also at all other seasons in the early morning, and on fine evenings just ere sundown: and when as many as from six to a dozen—no uncommon sight in the early spring—all sail and circle round one another in these mazy rings and spirals, it is a spectacle well worth going miles to witness. Sometimes a single Buzzard will soar—an insignificant dot in the heavens—for a considerable period; often will a pair breast the wind at a

lower elevation, especially when hunting. When descending into or crossing a valley, the Buzzard frequently half closes its wings, and, with a quicker flight than usual, literally cleaves the void with a mighty rush, resembling in no slight degree some monster bolt, with barbs on either side, hurled from a giant catapult. Seen under any of these circumstances—and especially when floating up in spirals—the Buzzard's flight is hard to beat. On the other hand, when the bird is flapping along, or when disturbed suddenly—and particularly from covert, which it leaves in a frightened and laborious fashion—it appears not a trifle ungainly, and certainly inspires no admiration.

The Buzzard's fare chiefly consists of rabbits (young ones, generally, in their season, though in severe weather the old ones are taken as well), moles, rats, field-voles, beetles, nearly any kind of carrion, and more occasionally birds (which it never flies down, but pounces upon unawares as they squat on the ground) such as Grouse and Partridges, and even reptiles, whilst a dead fish is not ignored. With young to cater for, however, the old Buzzards turn their attention to that which comes readiest to hand. For instance, should an eyrie be adjacent to a Grouse-moor, the "cheepers" may be remorselessly harried; and in and around different nests I have found Pheasant-poults, parts of an adult cock Pheasant,

the remains of Crows, Pigeons, and other species, inclusive of a Nightjar, as well as tiny lambs—a couple of days old at most, conveyed there, of course, after death, for the Buzzard is no slayer of lambs. With regard to the Pheasant, Crow, and Pigeon, the Buzzard must surely in the first instance have lighted on them dead, or, at any rate, wounded? for though no doubt the bird could—if so disposed—tackle even this “big game,” that would be quite out of keeping with its usual habit of picking up its prey from off the ground; moreover, a cock Pheasant, however attacked, could, and certainly would, put up a noble defence; while, as for the Crow, that species positively revels in mobbing the Buzzard, and routs him decisively, too, on any and every possible occasion. Rarely—but very rarely—a Buzzard, even out of the breeding-season, will devastate the poultry-yard, but, on the whole, this fine hawk is quite harmless to game and poultry—for all that, when one crosses over a moor, the Grouse lie like stones in the heather. Yet with a rabbit and grouse in front of it, the former is invariably selected. Tame Buzzards will eat almost anything—cats, squirrels, hedgehogs, and practically any variety of bird, though, of other fare, blind worms my pet Buzzards, at any rate, utterly rejected.

The Buzzard usually procures its prey by quartering the ground from a fair, and sometimes from quite a low, elevation, with slow, noiseless,

flapping flight, and pouncing down on it suddenly ; and it hunts the open moors and enclosures in the valleys in preference to the skirts of the former. Sometimes, however, the bird will sit motionless, perhaps for hours together, on some commanding pinnacle of rock or dead branch, until some likely victim comes within the ken of its keen eyes, when down it glides and easily snatches its unsuspecting victim.

Although the Buzzard nests alike in rocks and trees, there is very little doubt that it is preferably a branch-builder, seeing that should there exist in close proximity a *suitable* wood and cliff, the former is almost always selected. In Cambria, as a matter of fact, fully 80 per cent. of nests are in rocks, but then it must be remembered that the majority of its Welsh haunts show far fewer woods, and trees generally, than crags. Like the Kestrel, however, and as the Raven used to do, the Buzzard nests happily in either situation : sometimes a cliff-breeder has its alternative eyrie in an adjoining covert. Probably young Buzzards hatched in either of the two positions would be constant to the same when the time came for their own breeding.

The Buzzard usually possesses from two to four alternative nests, which in general are not very far apart, though occasionally they are, or some of them, as much as a mile or even more away from one another, especially in areas where

the bird is scarce, or where no convenient site exists close to that one already containing one or more eyries. Nests in trees, and periodically those in crags, are sometimes used for from two to six years in succession, though generally two or three are occupied alternately. I know of one pair of Buzzards, however, which laid in five different eyries in a like number of springs.

When built in a tree, such as an oak, ash, or a beech (the oak is the favourite), the nest is placed either in a fork of the main stem (very often in the second or third good one up), or just as frequently in the crotch of a projecting limb. If, however, a fir or larch is selected, then it is situate close to the trunk on several horizontal branchlets, as a Sparrow-Hawk's abode so often is; on a big protruding bough; or in the broad, flat crown of the tree. A tree near the margin of a wood is preferred to one in the interior, particularly if the trees are unduly close together. In a "hanger" the nest must normally be sought in the bottom half. Apart from woods, odd eyries may be found in plantations (large or small), in clumps of trees, and even in isolated trees in hedgerows or elsewhere. I remember one nest in a small mountain-ash jutting almost horizontally from a steep outcrop of rock; I have seen another in one little more than a bush in stature growing in solitary state on the confines of a moor.

Cliff eyries (especially those in sheer cliffs)—

maritime or inland—are generally in the upper half of the “fall,” though in a precipice composed of slopes and sheer faces, one of the lower bluffs is often patronized; and most of them are placed on the spacious platform at the base of, and behind, some dwarfed tree or bush clinging more or less projectingly to the crags. A few find dubious shelter on some big, unprotected ledge, or a better hiding-place in a large cavernous recess. In any case, a great partiality is evinced for a cliff with a crop of self-sown trees springing from it, or for one festooned with ivy and other vegetation, a bare precipice hardly ever being relished, while very few nests are overhung. This quite customary habit of building behind a tree on a cliff may possibly be a further indication of the Buzzard’s branch-loving propensity, since it may remind it—though slightly enough, one would imagine—of its original trait. Eyries on almost level ground amongst broken-up boulders, even far out on the open moor, I have found on several occasions. Generally, however, whatever the site, a secluded spot with an easterly aspect is preferred to all others.

Although Buzzards—for both sexes perform—always make their own nest, occasionally a deserted Crow’s, rarely a Raven’s or Kite’s, serves as a foundation, in which event the material employed by the Buzzards is less than its wont. Very exceptionally indeed a pair, possessed of

pluck extraordinary—the average Buzzard being a cowardly fellow—eject Carrion-Crows from their *new* nest.

A tree-nest, especially one built amongst ivy and if, too, on a projecting bough, is sometimes rather hard of access, for the bird often selects some forest giant with a huge, limbless bole. On *inland* crags, at any rate, the reverse is generally in force : indeed, only on half a dozen occasions at most have I had to requisition a rope, and a short one at that, in order to reach an eyrie, and I have climbed to dozens. In such simple spots, in fact, are most eyries, that, to many, women and children could climb or scramble with ease and safety. This propensity to build, often quite unnecessarily, in such stupid situations often proves disastrous to the species, since many a clutch of eggs, which would otherwise have hatched, finds its way into the box of the dreaded collector—perhaps an indifferent cragsman—or else is pulverized beneath the iron-shod heel of some brutally ignorant shepherd. Sheep dogs, too, when they can, will devour the eggs ; Crows, of course, and sometimes Ravens, prove a scourge to the Buzzard in this respect.

Nests vary a good deal in size, but tree-eyries are generally the bulkiest and most substantial. Some, indeed, from constant refitting, assume quite gigantic proportions, becoming over a yard in height and nearly three feet six inches across at

their foundations, narrowing, however, up to about two feet: but a typical example is from a few inches (this generally on rocks) to a foot and a half in height, about two feet six inches across, with an "egg-basin" from ten inches to twelve inches across by  $3\frac{1}{2}$  in. in depth.

In the ground-work sticks (living and dead), twigs, and heather find place, while the normal lining—in fact, it occurs in all nests—is of dried cotton-grass (tufts or blades) or wood-rush, sometimes both; but in different eyries I have noted the following miscellany: fragments of bark about two inches square, fir and larch sprigs, moss, dead bracken, wild thyme, ivy, and other green vegetation such as freshly-plucked branchlets of oak, birch, hawthorn, and ash. Some nests are upholstered—over the dried grass—with an emerald carpet of larch sprays, usually when the nest is in a larch; sometimes with the more sombre green of the Scots fir. The buzzard, indeed, appears to have a decided leaning towards the artistic, and I can scarcely recollect a nest which was not at one time or another—for material is added daily right through the period of incubation, and until the young have flown—graced with green foliage of some sort, which is frequently woven roughly into the rim. Now and then a scrap of wool is seen in the lining or clinging to the sticks of the eyrie, but it is more than doubtful if this substance is taken there intentionally, the

probable truth of the matter being that it is already adhering to some stick gathered by the Buzzard. Usually, however, it occurs when a Raven's, Crow's, or Kite's habitation is augmented, in which case the event needs no explanation. A quite recent writer insists that the Buzzard frequently pads its eyrie with wool and hair. Does it? All I can say is that in the scores of nests I have examined, except for the above-mentioned cases, I have *never* found either of these substances. The Kite, of course, *always* lines its nest thickly with wool, and often with hair.

Particles of white, fluffy down, and sometimes a few feathers, from the old Buzzards cling to the nest and its environment in greater or less abundance; and tree-nests often have a side platform of sticks superadded to them after the young are hatched, on which their parents stand to break up their "commons." On cliffs, of course, there is no necessity for this, as a ledge adjacent to the eyrie serves the purpose. The lining of the nest, if of rough material, is nevertheless fairly smooth, but in one instance it was so "ridgy" that none of the three eggs touched. Normally the "egg-basin" is very flat, though never so markedly as that of the Kite. In *very exceptional cases* the eggs are laid on a little dead grass collected on a rock-ledge.

In mid-March, and even before that, Buzzards make a pretence of building by partially patching

up several or all of their old eyries ; but no earnest work is done before the end of that month or early in April, about which time I have often seen six or more birds over one site playing clumsily with one another, even to rolling over grotesquely in mid-air in sheer exuberance of spirits ; in fact, a somewhat social feeling is evinced throughout the year. The real eyrie, however, even thus early, is indicated by sundry droppings and castings all round it, by the birds frequenting it the most, and by their roosting in its vicinity nightly. The nest is sometimes ready long before the first egg is laid. In this respect the Buzzard does not differ from many of its congeners.

The Buzzard produces from one to five eggs, usually two or three : a " four " is rare, a " five " I have only *heard of* once. It is presumably the very old hens which lay but one. They differ a good deal, even in the same clutch : indeed, eggs of one set are seldom of the same type, and when three are laid one is generally spotless, or nearly so, and as often as not smaller than the other brace. An addled egg is not ejected from the eyrie.

The general ground-colour of all eggs ranges from greyish- and yellowish-white to very pale bluish-white (the internal surface is pale green), and the markings may take the form of blotches, smudges, spots, or speckles, or, *rarely*, of streaks

and scratches. Their colour is very variable. In one wide area of country I know the usual type is light red, rusty, yellowish-red, or brown, with inferior markings—if they exist—of lilac-grey. One egg in a clutch is often zoned at the large or—and particularly—at the small end, and a hen accustomed to lay this variety always has one like it every year. In another district dark red and chestnut, sometimes even black and purple, are the prevailing tints of the markings, the underlying ones being lilac-pink or grey. Other specimens are filmed with a delicate coating of lime over pinkish-lilac and rusty streaks on a creamy ground, and are really lovely; or again, they are minutely flecked with light brown and purplish-red on a white surface. Usually far more ground-colour exists than markings; in fact, taken as a whole, Welsh Buzzard's eggs, though of fine size, are not richly coloured, but one clutch I have seen was as heavily blotched as a good set of Sparrow-Hawk's eggs: sometimes the whole clutch is spotless. The eggs are usually rotund rather than truly oval, while their shell is coarse-grained and thick. Single-brooded, the Buzzard seldom lays again in that year that she is robbed, but should she do so a fresh eyrie is utilized.

Three or four days, sometimes two only, or, on the other hand, as much as a week, elapse between the dropping of each egg, but the first laid is frequently brooded. Incubation, chiefly performed

by the female, lasts for one egg a lunar month exactly, but, of course, some few days longer must be allowed for the remainder to hatch.

The young in the down are pleasing studies in greyish plush ; they remain in their birthplace for six weeks, more or less. To begin with, they grow very slowly, being, when a fortnight old, only the size of a man's fist, but when the pen-feathers begin to sprout on the sixteenth day they increase in bulk rapidly. Whilst in the nest they often keep the beak wide open, and even pant as if oppressed by the heat ; and as they wax larger and lustier, strange bickerings ensue ; indeed, it is to be feared that the strongest often bullies its fellow nestlings unmercifully. Sometimes, in fact, one, or even two, vanish from the eyrie : from which fact has arisen rumours of cannibalism, it being conjectured—though by no means proved—that the strongest eats the others, or that the parents, finding much ado to keep body and soul in their entire family, end their difficulty by ending the life of one or more of the brood, leaving perhaps one only to be reared ! All I can say is that, if this be true, it is against all principles of nature, nor does it comply with the recognised habits of the other birds of prey, excepting, sometimes, with the Golden Eagle's. Moreover, I have known many a brood of Buzzards—both twos and three—fly intact from eyries situate in the most dismally wild, rocky regions to those in com-

paratively lowland areas. What most probably happens is this: the largest bird pushes the other out of the nest *inadvertently*, for remember the structure is very flat, remember, too, that fresh material is universally added to the rim of the eyrie daily, as though to provide against such accidents, right up to that day on which the young leave it for good. Then again, I have on several occasions found a young Buzzard in an advanced stage of decomposition on the ground beneath an eyrie, a fact which goes far to disprove all ideas of cannibalism.

The Buzzard is sometimes a very close sitter, especially with the eggs highly incubated, and more especially if the eyrie is in some shady, deeply indented gully in the rock-formation. In an ordinary way, however, I have repeatedly observed that tree-builders remain brooding closer than those in crags, possibly because they fancy that the surrounding timber affords them some sort of extra protection or sequestration, and oft-times may these be approached to within the easiest of gun-shots. On the other hand, the crag-breeder, particularly if intruded upon from the valley, very often quits her charge the moment an intruder has started to climb, sometimes, indeed, that instant in which he is visible far down dale, or as soon as the non-sitting bird sets up a mew of defiance and fear.

The average Buzzard is a noisy bird at the

nest, both sexes—the male, known by his slightly smaller size, often being the most agitated—wheeling and flapping above their haunt, though seldom within shot, mewling distractedly, and often most (oddly enough) when you are farthest from their belongings. If the eggs are taken they fly straight away without more ado. In other cases, occasionally even when they have young, they are only slightly noisy or not noisy at all, merely flying silently away to return at intervals; or else they at once take up a position on some adjacent tree or rock: the sentinel is seldom long absent from its sitting partner.

Very exceptionally a pair—but the male in particular—will show fight, and literally attack an intruder, the same couple resorting to these drastic measures year after year. I have known this happen to several friends, but I myself have never yet been more than threatened, the angry bird having approached me to within a few feet with outstretched talons and beak wide open. Once, too, as I scaled the rocks to reach an eyrie, the female Buzzard stooped closely at an ewe and her lamb, causing them thereby considerable panic. At all times is the Buzzard given to inquisitiveness. Sometimes when lying motionless on the moorlands I have known individuals to approach me to within a very short distance, perhaps thinking me dead; again, when stumbling through a shale-littered wood, a passing Buzzard has flapped

down momentarily into the trees above me, to examine the—to him—strange object, while on several occasions a male has accompanied me for miles, though keeping at a respectful distance, leaving his sitting hen far behind. This almost looks as if he were endeavouring to draw one away from the sacred precincts.

As has been shown, the non-incubating bird is usually close to the eyrie, either on some contiguous tree or ledge, or at any rate within easy hail of it ; or wheeling slow and stately far above the site ; and were it not for its often quite senseless habit of advertising the place by flapping down the valley or over the wood to meet and challenge an intruder by squealing piteously and persistently, many a nest would escape the indiscriminate looter.

The earliest " set " of eggs I have ever seen was completed by April 7th, but normally even the most sheltered eyries in the lowland woods seldom contain eggs prior to between April 18th and 25th, while hill-birds usually delay their laying until between the end of that period and early May, though some few pairs are a little later. Yet sometimes mountain-eyries hold eggs by April 20th, and, curious to relate, the early record first referred to hailed from a gorge buried in the mountains. Individual hens commence laying almost to a day annually. Where the bird is truly plentiful there may exist two tenanted eyries within

half a mile, and I know one wood of hardly larger extent where three pairs breed yearly. In the suitable Welsh valleys, however, there is usually a pair to about every mile, and from that up to double the distance; I have visited as many as twelve in one day. In one or two cliff-ranges I know, Ravens, Peregrines, and Kestrels breed as well as Buzzards.

The Buzzard is usually a sad poltroon which any bird may mob with impunity, though once or twice I have seen the tables turned when a Buzzard has harassed a Heron. Ravens and Peregrines fairly revel in this pastime, sometimes, indeed, actually striking the shirking creature, though never apparently too viciously, and probably because the latter, clumsy though it be in most respects, is generally quite capable of avoiding such ignominious treatment. The rest of the crow and small hawk tribe, as well as several of the wading birds, also find extreme pleasure in this guerilla warfare: a pair of Merlins, for instance—lithe, swift-winged fellows—make a regular business of it: as one mounts a hundred feet or more above its lumbering antagonist, to stoop at it headlong and quick as thought, the other “waits on,” ready and eager to take up the attack as its mate shoots up for further fierce frolics. Time after time the game little hawks give battle, and the wretched Buzzard, mewing with fear, gets no peace until it gains sanctuary in some sylvan or

rocky retreat. Besides these, smaller birds still, such as Ring-Ouzels, especially when a Buzzard persists in settling close to their nest, give the great hawk many a bad moment, sweeping past its head so closely that the two birds seem momentarily to touch.

The Buzzard's usual cry is a melancholy and rather nasal half-whistle, half mew, thus: *s-e-i-o-u*, which is generally oft repeated, albeit with an appreciable interval between each utterance: it may be heard from a bird flying or at rest. Different individuals call in different keys, and sometimes one is very husky, then giving vent to a weird, screeching croak. In wet and generally dismal or turbulent weather, a pair will often sit on the rocks, answering one another with an uncanny repetition of the syllable *mah*, while nestlings possess a softly-iterated and very human-like whistle of *whee-ou—whee-ou-whee-ou-whee-ou-wheü*.

A certain amount of internal migration—chiefly local—is noticeable in autumn and winter (this movement must not be confused with the immigration of Buzzards from the Continent, which pertains to the east coast in autumn), and I feel sure that it is mainly birds of the year, driven from the scenes of their birth by their parents, which seek perforce these pastures new, since not only are almost all the Buzzards one hears of as being destroyed down country in the north and

west immature specimens, but also because I have on so many occasions known a pair remain true to their breeding-haunt throughout the year, even to roosting by one of their eyries every night.

The usual Welsh appellation for the Buzzard is "boda" (plural, "bodaod"), but the term "bwncath," which means cat-hawk (no doubt from the bird's mewing cry, and so most descriptive), is sometimes employed. In North Wales, we are told, the Buzzard is generally called "barcud," which really signifies "Kite," but in South Wales I generally heard the bird called "boda"; the Kite, properly, "barcud." Yet, should a native of South Central Wales speak of the two species in *English*, he will frequently confuse you, if not versed in his ways, by naming the Buzzard the Kite and the Kite itself the fork-tailed Kite or forky-tail.

## CHAPTER XI.

### IN THE HIGHLAND HAUNTS OF EAGLES.

To the ornithologist a Highland April presents special attractions, particularly if he would see the nest and eggs of the Golden Eagle.\* With this object in view a friend and myself, thanks to the courtesy of certain landed proprietors and their factors, and to the help of keepers, set off north one early April.

A keeper meets us after our all-night journey, and soon a start is made for the first eyrie, distant a long twelve miles, far up a lonely glen. For seven miles we benefit by a fairly metalled road cut through the moorland, but it is all against the collar, with a fierce head-wind to boot. We skirt an immense, hanging pine-wood, the home of the Capercaillie; on the heather beyond Grouse and Curlew are our companions for miles; so are the red deer, never so wild now as later on. Eventually we leave the track, to follow a rough "pass" to the lodge, where tea, always welcome, is now doubly so. Shortly a blizzard, worthy of mid-winter, begins to rage: indeed, so severe does it become that during the two miles from the lodge

\* *Aquila chrysaëtus* (L.)

to the nest, it is all we can do—none of us weaklings—to breast it. At last—a sigh of relief, so venomous the hurricane—we view the eagle-rock. That the place?—why, on a fine day it would be child's play.

A triangular outcrop of rock breaks the monotony of the hill-side "scree," which, for all its altitude above the glen, hardly merits the name of cliff or mountain; and the nest lies on, as it were, the apex of the triangle, on a spacious, grassy ledge. Eagles normally nest on grass-grown ledges, and frequently in remarkably easy sites, while most nests, as this, face north. A struggle up the steep slope in the teeth of the storm, and we stand under the apex, perhaps thirty feet below the eyrie, whose rough, heathery edge is just visible. Now, up that little gully on the left; and when we are almost on a level with, but about seven feet from, the nest, the sitting Eagle raises her head to survey the intruders. Higher still she raises herself, till she stands over her treasures, her vivid yellow cere, flashing brown eyes, and immense, hooked bill being especially prominent. Then, with ungainly action (an Eagle is ever at its best when high in the heavens) she walks—waddles would be more appropriate—to the edge of the eyrie, where, for thirty all too short, but glorious moments, she stands disdainfully, ere hurling herself into the abyss and dashing off down wind with a hundred-mile-an-hour storm howling

in her wake: a picture worthy of some famous painter, we think.

Another approach must be used to storm her citadel; a careful climb it must be, too, considering the elements. We do reach it, however, and now for an examination. What do we find?—a huge, untidy structure of big heather branches, lined with broken bits of dead bracken stems (no wood-rush being present), and decorated on one side with a large bunch of freshly-plucked crow-berry. A good two feet in height, it spans fully six feet across in its lowest foundations, which, however, narrow up to a foot less on the level of the “egg-basin.” This is remarkably narrow and shallow—as indeed all eagles’ nests are—only measuring 14 in. by 13 in. across, by about  $3\frac{1}{2}$  in. deep at its lowest point. Save just this, most of the nest is deep in snow: snow nearly always wreathes the Highlands when the Eagle goes to nest.

Both eggs—one being white and spotless, the other shaded and smudged with pink, and both stained from contact with the bird’s plumage—are smashed, one irremediably, the other badly. The keeper fancies that the Eagle has gripped them with its huge talons, either in rage; from being numbed with cold, or from fear at so near an approach. To us, though, it looks the wanton handiwork of some passer-by, for even to the unskilled cragsman this nest may be commanded

from certainly one spot above: or perhaps a rock has slipped in of its own accord! Albeit, no rock is found in the eyrie.

Nothing more is seen of this Eagle; in fact, the blinding hail renders it impossible to detect any object more than a few yards away. Besides, an Eagle, when flushed from eggs, usually flies right away, merely waiting about a great way off; and the non-sitting bird—for both sexes incubate—is seldom much in evidence at the eyrie.

Next morning, in far better weather, we set off for a second stronghold of Eagles, which is situate in a deeply indented, rocky gully near the head of a glen, and the eleven mile walk to it is one of pleasurable remembrance. Woods and sheer walls of limestone unite with the stream-side in places; waterfalls and deep pools form part of the picture. But bird-life is scarce. Dippers there are naturally, so, too, Grey Wagtails; and a pair of Goosanders, the drake's rosy-tinted stomacher fairly glinting in the sun, whirl past with swish of fast-beating wings. For crow-birds (except Daws and Rooks near the mouth of the river) and hawks we look in vain, until some nine miles up stream, a pair of lordly Peregrines sailing over a big rock promise the keepers many a sleepless night: for, in these districts given over to grouse, so-called vermin, except the Eagle, is not encouraged: a smart keeper renders it practically extinct. Two miles this side of our goal a male

Eagle flaps across the glen at an immense altitude. He circles majestically a time or so, then vanishes over the sky-line.

Now leave the glen, and work up diagonally to a crest which overlooks the nest, perhaps eighty yards away. This crest forms, in fact, one of the sides of the ravine the Eagles have selected for their nursery. A picturesque spot it is too: a streamlet brawls down from the heights above through a chasm in the rock, and the gorge itself, narrow at first, now widens out (where the eyrie is) into a small, natural amphitheatre, whose rugged slopes and massive bluffs are decorated with an irregular array of stunted birches.

Much snow still wreathes outstanding pinnacle and "pad"; winter, as yet, will not be denied.

This Eagle sits lightly: the moment we top the sky-line she slips off silently, sneaking close in along and under the shadow of the cliff-face in a guilty fashion, which of itself would betoken a nest, did we not know of it already. She greatly resembles a huge Buzzard. Then a mile away and more she flies, only returning when we have left the nest some time, when from the glen we enjoy the spectacle of *three* Eagles soaring above the gorge—the owners of the nest and an odd male.

Now then! Down this side by a deer "pass"; up that by a half scramble, half climb; then along a track in the long, wiry heather, which leads right past and within four feet of the eyrie. Just

a steadier on that birch projecting from the cliff-edge, one step to the left and you are on the big ledge by it. This nest is an old favourite obviously and is quite six feet across, though it is narrower at the top. The "egg-cup" is 16 in. by 13 in. in diameter by  $3\frac{1}{2}$  in. in depth. Mainly fashioned of heather, it also shows some big birch branches, and is finished off with masses of *Luzula sylvatica* (roots and all) and a fragment of withered bracken. Some snowy tufts of down—not very large considering their owner—cling to the sticks and ground adjoining. The two eggs (the almost invariable clutch) are of good size and decidedly rotund. One resembles in colour a very faded Peregrine's egg, the other is streaked with brown and purplish-red on a creamy ground. This gully is clearly a favoured haunt ("den" the keeper call it), since hard-by, both in equally simple spots, are other two old eyries.

A third eyrie, visited the following day, despite its renovation, is eggless, though for all that a pair of Eagles are seen in its vicinity. But then Eagles, like Buzzards, which in many ways they resemble, patch up all their alternative sites annually; like Buzzards, they delight in ornamenting their dwellings with green wood-rush, and foliage, though both traits are most marked with the meaner species. This nest reposes on a huge grassy platform bisecting an otherwise sheer and overhanging outcrop of grey rock about a

hundred feet in height, and its approach necessitates a rope descent, easily accomplished. Most nests, however, can be reached without tackle, and the reason, no doubt, that such simple places are chosen is that, in the main, perpendicular precipices offer few, if any, sites suitable for the immense structure. Yet, for all their size, some eyries, especially those built on sunken ledges, are difficult to see, even if you stand well away from the base of the bastion.

Later in the day we hunt successfully several smallish plantings of sapling firs and birches for a Woodcock's nest, led into so doing by having watched the previous evening a male "roding" above them. With leisurely, flapping flight he flies down the glades and over and around the woods, serenading his mate with a note which, starting with a hoarse croak repeated several times, finishes lamely with a curiously weak, squeaky chirp, thus: — *cork-cork-cork-cheep-cheep-cheep-cheep*. After an hour's search my friend cleverly spots a Woodcock sitting on its nest right at the base of a small sapling fir growing in a tiny clearing in a spinney. Round it grows no vegetation; merely dead leaves carpet the soil, in which a scrape has first been prepared for the nest, which is loosely though plentifully made of withered oak (how fond Woodcocks are of oak leaves for their nests!) and birch leaves, in addition to some cotton-grass in the foundation. It measures 7 in. across by 2½ in.

deep. The other Woodcock is flushed about twenty paces from the sitting one. The eggs might well have been the produce of two different hens, so different are they in shape, since of the four two are curiously elongated, two comparatively round.

Two days later we enjoy a cursory hunt for a Goosander's nest, for though on the early side for a full clutch (April 12th), even in Sutherland this duck—probably sitting a month and often laying nine or ten eggs—frequently hatches out by May 20th. Bird-life seldom seen down south is always a treat, and to-day we have it in plenty—the Goosanders themselves, of course, the drake uttering subdued *kwuks*, as a pair fairly bucket over us; a couple of Black-throated Divers careering high above their breeding-haunt with joyous, though hideous, shrieks of *kark-kark-kark*; plenty of Wigeon on the loch, too; in a fine rock towering above a birch-wood hanging to the water a pair of angry Ravens with young in the eyrie, and a new Hooded Crow's nest in one of the trees: then, on the moorland, Golden Plovers not long returned to the hills, Redshanks, a Greenshank just back from his winter-quarters abroad, and a Peewit's nest with three eggs. Common Gulls, too, are seen (they breed here later); Grouse, of course, in plenty, and a good many Blackgame, of which one cock is parading in front of eight Greyhens on a rock-strewn plateau.

On the 13th—a party of four—we start betimes for another eagle-rock. A stiff, seven-mile moorland walk carries us to a crest facing the lower slopes of a mountain. Now, at last, down hill, still down, into a deep ravine; then a short, but fearfully steep pull up the other side, then down hill again for a couple of miles. Then we take a breather on the summit of the glenside in the opposite face of which, in some giant bluffs, Eagles have bred time out of mind. Yet there is no sign of them, though our presence three hundred yards away would not always be sufficient to drive an Eagle from her nest. It should be, however, for recollect we were in full view of all the known sites, remember, too, that, although Eagles often sit very closely indeed, this generally happens when they have caught no sight of an intruder. In fact, that is the secret of most species which brood closely. Noise they can frequently stand, but not the human presence or eye. Glassing the bluffs, however, and one big one in particular, the keeper through his telescope cleverly detects in an obvious eagle's nest two whitish objects which appear too regular and round for lumps of snow, masses of which, still being unmelted, suggest Christmas in the so-called good old times. Opinions are divided, but the only means of reading the riddle is to cross the glen and climb the crag—if we can. Well, we can, in spite of having hardly any rope with

us. For although the nest (behind an ash struggling for existence on the rock-face) is more than half way down a bluff fully 150 ft. in height, there is only one bad place to negotiate, and that at the very start. Then all is plain sailing, just a stiff slope of heather and wood-rush and a clamber along a long shelf, and here we are at the nest. The keeper was right: those patches were eggs—palpably deserted—all white except for a few dark red spots. Their owner must, of course, have fallen on evil times, poisoned possibly, trapped perhaps, destroyed somehow certainly. Sad to tell, in some districts Eagles are still ruthlessly harried; we hear of one locality where no fewer than nine were killed between an April and a July. All the same a good many still survive; the wonder is any survive at all.

A really stiff four miles now bears us from the glen to the shoulder of that mountain we first came from. Its summit is shrouded in shadowy mist, but the quite sweet song of a Snow-Bunting amply recompenses us for the hidden view, and before, lower down, the alarm-cry of a Ring Ouzel tells us that one of these moorland Blackbirds has already returned to his Highland home for the summer. Just here we are rather too low for Ptarmigan, rarely seen alive below the 2,000 ft. limit.

Descending the far shoulder an Eagle's thin-drawn, squealing yelp shrills out suddenly from

somewhere below us several times. A nest here too? Possibly, since the shepherd shows us a last year's eyrie built in a spot which would shame any species which habitually employs an easy site. A straggling outcrop of rock, nowhere more than 20 ft. in height, breaks the monotony of the lower slopes of the mountain, and on a large grassy slab, only about five feet from level ground and with a step formation leading up to it, an Eagle had elected to nest. Courting robbery if you like. If Eagles will nest in such ridiculous spots, they almost deserve to be plundered. These were of course.

Before examining this spot, however, we had worked the main and altogether higher and steeper escarpment far above. There we found three eyries, two of which were old, the third new; but there were no eggs in it, either then or at any further date, we heard. Perhaps the hen here is now barren, possibly the eggs had already been taken; for most Eagles are sitting by or before April 10th—to day was the 13th. No mischance had befallen the birds either, since both were seen, of which one, alighting clumsily on a grassy slope below the new eyrie, tore up great beakfuls of wood-rush, only to drop them again.

The greater part of the succeeding day (my friend having gone off to explore a haunt of the Grey-Lag Goose) I spent there in searching for a used nest, but the best I could do was to find

another old one, as well as many remains of Ptarmigan and the tail half of a weasel, all relics of the Eagle's forays, also many liberally white-washed boulders and "castings," the whole place testifying to this particular rock as being a favourite resort of the so-called king of birds.

## CHAPTER XII.

### IRISH GOLDEN EAGLES.

AT the present day the Golden Eagle, happily, does more than hold its own in the highlands of Scotland. Would that the Isle of Erin could tell the same tale! Formerly a fairly familiar object there in suitable districts, the species is now reduced to a miserable remnant of, shall we say, ten or a dozen pairs, which inhabit the loneliest and most romantic mountain-ranges of Donegal, Mayo, and just possibly of Galway and Kerry. The day, however, is not far distant when the ornithologist exploring those regions will look in vain for this majestic creature, which must impart an additional interest and animation to any spot, however fair. As a race, the Irish seem in no way proud of their Eagles, and scarce an opportunity or excuse for destroying one is lost.

It is in the co. Mayo that I am familiar with the Golden Eagle, where I have spent days watching its habits. There has been for some few years past a solitary old fellow—deprived of his mate through poison it is to be feared—who, constant to his ancestral domain, frequents a wind-swept mountain, one side of which culminates in

a sea-precipice hard to beat for its awful, forbidding height and stern grandeur. It is no exaggeration to say that—in places—this cliff falls sheer and overhanging for close on a thousand feet to the boiling surge below, while the least fearful parts are a combination of break-neck gradients and minor walls of basalt. There are two ancient eyries here; in such a stupendous steep there may well be more: probably there are. Of the two nests, however, one is utterly impregnable; it could not be stormed with all the tackle in Christendom, being—as it is—some four hundred feet down a fearsomely overlapping section of cliff, about nine hundred feet high. Usually when the Golden Eagle nests in a cliff (for some place their eyries in trees) it selects as a site for its eyrie a large and more or less turf-covered ledge or recess, but this nest is on a small (i.e. for the size of the structure), bare, and but slightly protected ledge, and, viewed from a horn of the bay, it appears to have been abandoned for years, though, for all that, the surviving Eagle makes some sort of pretence at patching up both old homes annually. The other nest, however, about a quarter-mile from it, to which I have been lowered, is in a huge, cavernous recess some four hundred feet down another terrific headland; but the first two hundred and fifty feet can be negotiated without tackle. Outside the cavern is a large, sloping, grass-grown ledge, though

the turf adjoining the base of the bulky nest, the bottom foundations of which are bleached with age, has been utterly destroyed by the droppings of past generations of eaglets. I have seen this solitary Eagle settle on this "pad" and sadly survey his ancient citadel. Poor fellow! What a mockery it must all appear to him. Surely it is sufficient proof how scarce Golden Eagles have become in Ireland that this bird cannot procure a mate? It is interesting to note that a *Golden Eagle's* eyrie on a sea-cliff is an occurrence of decided rarity, since the species normally loves the rocky escarpment forming part of an inland mountain breast, or the equally craggy, towering side of some lonely glen.

This lone Eagle is remarkably confiding. I have often been within appreciable distance of him; several times within the simplest of shots. One afternoon, for instance, while loitering along this bastion of Western Europe I noticed him standing in solitary state, some four hundred yards distant, on a nose-shaped rock, the highest point of a gigantic but broken-up cliff. This latter fact enabled me to bring off a successful stalk; indeed I won to within a few yards of him, when, crouched behind an opportune boulder, I watched him carefully for fully ten minutes. This gave me every facility for noting his plumage, which—perhaps from extreme longevity—was of a peculiar rusty shade, and not dark brown, as is the case with the majority of Golden Eagles. The sun,

coming out at the moment, burnished with its shining rays his frayed and shabby garb, especially the hackle-like feathers of the neck. Then I knew why this Eagle is called "golden." Presently my friend must have fancied something wrong, yet he was by no means startled. Simply expanding his ample wings, he dropped leisurely off the pinnacle and slid over me within fifteen yards, bending down his broad head to survey the disturber of his peace. During flight the terribly powerful, feathered legs are held straight out under the tail, and *not*, as some observers assert, gathered up under the belly.

He now made for the next "cove," and, half closing his wings, shot downwards, described a small circle, then alighted on a "pad" adjoining a big cleft in the cliff. His stay was merely momentary, however, and he swept off to range the mountain above. A little later he was back again, and soared splendidly ere resting on a pinnacle. Leaving this he was rudely mobbed by half a dozen Rock-Doves, which looked mere midgets by comparison with their mighty adversary. The only notice he vouchsafed these petty tormentors was to flick at one with his powerful pinion, a blow which, gentle though it looked, had it taken effect, would indubitably have sent the rash pigeon headlong and dead to the seething cauldron of surf seven hundred feet beneath.

On another occasion this Eagle was sunning himself on a jagged tooth of rock hanging over the abyss, when a passing Herring-Gull had sufficient temerity to stoop close over his head; in fact, the encounter was so close that the Eagle was obliged to "duck." Later on the same morning, however, the tables were turned, when the Eagle, with seemingly slow and laboured, but in reality with rapid and decisive rushes, first this way, then that, pursued some gulls of the same species. But he failed to cut one down.

A Peregrine Falcon, breeding on an outlying Island rock, was wont to annoy this Eagle sorely. One day, as the former winnows his way along the broken coast-line, he descries the latter wheeling indolently far above him. This is too good an opportunity to be lost. With deliciously easy and rapid sweeps the Falcon climbs the air in a fine ringing flight. Higher, and higher still, until he is a mere dot in a cloudless sky; then, and not till then, he hangs directly above the Eagle. A second, and he grows more distinct and wedge-shaped; he is stooping now with a vengeance, and like a descending rocket he hurls himself head downwards at his clumsy foe. He is below the Eagle, he has missed his mark this time, the great bird having shuffled aside at the critical moment. Nothing daunted, however, the Falcon is up again, down again, too, like a flash, and on this occasion he meets with better success, striking the Eagle

in the region of the pinion bone. The wonder is it was not shattered. The two assailants are low enough for me to hear the swish of the Peregrine's rush through space and the sound of the blow on the Eagle's stiff pinions, to see a few small brown feathers from the latter's carpal joint floating aimlessly in the void. Now, at last, is the Falcon content to abandon the fray and sail seawards. This is the only occasion on which I have ever seen a Peregrine actually *strike* an Eagle, though mock skirmishes are of frequent occurrence when the two bandits meet.

Moreover, nearly every bird of any size mobs the Eagle, which, for all his fine presence, is at heart a coward, or seems to be one. A pair of Ravens for instance, one thrusting with his iron bill from below, his fellow attacking strongly from above, can give the royal bird many a bad moment; while Choughs, both singly and in parties, as well as Merlins and Kestrels—and especially the former—find extreme pleasure in such make-believe combats. Then the Eagle may even cry out in alarm or from annoyance. Otherwise, it is a comparatively silent bird. For so large a creature the cry is certainly thin and weak; to me it sounds like the syllable *way-ah* or *wah* repeated several times in fairly quick succession—a real yelping bark in fact.

Another eyrie I know in co. Mayo is more fortunate, in that it possesses a pair of Eagles. All

the same it has been constantly harried, and, some years ago now, the male was ruthlessly shot off the nest, a fact which demonstrates that the cock Golden Eagle sometimes at least participates in the incubation of the eggs. The survivor procured a fresh mate, but the last eggs of which I can glean any definite tidings are the usual couple (a "three" is very rare indeed), newly laid, taken on May 13th, 1898. This is an extraordinary date for *fresh* Eagle's eggs, since early April is unquestionably the normal date for them, while the least exposed eyries constantly contain their complement during the latter half of March. The two eggs in question were both poorly-marked (usually one is of this character, the other being more or less richly patterned with reddish-brown and sometimes lilac-grey), and were presumably a second attempt after the loss of the first clutch, though I believe for a Golden Eagle to lay again in the same year that she is robbed is an event of great rarity. I think this pair are early breeders, and always have eggs by the end of March. Anyhow, I have never yet visited the haunt before April 10th; never yet have I seen eggs in any of the eyries, though I have seen the birds themselves there and a nest which had palpably been robbed.

This, which should be a stronghold of Eagles, is a picturesque spot, and is amongst the broken-up masses of a mountain-side with a northerly aspect. The whole place is a medley of peaks and buttresses.

Here, long, shelving platforms of grass upholster the crags; there, an embroidery of lichen—grey and amber—lends a faint dash of lively colour to the rocks, if you are really close to them. Wood-rush in bristling tufts thrives on its sweating flanks; mosses, ferns, and ivy strive for supremacy on its rugged shoulders. A string of loughs—blue as turquoises—nestles in the amphitheatre below; around them during summer the Sandpiper trips its way as of yore. Apart from that, other bird-life is scarce, even in the breeding-season. A few Meadow-Pipits there are, of course; Twites, too, nest in the heather; the Golden Plover's home I have found here. But these, together with a few Grouse and an occasional Kestrel, about fill the list, if we except two such homely species as the Wren and the Robin, both of which nest in the mountain-side of all places. Of the three Eagles' nests here, two are very old indeed, and one especially is very easy of approach, being on an enormous turf-grown platform near the base of the cliff, and approached by a long, easy-shelving, and broad ledge. The third, however, requires a rope for its inspection, and is in a huge horizontal fissure, so low, at one point particularly, that the Eagle every time it visited its castle must have experienced some ado to force an entrance.

The Eagle in Erin, then, meets with no luck, but even at this eleventh hour, were spirited measures adopted, as they have been so success-

fully in Scotland, there would be every chance of the meagre remnant living to re-propagate their kind in the beautiful regions which, not so long since, knew their majestic forms so well.

## CHAPTER XIII.

### THE ONCE-COMMON RED KITE.

IN reviewing the list of British breeding birds the naturalist sighs for the day when many a now-extinct species graced our shores in goodly numbers. Ruefully he deplores, as nesters, the absence of Bustard, Crane, Black Tern, and Avocet, and the almost-extirpation of many others, notably the majority of the larger birds of prey. Amongst these the Kite\* ranks high; and the circumstances of its banishment are peculiarly sad, since, from being in mediæval ages one of our commonest birds of prey, even a scavenger in the very streets of London, and an object of comment amongst foreigners owing to its confiding habits, it must now be numbered in the first six of our rarest regular British breeding species.

Fine fellow though he be, the Kite may hardly be termed "royal" (as one of its Latin names, *regalis*, implies) from any intrinsic merit. Is he not bully, coward, and thief rolled into one? Surely he is "royal," simply because in bygone eras he was the sport of kings and princes, who were wont with their "hooded" falcons to harry the Kite. These flights—Peregrine versus Kite—

\* *Milvus milvus* (L.)

must have been indescribably engrossing, and, it is said, all three birds (for a "cast" of falcons was usually employed) were often lost to view, but that in the long run the latter succumbed to its relentless foes, which is not to be wondered at, seeing that the Kite is a poor fighter, boasting mean-looking talons, especially for a creature of so fine a presence. Its only chance lay in outflying its murderous assailants. Knowing both birds so well, I have often tried to picture the scene, and, were the Kite not so rare, I would give much to see the mental image reproduced in life.

A short century ago, a late kinsman of mine—the *fidus Achates* of the famous Colonel Thornton—enjoyed some fine "Kiteing" near Alconbury, in Huntingdonshire. Can it be that a pair still linger there? Surely not! Yet on August 23rd, 1904, I had a good view of a Kite—a bird of the year, I thought—in that very district. This Kite must have been a belated specimen from Wales, or possibly a Continental visitor, probably the former, for, in Britain, at any rate, the bird is of the tribe of Ishmael, especially birds of the year.

From about 1825 onward, then, game-preserving served as the chief factor in the abolition of the Kite. All the same, about 1870, there were still some breeding in England. The last authentic nest from the eastern counties hails from Lincolnshire in 1871, while just at this period

there was still a remnant left in the western Midlands, more than a few in Scotland, and a good number in Wales. To Ireland the Kite has always been but a casual migrant, and it is said that it never bred there.

Then the demand for salmon-flies, made from its tail-feathers, combined with more over-zealous "keeping," shortly rang the Kite's death-knell in Scotland, and the same thing happened in the western Midlands, but parts of Wales, at all events up to about 1880, could still muster a fair show. Here again, the petty farmers, purely dependent on their scant freehold and farm produce for a living, naturally failed to regard the Kite as an object of merit, joy, and beauty. They knew full well that, whenever a brood of goslings or ducklings (which the Kite often plucked from the water) caught the lynx eye of roving Kite, their slender incomes would still further be reduced. Consequently, the Kite, even in its last refuges, became scarcer and scarcer. Old birds were shot from the nest, young were shot in it; in fact, no pains were spared to get rid of them, and a friend of mine well remembers a brace of nearly-fledged young Kites tied together and flung down in a field to entice their parents within shot of a keeper concealed in a neighbouring hedge, while, at one farm, close to which a pair were breeding, the tenant, having no gun, in desperation painted his goslings red, in the hope of checking the raids of the Kite.

Things went on like this till somewhere about 1890, when there were perhaps twenty pairs left in south-central Wales, and the outlook was very bad indeed. Seeing, however, that landowners were beginning to wake up, and that some keepers even were refraining from molesting the bird, the Kite might yet have won its way back to comparative plenty. Only—unfortunately, an egg-dealer got wind of them, with the result that the succeeding spring he swept Kite territory, coming away with probably six clutches. This robbery continued apace till 1902, and from one cause or another the Kites appeared to have dwindled to, say, eight couples. It is true that certain bird-lovers had tried to check the looting, but only half-heartedly. Various devices were tried, such as twining barbed wire round the nest-tree and “tipping” the neighbouring farmers: but that was no good, for the snatchers (with no watchmen and dogs to stop them) came by night with ropes and portable ladders, while on other occasions all manner of shifts were employed and succeeded.

Anyhow, no luck attended these kindly endeavours, and meanwhile another pair or so came to grief, till, in 1903, I knew of only four breeding pairs and an unmated bird or two. In fact the end of all things seemed to be at hand. That very year, however, members of the British Ornithologists' Club subscribed liberally, and something was done to protect the shattered

remnant. Still with no avail. To this day it is supposed by many that the only nests in Wales are those watched by the protectionists, but the many are not quite correct, for I know of several pairs which are not watched at all, and it would be on the safe side to number the present breeding stock at ten or a dozen pairs.

Why did the Kite become so rare, even in Wales, where the Buzzard—an equally large and conspicuous bird—still more than keeps up its numbers? One reason, no doubt, is that the latter prefers a more romantic and lonely spot in which to nest, while the Kite, though now driven to frequent equally wild and desolate places, is in reality a bird of cultivated rather than of savage country, and nearly always, to this day, builds its bulky nest in some wood close to a farm or cottage, presumably that it may keep in touch with the chickens and ducklings (which the Buzzard seldom touches), or else, which is more likely, because, being a branch-builder, it necessarily chooses a locality where trees exist. Whatever the cause, the Kite laid itself open to persecution; and of this it received full measure.

Another good reason for its scarcity is that as its numbers diminished, so was a price put on its head. I much doubt, however, if it was ever as plentiful in Wales as the Buzzard.

Fairly recently a good naturalist asked me why the Kite still lingered in Wales, and not—

apparently—in Scotland, where the vast solitudes of the deer-forests (where birds of prey, one and all, are welcomed) would appear eminently suited to its welfare, far more so than the comparatively dwarfed area in Wales which still gives its shelter. The question is easily answered, since it is only of fairly late years that gigantic expanses of moor, formerly given over to Grouse, where carnivorous birds are *never* encouraged, have been turned into deer forests. Moreover, there will always be more Grouse-preserving in Scotland than in Wales; indeed, on the whole, Grouse are scarce in the Principality, in some of the Kite's haunts not existing at all, or at best in widely scattered pairs. Did Wales possess extensive grouse-moors, or were Kite-territory capable of much cultivation, Kite, Buzzard, and Raven would long since have been but a dream. It is possible, of course, that a Kite or two may yet safely harbour in Scotland. If so, the secret is well kept, and rightly so.

The Kite is not really a hill-bird at all; on the contrary, it is a lover of wood and forest. Yet its last refuges are in the "Ultima Thule" of civilization, just where cultivation scrapes acquaintance with the wilds, where man's work joins hands with the savage grandeur of the Cymric uplands. The Kite must now be wooed where those curving streams of molten silver surge through mountain valleys of matchless beauty, whose sides are decked, now with well-thinned, hanging oak

woods, now with beetling, storm-torn crags. It is there that the melancholy mew of the Buzzard challenges the ear incessantly ; there it is that the hoarse bark of the Raven bespeaks the dawn. That is where the Kite still lingers.

It would be folly to specify exact localities, but one may venture to remark that the bird breeds in three of the south-central counties. Even in its brightest days, it appears never to have been abundant in North Wales (why?), though quite recently a pair nested in Merionethshire.

In its general habits the Kite is not unlike the Buzzard, but it is a greater wanderer. In common with many of the birds of prey and the Raven, it has favourite hunting-beats, which it patrols much about the same time every day. These "beats" are principally confined to the edges of the moorland overlooking the valleys, for the Kite, except in really severe weather (when it is often very tame) seldom ventures into the valleys themselves, unless it is with rapid stoop to pounce on some hapless chicken, but, like the Raven, crosses them at a good height. Unlike the Buzzard, however, which, in wet or turbulent weather, often mopes disconsolate on some crag or tree, the Kite even hunts in mist and welting rain: I have watched one so doing in a blinding hurricane. On such occasions it hugs the steep slopes of the hills rather than their summits. In an ordinary way, though, the Kite, when foraging,

keeps just above that sky-line visible to an observer in the vale beneath. It flaps along in leisurely fashion, now with an occasional glide, now with a momentary hover over thicker covert, ever alert for the smallest living object. Now a small rabbit squatting on a grassy ledge of the broken-up cliff catches its crafty eye ; again, a quick swoop carries it suddenly into the midst of a brood of ducklings in the farmyard below ; anon the Grouse " cheeper " or young Plover on the open moor yields its life to the bird's ready talons. In short, scarcely anything in the flesh line comes amiss, only it must, of course, be able to steal upon it unawares and feel capable of mastering it. Tiny leverets, many young rabbits, moles (which it procures largely from the rough meadows encroaching on the sequestered villages), rats, mice, " cheepers " of game-birds, and even the old birds themselves (especially Grouse and Partridges), Plovers (Golden and Green), goslings, chicks, ducklings, carrion, and even frogs, fish, snakes, and beetles, all help to swell its *mênu*. The quarry is always made on the ground ; indeed, with its weak talons, the Kite is incapable of cutting down a bird on the wing : and the meal is devoured, either on the spot, or, if not too heavy, is borne first to the broad limb of some adjacent tree, though in the spring it is frequently brought to the nest, even before the eggs are laid.

Pliny tells us that the Kite taught man the

art of steering. Well may this be, seeing that there is no other bird with such infinite variety of aerial evolutions; not one possessing quite such control of wing: its soaring is a matchless sight. To watch a Kite wind and wind, higher yet and higher, till it often becomes a thin brown line stencilled on a blue background, must ever command the keenest admiration. Its wheeling, too, is inimitable—exquisite and easy; even in its ordinary progression it cleaves the air with powerful but delightfully effortless strokes of its scimitar wings, and that in the teeth of the fiercest gale. Its gliding is reminiscent of some beautifully oiled and rare machine suddenly put in motion. Periodically, too, especially in the spring, a pair sail round one another spirally high in the air, as is a frequent habit of the Buzzard. Sometimes the two species toy in the air together, and I have seen both these birds and the Raven at carrion. In all its varied wingmanship the forked tail plays no mean part. It is almost as good as a third wing, and, being spread to its full, each prong, with cunning twists and turns, helps to entrap the elusive breezes.

If the sharply-cleft tail is seen, a flying Kite, even at a great distance, may instantly be recognised. Otherwise, the flight is very Buzzard-like. The chief distinction is that the Kite's wings are much narrower and longer, besides being more bent at the carpal joints, which suggest rather sharply pointed elbows. In certain lights the flight is

reminiscent of that of some of the larger gulls, while, similarly, a Heron flying towards one may cause momentary confusion.

The plumage, though plain, is pleasing. Above, brown prevails, shading into rufous with paler edgings, while the primaries are black. In different individuals the long tail ranges from orange-brown to brick-red, with a few indistinct bars on the outer webs of the feathers, and the head and throat are greyish-white (in very old hens almost white), more or less streaked with dark brown. The neck-feathers are reminiscent of hackles. Below, tawny red finds a place, the feathers being centred and streaked with brown. The legs, feet, irides, and cere are all yellow; the beak horn-colour; the claws black. Rightly has it been called the "red" Kite, but the *praenomen* "common" should once and for all be dropped, in Britain, at any rate. Of the two sexes, the female is slightly the larger. Birds of the year are lighter in colour, and have not such sharply-cleft tails. Nestlings in the down are whitish on the head and under-parts, buffish above.

Faithful to one mate for life—and Kites probably see forty or fifty years—the Kite patronizes its nest-haunt off and on at all seasons, and always roosts there. A decided sociability, except that no pair will brook another in the same breeding-wood, is evinced at all times (I have seen six together); and in days gone by two coverts

adjoining no doubt harboured each a nest, but it should be noted that a pair seldom hunt in company.

The same haunt then, and sometimes the same nest, is used annually, though quite often a pair have chosen a spot where two suitable woods occur at fairly close quarters, in which event there will be one nest at least in each. If, however, only one wood exists, two or three nests, used alternately, will be found therein. The eyrie not in use is, nevertheless, partially refitted and littered with bones and other refuse, for which, I believe, the male is responsible.

In Cambria, at all events, the Kite breeds rather early. Long ere the oaks have begun to don their summer-finery, the huge stick-nest stands out prominently in some tree near the centre of a wood. Mid-March sometimes sees a new home started, but, in the case of renovating an old structure, nothing is done in real earnest till early in April. A new nest takes a fortnight to complete, an old one a week or less. Both sexes are builders, and the nest is invariably their own work, though not rarely a Crow's or a Buzzard's ancient home is used as a ground-work. In Britain the bird is essentially a branch-builder, but a farmer told me that years ago he once found a nest in rocks, and this may have been true, seeing that in certain districts abroad, notably in north Africa, the species does, we are told, nest on crags.

A wood with a northerly aspect, which has been well cut back, or sparsely planted in the first instance, is almost always selected; and, customarily, it is one in full view of a farm or cottage, or even of the whole village. Not so long since (one notably in 1906), nests could be seen in woodlands backing country seats, and concerning one such instance it was noticeable that the birds did not harry the poultry on that estate, but confined their attention to that on a demesne marching with it. The thinly-planted wood is assuredly chosen because the Kite dislikes catching its ample wings in projecting twigs and branches. This the Buzzard does not seem to dread, though when breeding in a *thick* covert, that bird almost invariably chooses a tree close to the edge.

In Scotland, it seems, the Kite was partial to some fir in which to build, but in Wales oaks have nearly always been in vogue, though occasionally a larch does duty. For a position the nest usually claims a fork where two or three stout branches diverge from the main stem; but sometimes it lies in the crotch of a protruding limb—a site much favoured by the Buzzard. When in a larch, however, it is normally near the summit, or, if in a giant tree, in some prong, should it exist. Rarely it is but ten or a dozen feet up, generally from twenty to forty. It is chiefly remarkable for the assortment of rubbish deposited in it. The main sticks (dead ones of the oak being favourites), though of good

size, are smaller than those the Raven uses, if larger than the Buzzard's. Into this ground-work a great deal of rubbish is worked—moss, lumps of turf, flakes of wool, hair tufts, tussocks of coarse grass (roots and all), and, more rarely, a few fir sprigs. Much of this protrudes through the foundation and sides. Then comes the characteristic lining of mats of sheep's wool (some measuring nearly five inches square), some of which lap over the rim of the nest and generally festoon it: while as a doubtful ornamentation (if for such purpose it be) I have in different nests seen worsted, twine, cord, rope, bits of a halter, leather, calico, flannel, bed-ticking, coconut matting, rags, garters, half a brace, fowls' heads and legs, bones, the pelt of different animals, rabbits' "fleck," and paper of all kinds. Small pieces of white down rubbed from the old Kites cling to the nest and adjacent branches, while, as incubation progresses, a few small feathers, also from the birds, and "castings," as well as relics of prey, litter the base of the tree. A few droppings, too, are noticeable, especially when the eyrie is in an ivied tree.

The "egg-cup"—measuring about a foot across—is remarkably flat: indeed, until the sides of the nest have been raised with more sticks and refuse, as they are almost daily during the whole period of hatching and rearing the young, the eggs are on or even above the level of the rim. The nest also abounds with vermin, and often smells musty. The

eggs frequently repose on, or touch, some specially fancied trophy, as, for instance, a large sheet of paper or a dead kitten, though in time these give way to fresh adornment!

The eggs usually number two or three, a "four" is extremely rare. I once heard of five young, but I hardly know whether to credit the tale. Sometimes a single egg only is laid. They are larger in every way and more elliptical than the eggs of the Buzzard, which in many other respects they resemble. A characteristic type is of a whitish or yellowish-white ground, finely spotted, streaked, and *scratched* pretty evenly over the whole surface with yellowish-brown, dark red and rust-colour, the inferior markings, which are usually scant and scarce, being lilac-grey and purplish. Another type is the colour of skim-milk, richly blotched, smudged, and freckled, chiefly at one end, with reddish-brown, chestnut, and grey: a third is filmed all over with purplish-grey: a fourth is of a dirty dead green, zoned with blood-red and dark brown: while a fifth is spotless. The scratchy markings are almost peculiar to the eggs of the Kite: of the scores of Buzzard's examined by me very few have shown any such proclivity. Eggs of the same clutch are seldom of one type, and one is often larger than the others. The shell is rather rough, coarse, strong and thick. They are laid every third or fourth day, and incubation certainly does not always commence with the first laid. Incubation,

chiefly the work of the female, lasts a month. Because the nest is so flat, the Kite sits very high ; indeed, she looks not a little ungainly when thus occupied.

Stories are on record of Kites attacking those who climbed to their nests, but this I have never known of recent years, though a dog has been struck as it passed beneath the nest-tree.

Somewhat dependent on the openness of the wood, the Kite, especially with the eggs nearly hatching, usually remains brooding till one is within easy gunshot, sometimes till the nest-tree is well-nigh reached ; but from a very thinly planted hill-side I have seen a Kite leave her nest while I was still a hundred yards distant. When leaving the nest the sitter literally drops a yard or more before quickly swinging up and out of the covert, when, often with her mate, both birds circle excitedly above the haunt, seldom within shot, though periodically one—and generally the hen—approaches the intruder with quicker flight than usual, as if to challenge him. The non-sitting bird is normally not far from its busy partner ; he may be in a tree adjacent, or wheeling long and stately far above the haunt.

If permitted, the Kite quickly returns to its eggs : I have known one recommence to sit before I was out of the small wood containing the eyrie, but, normally, the bird awaits your presence right out in the open, before going back. The return

flight is frequently performed by a series of circles, which from being wide and lofty, probably so as to embrace a full view of the covert below, become lower and smaller, till when within a short distance of the nest, the bird slides down on a gentle slant. She will then sometimes go straight on to the eggs, or she may, at first, momentarily alight on a tree hard-by.

In Scotland, we are told, May was the month in which to seek the nest, yet in Wales, the average date for a full "set" of eggs is between April 15th and 25th, sometimes a little later. Rarely are eggs found early in April. The same hen will begin laying annually almost to a day. If the eggs come to grief, a second venture is seldom attempted: if it is, another nest is called into play. In any case only one brood is produced in the course of the year. The Kite will not desert her nest if the egg first laid is removed, though in one case the male, after the brutal butchery of his mate, discontinued incubation; while, in another instance, a pair deserted their eggs owing to wood-cutting.

I know woods shared by Kites and Buzzards for nesting purposes, but this is not usual, chiefly, I imagine, because the latter generally likes an easterly, the former a northerly, aspect. Carrion-Crows, however, are universally present, and these sable devastators lose no opportunity of harassing both birds, which, although of large size and imposing presence, are at heart sadly

wanting in courage: indeed, even Jackdaws bully the Kite and Buzzard, while the Raven, of course, has matters all his own way.

The Kite is not a noisy bird: like the Peregrine, it is—out of the breeding-season—practically mute. It will “mew” from fear when being mobbed by other species, or in anger when disturbed at the nest, occasionally at play, but it never calls so persistently or so often as the Buzzard. The note is a weak, thin, high-pitched squeal, sounding rather as if the breath were being sharply drawn in. It differs from the Buzzard’s normal cry in being higher pitched and more quickly iterated; thus, *whiou—whew, whew, whew, whew whew*. It also utters a shrill, single scream, probably a note of extreme panic. Anyhow, I only associate it with a Kite sore beset by some other bird. I particularly have in mind a troop of Jackdaws which gave a Kite many a bad moment before the latter won into covert.

The Welsh appellations for the Kite (which is often called the Fork-tail or Forky-tail) are *Boda Gwenol*, which means Swallow- (tailed) Buzzard; *Boda Forchog*, which is Forked (tailed) Buzzard, and *Barcud* (pronounced *Barkit*) or *Barcutan*, which presumably implies Barred Kite. In Essex it was formerly called the Crotchet-tailed Puttock, and in the north Glead, from the Saxon *glidan*, to glide.

Now that for some years past success has

attended the efforts of the protectionists in checking the egg-looters, and now that several broods have actually succeeded in flying, there is yet a chance—if stringent measures are still enforced—that the Red Kite, from being on the verge of extinction, may recuperate its shattered forces, once again with its matchless flight and perfect presence to grace many an ancient haunt in the British Isles.

## CHAPTER XIV.

### PEREGRINE FALCONS.

IN most parts of Britain, and not least on the south coast, the Peregrine Falcon\* has wrongly acquired the reputation of surpassing rarity, some people, indeed, holding that the bird is on the verge of extinction. This state of affairs is partly owing to the sequestration of its haunts, and partly, but more so, to the fact that the species does not advertise itself as freely as do many of its congeners. In fact, if not off hunting, or "skylarking" with its mate during the nuptial season, the Peregrine spends much of its leisure on the cliff-face, standing statuesquely on some knob or buttress far up the steep, merely turning its broad and noble head from side to side periodically to take in any smallest moving object within its ken, as it quietly digests its last ill-gotten meal. A Peregrine at rest on a precipice is by no means the conspicuous figure you might imagine. To begin with, even the female is not a remarkably big bird, seldom if ever exceeding nineteen inches in length, while then its pale, barred breast, if facing you, and especially on a chalk cliff, tones in perfectly with the back-

\* *Falco peregrinus* Tunst.

ground, if viewed the other way on, its dull grey back and dusky hood only look like some shadow thrown on the same. Moreover, in some districts, and notably in Sussex, so accustomed have the birds become to beach-combers, prawn-catchers, and the like, that they will frequently remain at their post quite fearlessly and knowingly secure, as you plod along the shingle bed beneath. Nor do they deign to move a muscle beyond those of the head and neck, unless, of course, you shout or clap your hands vigorously, while even then I have known exceptional cases where the creatures refused to budge an inch. Consequently, even a very capable ornithologist, as yet not quite up to these tricks, may well pass along a wide stretch of cliff, walking below (from the top, of course, he could not fail to succeed so long as he kept near the edge and continually hurled rubble over), and that, too, in the breeding-season, without locating more than one eyrie—if that—whereas in reality he might have found half a dozen. Our southern cliffs—I refer to those of Kent and Sussex—being in the main fairly straight, unbroken chains and headlands, that is, not broken up into coves and deep indentations, are best worked from the shore at low tide. Most people seem to think that, if a biggish bird like the Peregrine is frequenting a district, they are bound to see it, and often; and only a long experience will convince them of the fallacy. Personally, I have sojourned for days on down and moorland within

easy touch of cliffs, which I well knew harboured eyries, often without seeing a Peregrine at all. Confiding though our Peregrines are on the south coast owing to comparatively heavy traffic, yet, in regions where human beings and their devices are scarce, the birds are correspondingly wild and shy. "Wild as a hawk" is then an adage well applied to the Peregrine.

Whilst admittedly the Peregrine is not common in the general acceptance of that term, an examination of its range in Britain will show that there is hardly a headland or cliff range of any altitude round our entire coast line, inclusive of the big groups of islands, as well as many a steep-sided, rocky islet, where a pair of these noble birds do not at least attempt to breed annually: while with some few modifications the same may be said for certain inland mountain-ranges in Ireland, Cambria, the Lakes, Yorkshire, and Scotland, where in some areas—notably in Westmorland and parts of south-central Wales to specify—the species has well come to the fore, even of recent years. This is quite an anomaly when we recollect how almost every keeper's hand is turned against the "hunting hawk" on account of its very real depredations amongst "game"; because of which, in many of the Scottish highlands the Peregrine may almost be accounted a rare bird. That it would soon reinstate itself there if allowed, is self-evident from the persistent way in which a favourite site is often

speedily usurped time after time by some wandering pair after each preceding owner has gone the way of most predatory species. To show that the Peregrine is really no uncommon bird, there is no need to travel further than the sea-cliffs of Sussex, where some years I have known of as many as a dozen eyries, while we never boast less than seven or eight annually. No better evidence of the bird's plenty could be adduced, or, if adduced, needed. Indeed, when one considers that the combined frontage of cliff there attains to little more than sixteen miles in all, the figures are little less than startling, since it means that, in those years that there happen to be a dozen eyries, there is on an average a breeding pair to every mile and a third of cliff. No district I know—and I have sojourned in areas of Wales, Ireland, and Scotland, where the bird is justly considered common—or have heard of, can show so many Peregrines to so small a mileage of cliff. This is all the more remarkable when we remember that Sussex is in the main a "preserved" county; bear in mind, too, how bitter is the sportsman against a hawk which, 'tis true (though I say it regretfully), plays fast and loose with his prospects of a heavy bag. In Sussex the Peregrine wins the day, because, in spring and summer at any rate, it confines its raids to the stretches of cliff with the downland reaches at their back, where keepers are fortunately few and far between, and because, quite apart from this

important bearing on the case, this hawk, except when in hot pursuit of a prospective quarry, and sometimes at its eyrie, usually stands for all that is wary. Farmers and others, whose homesteads nestle amidst the folds of the Downs, and to whom pigeons are a joy and a would-be profit, have a fierce vocabulary for the Peregrine: they utterly fail—and naturally—to see in the same light a fact at which the naturalist rejoices, namely, that an area nowhere much more than sixty miles from the Metropolis itself can supply so noble a census of so noble a creature.

The Peregrine then is by far the finest bird we possess. Who can but admire its symmetry of form, who but revel in its superbly cut outline, full of latent vigour and agile strength, as poised disdainfully—often on one leg—on some shelf or pinnacle far up a mighty ocean precipice or majestic mountain side, it surveys its surroundings with keenest of keen brown eyes? Nothing escapes its haughty and penetrating gaze. It looks—as it rightly is—a very lord of the feathered creation. Again, watch with startled admiration its impetuous, death-dealing stoop, as with closed pinions pressed tightly to its sides, it hurls itself headlong—a steel-tinted wedge of solid feathering—at its panic-stricken victim; regard with chastened joy the sometime-tragic *finale* to the pursuit, when the destroyer as it were rebounds from its prey after that murderous mid-air stroke, so as to avoid

probable death, certain disablement, on the ground beneath ; while the destroyed—never to rise again—falls like a stone earthwards—a lifeless, blood-bespattered bunch of feathers. Sometimes, of course—and especially when dealing with comparatively small fry—the slayer “binds to” its quarry in mid-air.

Take a typical instance to be seen sometimes (though not half so often as you would suppose, even where the Peregrine is common), and usually by him who has unlimited leisure. Standing some spring morning on this southern headland to inhale the salt-laden breeze, to contemplate the ceaseless swell of the Channel, a sable cloud of Daws—each silvered nape fairly glinting in the sun—drifts forth from the precipice face cackling excitedly as is their custom. Herring-Gulls, too, visions of lavender-grey and snowy whiteness, soaring high in air head to wind, express their feelings in harsh, restless cries. Higher still, in wide circles, there roams a tiercel Peregrine. A Stock-Dove—one of several—darts along like some grey meteor parallel with the wall of chalk, yet fairly high above and well out over the beach, for it is the ebb of a neap tide, and therefore very low water. You watch him admiringly ; so, too, does the Peregrine, only for different reasons. Swift though the pigeon’s flight it will save him not at all ; be his twists ever so quick, his turns ever so extraordinary, they will reap him little advantage. For

like a thunderbolt the "game-hawk" bears down upon him. There is a splendidly speedy and head-long rush through space, a muffled clap caused by the sudden impact of two fast-moving bodies, a sharp swing up—rebound would be better—on the part of the Peregrine, and the thing is done. A small shower of blue-grey feathers floating in complete abandon in the air alone indicates the approximate site of an every-day seaside tragedy—that is all, so quick has been the happening. The Falcon shoots up and circles easily, now prepared to descend leisurely and reap the fruits of his cruel hind talon, but the Dove crashes straight to the shingle: what was a moment back a creature brimful of life and activity, now simply an inert mass of bloodstained feathers—lacerated—crumpled—dead.

Yet the Peregrine is not so infallible in its methods as people imagine, for I have repeatedly seen hunted birds—Curlews in particular—thwart it deliberately, either by hugging the ground, or by flying low over sea or loch, in which cases the Falcon dare not let itself go for fear of being unable to reverse engines quickly enough to escape disastrous intimacy with land or water. I have, too, quite often seen a Peregrine miss its mark completely, and more than once, even with everything apparently in its favour, especially when that wiliest of flyers—the Peewit—is the intended quarry. Princely murderer though the Peregrine

is, it occasionally turns wanton as well. I have watched first one then another of a "chackling" troop of Daws—a regular right and left with two short, deft stoops—drop lifeless to its relentless lust of killing, while the tyrant vanished over the brow of an adjacent ridge without so much as a glance at its hideous handiwork. Often and often, too, will a Peregrine—especially the female—just "foot" a big bird which has intruded too closely on the sacred confines of its eyrie—a sort of caution to trespassers in fact.

Aptly has the Peregrine been christened "hunting" hawk, since scarce a winged creature comes amiss to it in the way of food, few are the fowls that can foil its fearsome onslaught. On moor and deer-forest its fare mainly consists of Grouse, Ptarmigan (if they occur, this species being wholly confined to the highlands of Scotland), Black-game, ducks, plovers, and their kind; on ocean cliffs, according as they occur, quantities of Rock- and Stock-Doves, together with many sorts of sea-fowl (the larger gulls, however, usually enjoying immunity), Puffins in particular affording it many a dainty repast. I have seen an eyrie on the rough, turfey top of a stack-rock right in the centre of a colony of Puffins, to which a three year old child could have toddled unaided, which was ringed round with a pile of those birds' remains to the height of fully a foot. Innumerable tame pigeons, too, from the outlying cotes, not to

mention "carriers," daily lose the number of their mess owing to the prowess of the Peregrine Falcon. In fact, on the cliffs of Sussex, Kent, and the Isle of Wight, these, in conjunction with Daws, Partridges (many a red-handed foray being, of course, made far inland), and any chance species luckless enough to dare the ogre's path, constitutes its chief diet. In some districts, for instance, Rooks form a favourite item of its *mênu*. Smaller deer, however, are by no means despised. In and around different eyries I have examined the relics of Coots, Moorhens, Rails, Starlings, Finches, Buntings, Wagtails, Cuckoos, and Chats, not to mention beetles, while even the Merlin, Kestrel, Short-eared Owl, Crow, and Chough do not always escape its unwelcome attentions. Occasionally a leveret plucked from the fallow (I have only once known of it personally), a young rabbit gambolling on some broken portion of the cliff, or a rat, go to swell the throng of slain, while rarely a Peregrine, imbued one can only suppose with a spirit sometimes averse to the customary habit of "making a quarry" when the latter is on the wing, turns poultry snatcher as well, for which delinquency it is nearly certain sooner or later to pay the extreme penalty. Sometimes a pair of Peregrines will attack and successfully pull down a Heron.

Occasionally will a Peregrine, as it dashes past, clip a victim off one of the topmost sprays of a tall tree, but normally it adopts quite different tactics.

The first, as has been shown, is where the big hawk sails round or soars fairly high in the air, till a likely quarry—likewise at a fair elevation—passes beneath, when, if hungry, it descends on its victim like a flash, more often than not with pronounced effect ; the second, for the Falcon, as it winnows along, sometimes proceeding by a series of switchback curves, to pursue any bird it may happen to flush, only rising above and stooping at its prey when a favourable opportunity of administering the *coup de grâce* is presented. The blow is always, so I believe, delivered with the foot and presumably by the hind talon, which generally strikes the victim on the wing or back, often ripping a flap of skin clean from the body and shattering ribs and backbone alike. Sometimes, however, the hapless creature is neatly beheaded, as though by a scimitar-edged razor. As has been described, but to glance at momentarily once again, when the quarry is made the hawk shoots up and describes a few leisurely turns before finally coming down to its meal. Then, after a careful scrutiny to find out if the coast is clear, it turns its booty breast upwards, nips its head off and tears greedily at the upturned chest: so that any bird with these defacements found lying on its back on down or mountain unmistakeably bears the label of a hungry Peregrine.

The quarry is not invariably killed outright. I have one specially sad scene vividly painted in my

memory, where an unfortunate Jackdaw, just caught (I think he must have been swept off a pinnacle of the cliff) and partially feathered, encumbered a female Peregrine, disturbed from her feeding-ledge, as she flew seawards. At length the half-gale which she had to face proving too much for her, she dropped her booty, which fluttering strenuously—half nude and frightfully lacerated as it must have been—made the shore fully half a mile distant, only after all to be swept away by the incoming tide.

Great is the uproar on the part of the Falcon's neighbours at the moment when a quarry is made, but once let the victim be sacrificed and peace is restored almost immediately, as though no such horror as a Peregrine existed. Curiously enough, until the actual death-dealing stoop takes place—that is if it happens over the cliffs—the Peregrine's neighbours appear totally unconcerned at its presence. This is an event of daily occurrence in spring and summer, seeing that most colonies of sea-fowl have as their suzerains a pair of lordly Peregrines. Indeed Gulls, Auks, as well as Daws, among others, sit and stand placidly on the cliff-ledges within a few feet of the dread destroyer. At times even, as the tyrant sails above or around its fastness, some species actually venture to make as if to mob it, Herring- and Great Black-backed Gulls being especially daring in this respect. Sometimes, indeed, one of these fine birds (or

several together), will lay itself out to pursue a Falcon. The latter, however, chooses to treat the whole affair as a huge joke, and avoids their clumsy onrushes with ease. At first though, it permits one of its tormentors to overhaul it, till, in fact, the Gull seems as if it will really succeed in buffeting it. Then, however, the hawk makes a sort of smooth forward plunge, half turning on its side the while, but instantly recovering puts on full steam and shoots ahead, leaving its aggressor far, far in the rear.

The flight of the Peregrine is extremely characteristic and one quite its own. Without being exactly graceful, it is nevertheless utterly devoid of all clumsiness, being clean, vigorous, and very purposeful. It is an impetuous winnow varied by straight, bold glides on motionlessly extended wings, in which connexion it should be noticed that the bird, even when flying *with* the wind, often sways gently from side to side. When dashing along a cliff-face the Peregrine—especially the tiercel—will dive curiously from time to time, but the recovery is effected like lightning, and by no means retards the journey. This rapid winnow and glide, then, is the normal flight, and is very characteristic, especially when you get the bird profile on, as it then appears to carry all its weight forward, being indeed wondrously deep-chested. Hence its great strength. At rest, of course, as is common with most of the *raptors*, the chest is

usually sunken, the shoulders rounded. At a long range a flying Peregrine is best distinguished by its quite long and sharply pointed wings and by its comparatively short and rather wedge-shaped tail, as well as by some vague trick of movement, which the experienced *field-ornithologist* recognizes directly, but which is quite impossible to describe on paper. This is a remark which holds good for most species, and one which I have proved over and over again when out with a man who does not profess great ornithological pretensions. For instance, a bird, looking little more than a speck, is seen approaching. You say at once "a so-and-so (whatever it may be) coming." Your friend replies: "How on earth do you know that?" You cannot exactly tell him, but a nearer view of the creature—perhaps through strong glasses—generally convinces him that you were right. Of course no one is infallible—the naturalist who says he is, is hardly truthful—but to the careful observer his infallibility generally extends to momentary errors only. I digress, however.

To return to the Peregrine, at the eyrie and when hunting or flying for sheer pleasure—as birds certainly do on occasions—wonderful aerial evolutions may be witnessed. Now a pair soar grandly, head to wind naturally, on extended and rigid pinion, like two anchors, even in the teeth of the fiercest gale and that too without giving back an inch; now they describe wide, sweeping

circles, some of the turns being rendered in amazingly majestic fashion. Again one—and especially the tiercel—will, as a preliminary, alternately dash along a cliff and circle over the sea, then make off inland a short way only to return almost at once, when it hurls itself just over the brow of the precipice, almost brushing it in fact, and with terrific speed fling down like one possessed till the beach is well nigh reached, where it continues its giddy career low over the shingle and rocks, half closing its wings the while, though all the same flapping them at a great rate. Or else it may proceed in deep switchback curves, flapping its wings vigorously on the ascent of each one, gliding on the descent.

Yet again witness a pair on their aerial honeymoon. A stiff gale is raging this sunny March morn, and the two Peregrines—one behind the other—bent on pleasuring, wing their way—it seems laboriously even to these mighty creatures—full in its face for some distance. Suddenly a turn is made, and down wind they coast like lightning. Half a mile, a mile, is covered in fractional time (the Peregrine seldom travels at a less rate than an express train, while when in pursuit of its prey its speed has been computed at two miles a minute), then up wind once again only to repeat the performance. At other times the Falcon with fine ringing flight is careering round high above the cliffs, when the tiercel streaks out from a buttress

far below, mounts above her and joins in the giddy race. Amorously inclined he keeps stooping at her playfully. But she—just as a collision seems inevitable—avoids his attentions by describing a sideways somersault, the whole exhibition being accomplished at top speed. Anon they will toy with and caress one another with their bills in mid-air, or “tumble” sportively in a fashion which somewhat recalls the aerial frolics of the Raven. The control of wing exhibited by a Peregrine is certainly amazing. I remember once sitting with Mr. Witherington in the rocky bed of a Yorkshire “force,” in one of the steep sides of which a pair of Peregrines breed yearly, though at the time it was a good month too early for eggs, but of course the birds were frequenting the site. We were well concealed, and the tiercel, returning from some moorland foray and failing to see us for the moment, shot up the narrow gorge between the black lines of crag. His failure to detect us was very fleeting. When he did, without slackening speed in the least, he swerved up almost perpendicularly, rising at this tangent for quite sixty feet, until in fact he was quite clear of the ravine; and then he was out of sight like a flash.

It is worth remarking that a flying Peregrine practically always, and this applies to all hawks and owls, except when “stooping” at their prey, to the waders, and indeed to most species bigger than a Mistle-Thrush, excepting the *corvidae* and

doves (once the latter have got into their swing), carries its legs straight out under the tail, occasionally one or both being dropped limply, as if broken, and so for the nonce useless.

The Peregrine pairs for life, and except that the couple seldom hunt in company, the two are frequently together, especially in the region of the cliffs, the vicinity of the eyrie being resorted to the calendar through, the birds roosting by it every night. Indeed, towards sundown is always a time for a sure find, when before finally retiring to roost—and how bitter their couch, often on some totally exposed pinnacle, during the blustering or frost-gripped nights of winter—a meal is usually indulged in. During winter, Peregrines—and particularly immigrants and brown, immature home-bred birds—this species taking nearly two years to acquire fully adult grey plumage and not breeding until such is attained—are of a decidedly roving disposition, when it is quite usual to encounter one, or a pair, passing over and even taking up temporary residence in wooded realms. Wood-pigeons then supply them largely and liberally with their daily bread, and also wild-fowl, if, as is often the case, their time-being resort is adjacent to a sheet of water.

In the hey-day of spring and summer, however, the breeding stock (what becomes of the non-breeding one-year-olds then, is a puzzle) confine themselves (in scattered pairs, of course, each

eyrie, even where the bird is common, seldom being less than two miles apart, though I have on several occasions known of two tenanted sites less than a quarter of a mile distant, especially on the south coast) almost exclusively to the sea-cliffs and mountain-ranges they love so well, with the wide unbroken stretches of barren down and desolate moorland as their background. Here nature's workings and hushed, inarticulate voices have matters to themselves; here, save for the ever-attentive shepherd and cattle-herd, the vagrant nature-lover or chance wanderer, the soil is well-nigh virgin. In fact, most Peregrine's haunts are amongst the wildest and most savagely-romantic scenery to be found in our Islands. You may follow the bird to the frowning grandeur of the Highland glen, from there to the notorious beauty of the "Lakes," again to the loveliness of the Welsh "cwm" or Irish mountain, from there again along the majestic contours of the chains and bluffs of cliff-land, which lend so much additional charm to so many of our sea-boards. The Peregrine chiefly loves bare, treeless country such as is only found to perfection on the misty ruggedness of the moors and among the more gentle undulations of the downs. There truly is it "monarch of all it surveys," if we except that destroyer of all wild-life—man.

Much as it loves solitude and solitary places, the Peregrine evinces little real dread of man, and fre-

quently chooses as a site for its eyrie some cove or headland close to a coastguard station, a seeming peculiarity which I ascribe to the fact that these dwellings are mainly situate in or near gaps or hollows. These in turn attract the hordes of arriving and departing migratory species, loving, as they do, to follow the course of a valley, however insignificant. From these tired battalions the murderous Falcons, having seized their coign of vantage with no mean cunning, reap many an easy and ill-gotten meal. I am familiar, too, with certain mountain-ranges in Cambria and elsewhere which, lying in the direct route selected by Carrier-Pigeons plying a peaceful avocation between their respective points, provide a generous board and lodging for different pairs of Peregrines. I have, also, on several occasions watched a Peregrine flapping leisurely along above the roofs of seaside towns situate not far from cliffs; obviously on the prowl for pigeons.

With one or two solitary exceptions, as for instance the late eyrie on Salisbury Cathedral, the home of the Peregrine, in Britain at all events, must be sought on a cliff, and often—only of course by chance, since birds never, as sentimentalists will have you believe, intentionally choose a site which is difficult to reach—in the least accessible part of it, a spot which is overhung, sometimes to a fearsome degree. Although on the whole the bird prefers a lofty escarpment, I am none the less

intimate with some pairs which are well content with quite tame heights: I have, for example, seen an eyrie in a 50 ft. cliff. As a matter of fact, from its being sheer, a rope was required for this "nest," and indeed even in broken up cliffs the bird has a happy knack of selecting a site which to reach necessitates tackle. All the same, to a good many eyries, especially those on mountain-cliffs, I have climbed without so much as a yard of rope.

One of three positions—*usually* in the upper half or upper third of the precipice, doubtless because of the commanding position so established—is pitched upon, (1) a broadish ledge, buttress or shelf, (2) a big hole, wide slit or embrasure, and (3) a basin-like formation lying between some outstanding pillar or pinnacle and the main cliff. Of over seventy eyries examined between 1904 and 1912 inclusive, forty-two have been in the second-named position, but only three in the last. Our Sussex Peregrines, in fact, like nothing so well for a breeding-site as one of those large, soil-bottomed holes or small caverns—measuring roughly from two to three cubic feet, which, dotted about here and there in, and generally in the upper third of, the cliff, form a special feature of certain portions of our chalk bastions. It is interesting to note that all these holes have a floor of soil (sometimes of the normal brown, sometimes, and no doubt from an admixture of chalk, of the colour

of cigar ash), whereas the ledges, of course, merely show a crumbling surface of chalk, which, after the Falcons have furrowed about in it, becomes quite dusty. How these holes originated is uncertain. Some say that that section of the cliff directly above them was once sloping or very broken and that rabbits, still found here and there in such suitable spots, especially where the summit of the cliff is sandy, have thus been responsible for them. This, I know, applies to one or two eyries, but on the other hand the majority of these holes are much too far down the steep to warrant any such assumption. My own idea is that at some remote epoch a huge flint (lines of flints are great features of chalk cliffs) became dislodged from the chalky stratum, so leaving its former bed to the mercies of the elements, which in the course of centuries have eaten into and hollowed out the friable material.

It depends a good deal on available sites, but not infrequently—and especially in Sussex—I have seen eyries only a few feet (sometimes but three or four feet) down the steep. One specially curious site was—the ledge having now broken away—on a long, broad shelf, only fifteen feet down the cliff, which culminated in the gap down which the rubble from the neighbouring village is shot once a week; and the eggs were wont to be deposited but a very few feet from the “shoot” itself. On this ledge could be seen, periodically, decrepit tins and cans,

rags, cinders, wood, corks, broken glass and china, orange rind, banana skins, potato and apple peelings, and paper, while in 1905, in the eyrie itself, and almost touching the eggs, lay an oblong strip of cardboard. This was asking for trouble.

Nest there is none, the Peregrine *never*, in spite of assertions to the contrary, obviously made by naturalists who were no cragsmen, makes a nest, though sometimes the eggs are laid in the one-time habitation of a Raven, rarely in that of a Buzzard or Crow, or in a Jackdaw's home in a *big* hole. I have seen this last-mentioned species' nest used by Peregrines on several occasions, though usually all the woolly lining has been entirely removed, and I remember one such which, for all its wide entrance, was so restricted that it was clear that the Peregrines must have remained in a crouching posture once they were within, even when not brooding. Such a position is, however, most unusual.

The usual receptacle for the handsome, thick-shelled eggs, is a scratching from eight inches to a foot across and from  $\frac{3}{4}$  in. to 3 in. or 4 in. deep (according to the nature of the soil, the shallowest usually being those on chalk), in the earthen floor of the selected ledge or chamber. If the soil is not too thick and dusty—I have once or twice seen eggs in such a very dusty hole that all semblance to a scrape was lost—the furrowing of the bird's

great talons is plainly visible. On a well-grassed ledge (the Peregrine is not particular as to the site being bare, though the eggs are never laid on rock), they are often unable, or do not trouble, to remove the herbage; consequently, I have seen clutches reposing on at least a partially green bed, or on a yellowish one, should they be laid on cotton-grass or wood-rush. In one eyrie I saw in Ireland there was such a thick layer of cotton-grass under the four eggs (all of which touched, curiously enough; usually they do not, on which point I shall have a word or two to say presently), that no soil showed at all, a state of affairs usually only noticeable (as here) in a brand new eyrie, since the old favourites, being much soiled, burnt, and pressed by the decaying remnants of prey, and the droppings and weight of the eyasses, lose in consequence all their vegetation, and from long use, combined with the gradual pulverization of the ancient bones of the victims, assume in time a well-worn, dusty appearance.

Even with fresh eggs a few feathers and perhaps a bone or so from different victims may be found actually *in* the eyrie (of course when the young are hatched the place is smothered with them), which sometimes smells atrociously, especially when a covered site is used; but the Peregrine at all events seems to shed—and most probably because there is no nest proper for them to cling to—few feathers and little down (which

is white), which its congeners do, sometimes to no small extent (but of course through friction), during the period of laying and incubation. Although a pellet or so is occasionally cast in the eyrie by the old Falcons, no layer of them is ever seen under the eggs, as is the customary habit of the Kestrel, once its incubation has fairly started.

When on a longish ledge the eyrie is generally placed in about the middle of its broadest part ; sometimes, however, the shelf selected is only just a size larger than the eyrie itself, while occasionally it is so insignificant that the scrape for the eggs has perforce to be considerably smaller than its wont. Moreover, a very casual Falcon, temporarily bereft of all common sense, will actually lay on such a sloping platform that one or more of its eggs have rolled off ; sometimes, too, even in a normal eyrie, the bird will kick or scrape an egg out of the site. I remember one such instance where the shelf selected by a pair was of an extremely rough character, being littered and encumbered with some big and half-detached lumps of chalk. In their commendable zeal in removing these blocks the first egg was knocked out of the eyrie, and I found it reposing in a chink of some debris to one side of the ledge, only a foot or so lower down the cliff. Curiously enough, it was not even dented, and at the time I found it the Peregrine was complacently sitting on the empty eyrie—as the species often

will, like some broody hen, long before an egg is laid.

When deposited in a hole the eggs generally lie rather less than half way in, and since most of the chambers used seldom penetrate the cliff more than a yard, and usually not so much, the eggs can be examined with ease. Only, of course, you must get down to them first. Mr. Smythe, however, tells me of one eyrie in which the eggs were right at the back of a "den" fully six feet in length, where they were utterly beyond reach except through the medium of a long, crooked stick.

Several recognized feeding-posts are situate around the eyrie, as well as further along the cliff and on the ground above it, occasionally to the extent of half a mile, sometimes indeed the whole place is a veritable golgotha and "goose-green"; the eyrie itself, if large enough, and particularly when there are young in it, often constitutes one such "messaging" table.

Sometimes—after a thorough spring-clean—the same eyrie is used for several years in succession; yet, usually speaking perhaps (and this holds good quite irrespective of whether the bird was plundered the previous season), each pair possesses from two to six alternative sites, which are patronized in turn. These may be close together, or, on the contrary, some little way apart; sometimes, indeed, two sites are distant a mile or

more, though on a sea-cliff this contingency depends largely on the position of the next eyrie (belonging to other two pairs) on either side of it. On a mountain precipice, of course, things are different; the same face is seldom, I should say, and never in my own experience, of sufficient length to harbour more than one pair of Falcons, though, naturally, in a long rocky valley the occasion may well arise.

Although individual pairs are prone to use the same site annually, even in the face of persistent robbery, they seldom indeed lay a second "set" of eggs in that eyrie from which, earlier in the season, the first clutch has been removed. They then almost without exception select a fresh nursery. Although some Falcons patiently submit to their eggs being taken one by one as they are laid, others resent such an outrage after one or two, say, have been snatched in this manner, by shifting to new quarters and finishing the clutch there.

The Peregrine lays from two to four eggs, usually three or four. The latter is commonly found in the south of England, as well as in the west and from there to Cambria and the Green Isle. Further north, however, a "three" is perhaps most general, and in any district a mountain Peregrine, as opposed to a sea-cliff bird, is liable to produce a triplet instead of a quartet. Some ornithologists deny that genuine "twos" exist,

maintaining that one or two have met with some mishap. I do not; though where but one incubated egg or young bird is found I strongly suspect foul play or accident, unless of course it were, as well might be, the produce of a very old hen. That reminds me that here and there one meets with a presumably barren female, who proves a perfect scourge to a chain of cliff which hitherto has always boasted an eyrie. Not only will she refuse to mate with any chance bachelor or widowed tiercel which may come her way, but also, and far worse, does she fiercely drive off a pair prospecting for a home. Mr. Philip Gough gave me a capital illustration of this peculiarity, but luckily, after a deal of time and trouble, he shot the delinquent, and now a pair reign supreme on his cliffs once more.

A Peregrine which lays four eggs not only usually produces the same number annually, but is also apt to do likewise for a second attempt, on losing her original clutch. *Very occasionally indeed*, should number two court misfortune, a third laying is produced, but in such rare instances the eggs are practically always infertile. "Fives" and even "sixes" I have *read of*, but in these I place no faith whatever, though I do know of one well authenticated case where five eggs were taken from the same eyrie at *intervals*. The facts are these. A friend of mine took three eggs—it was a second attempt, too—from a certain eyrie about

April 27th, while four or five days later a friend of his procured other two from the same hole. Now, since the Peregrine never makes up its "clutch" to the correct number after losing one or more of the complement (indeed very few species do), I am disposed to regard this case as a genuine "five." Of course, one has heard and known of instances where this year's eggs reposed only a matter of inches from some addled specimens of the previous spring. Mr. Carroll tells me of a case where a friend of his on going to take an eyrie rather late in April, found on the ledge two fresh "sets" of eggs of four each. What had happened was, of course, this: early in the month the original female—shot just after she had completed her laying—had deposited one "four," whereupon her bereaved mate had speedily taken unto himself "number two," who promptly laid four more, and moreover selected a spot for her belongings on the selfsame shelf. What a rich haul!

This procuring of a fresh mate brings me to the issue—and a remarkably interesting issue it is too—of how rapidly a bereaved bird of prey will acquire a fresh wife or husband, as the case may be, sometimes in the space of a few hours, and sometimes, indeed, more than once during at all events the early part of the breeding-season. For example, in less than a month (March) I have known a female Peregrine get three husbands one after the other, just as they came to grief. The

puzzle to me is where all these unmated birds come from, how does the survivor at any given eyrie know where to look for them? For the occurrence is too common to warrant any element of chance. Another interesting point is the usual quickness with which a vacant and obviously recognized site is appropriated. Where would the appropriators have bred had the site not been free, and had there been no more "availables" in the neighbourhood? "Gone elsewhere," you would say. Just think a moment, and you will remember that, once a pair of birds (of any sort) have fixed their fancy on a neighbourhood, it takes more than a "filled vacancy" to drive them away. Here we have, I believe, the reason of sometimes finding two pairs of such a segregated species as the Peregrine breeding in—for them—really close quarters. I have already mentioned that I have on several occasions known of two tenanted eyries within, roughly, a quarter of a mile.

Save by the merest chance (as, for instance, when the eggs are laid in a scraping in a *thick* bed of cotton-grass), the eggs never touch one another in the eyrie, each one lying from half an inch to two inches, or—occasionally—even more, from its fellow, the entire clutch therefore, according as to whether there are three or four eggs, being arranged in the form of an irregular triangle or rough square, each egg forming a point to connect each imaginary line. On those

quite rare occasions where two eggs of a "set" have been in contact, I am positive that it has always been the result of the sitting bird having kicked them against one another in her frantic hurry to be gone when *suddenly* disturbed. Anyhow, I have seen the thing happen when an exposed eyrie has been fully commanded from above. This curious fact of the eggs never touching—except accidentally—must surely owe its origin to some formation of the Peregrine's underparts. Certainly there is no chance about it, not only by reason of the bird making a shallow "cup"—though not so shallow as to prevent their all lying together—for the reception of its eggs, but also because I have examined so many "sets" *in situ*, and because—best "because" of all—I have even troubled to descend to eyries in the morning and place all the eggs touching, only to find a few hours later that their owner had just as surely separated them. No other bird I know of lays its eggs apart intentionally.

Moreover, the Peregrine incubates in a decidedly curious fashion. Instead of keeping the head up and the neck curved, it extends the latter almost in a line with the body; indeed it must, I think, be actually resting on the ground, while the head is pointed slightly upwards, though occasionally I have seen it tucked down beneath the breast, the beak then almost, if not quite, touching the soil. The wings are either somewhat

raised, the pinion part being, however, actually in contact with the ledge, and deflected outwards ; or else they are neatly folded across the back, the primaries of each one crossing. The tail is compressed into a clean wedge.

The eggs are very beautiful objects, and include every variety of the Kestrel's. One type is creamy-red in ground, suffused with rich orange-brown and purplish-red; another is yellowish-brown, red roan, or leather-colour, with darker mottlings of the same tint ; while a third is almost uniform brick- or orange-red. A fourth is creamy-white, sparingly freckled with rust-colour, or splashed, clouded, and blotched with red ; and a fifth, brownish-red, mottled with a darker shade, and finely sprinkled with innumerable tiny dots almost black in their intensity ; while a rare type is heavily suffused all over with very dark brown. On some specimens dark, heavy blots of superimposed colouring are noticeable ; or curious white patches of a chalky appearance. Eggs identical in size and coloration in the same "set" are rare, but the same hen produces a very similar type year after year. As a whole, south coast eggs are bright, finely-coloured specimens, the pink or red brick-dust type being distinctly prevalent, but as contrasted with eggs from Ireland, Wales, and the North they are in the main decidedly small, as indeed are the birds themselves : moreover, our southern Peregrines are seldom of the

## 244 FIELD-STUDIES OF RARER BIRDS

white-chested form found elsewhere, being of a dirty-grey there instead.

The eggs are deposited at intervals of two, rarely three, and very rarely four, days, while both sexes—though the female particularly—participate in incubation, which lasts twenty-eight days exactly. Only rarely does brooding truly start with the first egg or two dropped, although, as soon as the first even has been laid, it is of general occurrence for one of the Peregrines to stand sentinel on the edge of the eyrie.\*

The young are white, fluffy, very pink-skinned fellows when in the downy state, and take nearly six weeks to acquire full feathering, remaining in their soiled birthplace till such is acquired. Even after this they remain with their assiduous parents for quite another month, when they are driven off to fend for themselves.

Single-brooded, if the first clutch of eggs is taken, a second is generally, but not universally, laid, after an interval of between three and four weeks, that is, the clutch will be completed by then. On the south coast (including Dorset, Devon, and Cornwall), I have known of full

\* The hatching-period of any Peregrine's egg is twenty-eight days: for although one of the birds often covers, or half covers, the first and succeeding eggs laid, it seldom sits for a sufficient length of time at a stretch to "turn" them. Naturally, however, when the occasion does arise that incubation *really* commences with any number of eggs short of the full clutch, a few days longer must be allowed for the hatching of one or some of the eggs. As to the number of the "few days," that, of course, will depend entirely on as to when exactly real "sitting" started.

clutches late in March, though April 7th is the best average date. This date, too, is occasionally safe for Welsh and Irish birds, though far more usually from April 12th to 20th constitutes the normal laying-period of those individuals, as well as—and of course—their brethren in more northerly latitudes: Lakeland, Scotland and its outlying isles. Usually individual hens deposit their first egg on almost precisely the same date year by year.

Hole-breeders are, naturally, closer sitters than those whose eyries are on ledges. The former, indeed—and especially at certain stages of incubation—are sometimes induced to quit with difficulty, even by means of repeated shouting, vigorous hand-clapping, or several shots from a revolver. I have, too, seen continued showers of rubble dropped past a hole before the brooding Falcon inside could be persuaded to vacate her post. Once—but it is only fair to add that it was a peculiarly atrocious day—after having utterly failed to dislodge a sitting Peregrine from her eyrie in a deep embrasure in a certain precipice, I roped down, only to have the great bird flutter out under my very feet. Such instances are, however, very exceptional, and generally only occur when the sentinel bird is off duty. On several occasions on the south coast I have watched a Peregrine, flushed from eggs, revisit its eyrie with the guide rope swaying right over and in front of the latter.

When flushed from the eyrie individual pairs behave very differently. Frequently the tiercel is standing on a ledge not far from the brooding Falcon, and on being disturbed he shoots out from the cliff, sometimes screaming lustily, though it is interesting to note that not only are south coast tiercels mainly quiet, easy-going birds, but that the Falcons also are apt to be more or less voiceless during an invasion. Once the tiercel is out a few good claps or a shot generally arouse the Falcon, who dashes from her eyrie to join him, taking up his plaint in a somewhat different and even more raucous key ; and though both birds are sufficiently bold, especially when they have young, they seldom venture within gun-shot. Sometimes the flushed bird, especially if its mate is an absentee—hangs head to wind at a good height and never utters a sound while I have stormed her citadel, and quite often the absentee fails to put in an appearance at all, or he may return only to disappear after a short interval ; or again, even if on the spot in the first instance, he may elect to streak away at once with whining remonstrances. I have noticed this trait particularly with mountain Peregrines. Very occasionally the “sitter,” after being put out from eggs, will deliberately dash off clean out of sight, not to return till danger is passed. All the same, if one may claim any definite rule in the matter, most Peregrines, when disturbed from their eyrie, winnow up and down along the cliff (some-

times settling briefly on some pinnacle or ledge) with strikingly rapid flight, ever and anon making wide détours out over the sea or round the valley as the case may be: and the female, at any rate, is prone to scream lustily from time to time, some specimens, indeed, being remarkably noisy.

The Peregrine's scream is quite unmistakable. It is a wild, piercing, angry cry, resembling, as I think, a compromise between the quack of a duck and the clucking of an aggressively harsh-throated hen, and sounding like the syllable *kwark* oftentimes, loudly and rapidly repeated. The tiercel's contribution is rather different, and suggests the word *krark*. Besides this the Peregrine possesses other three cries:\* one, which often preludes the above scream, is a long-drawn, whining *kee-ark*; the second, a short, sharp *kek*, rarely heard; and the third, a low, iterated "chittering" or squeaking sound (a cry which with modifications is used by young Falcons while still eyasses), which somewhat resembles one call of the Kestrel, thus, *hek-herrek-kerrech*. All these cries are usually, but by no means invariably, uttered when the bird is flying. Out of the breeding-season the Peregrine is practically mute, though I have repeatedly heard the normal scream a month before an egg has been laid. The earliest personal record I possess is February 26th, the latest October 26th.

\* On occasions, a brisk cry sounding like *quach-ek*, is uttered.

From below it is a glorious sight to watch a Peregrine leave her eyrie. She launches or flings herself out with an upward trend of the body, then giving a few lightning-like wing beats before getting into her swing ; but when roused from above she often literally flutters off with a downward inclination, looking momentarily, for a bird of such imposing appearance and noted control of movement, quite awkward and deranged. The return to the eyrie—and on the south coast at any rate, no doubt because the birds are used to the sight of human beings, so long as the observer is on the beach the Peregrine shows little reluctance about revisiting it—is often accomplished in splendid fashion. Instead of flying straight up to it, as is sometimes the case, the noble creature first mounts high in the heavens and describes a few circles, in the middle of each of which she passes down and close past the eyrie, often almost brushing the cliff with her wing. Then aloft once again, before diving with tightly-shut pinions, as if on an inclined plane, into her retreat. Only, just before the haven is reached are the powerful wings unfurled and quickly flapped, only then are outstretched the muscular yellow legs, and she alights on the edge of the eyrie with her compact form, so it seems, thrown right back, though no impression of lost balance is conveyed by the action. Then often indeed will she stand for an appreciable interval over her eggs before resettling on them.

Sometimes, too, after she has settled down, the male will fly into the eyrie and stand close beside her.

The Peregrine is a pugnacious fellow in that it resents the propinquity (especially in the breeding-season) of other birds worthy of its steel. The Raven, sometimes found nesting really close to its eyrie (in spite of many assertions to the contrary), it detests in particular, and there is some evidence to show that in a comparatively small rock or gorge Ravens have been driven from their ancient retreat by a pair of Falcons in search of quarters. When the Raven is attacked—always in mid-air, of course—it turns over on its back and thrusts upwards with its huge bill to ward off the deadly stoops of its foe, while the moment it can it seeks a refuge on the rocks. Its refuge, however, is only temporary, for it has to be about and doing, and this guerilla warfare continues day after day, all day long at intervals, right through the breeding-season. Occasionally only is a Raven actually struck: this has been when it was not quick enough in its “turn over,” for my lord Peregrine, fearless though he be, likes not the prospect of impaling himself on that iron bill; his blow, to be effective from his point of view, must be delivered on the back. I have never known a Raven to be actually struck down: at the worst he sustains a severe shock and the loss of a few feathers. The Eagle is

another honoured foe: he, too, bows to his assailant's superior prowess and agility. Sometimes "thieves fall out." I once witnessed a fight in grim earnest between the Falcon of an eyrie I was visiting and a stranger tiercel. The former, looking like an animated anchor of live steel, leapt from her eyrie and sweeping high above the latter, himself at a goodly altitude, bore down on him right viciously. To receive and, as he hoped, to baffle this determined onslaught, he turned over on his back. All the same the Falcon grappled with him, and locked in this deadly embrace the two brigands fell like a stone through space for fully a hundred feet or more. Then with a mighty effort the tiercel disengaged and made off hot foot, now pursued by the virago's mate, who had just got into the picture. The chase continued for some distance inland, though the victorious Falcon, feeling satisfied with what she had already done, left the fray chiefly to her husband. They never caught him, and both shortly returned to see what had happened in their absence.

As a rule, no warier bird exists than the "hunting hawk," but on one occasion—a red-letter day—knowing a recognised "stand" only four feet down a cliff, I leant over cautiously and for ten engrossing minutes watched a female Peregrine at these very close quarters before she looked up; while at another time, only the ledge

was a little further off, I dropped several small pieces of chalk on to a tiercel's broad back before he perceived the gravity—to him—of what was to me a laughable situation.

## CHAPTER XV.

### THE HABITS OF THE HOBBY.

THE Hobby\* can only be regarded as a rare and very local summer-visitor to Great Britain: yet of comparatively recent years it has extended its breeding-range west to Shropshire and Wales; while a census would certainly show that a few pairs nest annually in all our southern, midland, and western counties. Indeed, I know parts of our southern counties where the bird is quite common: I have seen two pairs in the air together at one spot, and that, too, in June. Northamptonshire is, however, the probable head-quarters of the species. North of Yorkshire, and in Ireland especially, it is a bird seldom met with. That it breeds within our limits far more often than is suspected, there is little or no doubt. The only wonder is that pairs are not more often met with in wooded districts. On the other hand, a dearth of Crows and Magpies in many places might account for the bird's absence, since the Hobby, instead of building a nest for itself, prefers to lay its eggs in the deserted house of some other bird—and pre-

\* *Falco subbuteo* (L.)

ferably in that of a Carrion-Crow. Naturally, however, where Crows and "Pies" are absent, recourse may be had to the abandoned abode of Heron, Ring-Dove or Sparrow-Hawk, or even to the "drey" of a squirrel. The Weald of Sussex affords a capital illustration of the Hobby's scarcity, in an apparently suitable area, for no apparent reason, since that part of the county is uncommonly well-wooded, much of the forest region is remarkably secluded, while, although in the true forest land Crows and Magpies are extremely rare, Sparrow-Hawks and Ring-Doves are on the other hand abundant and squirrels are fairly plentiful.

I am confident that the Hobby is badly overlooked by most classes, not even excepting many naturalists and keepers who, after all, stand the best chance of coping with matters ornithological. It is true that the latter in June and July—when the Hobby is breeding—have all their work cut out for them in the pheasant-rearing fields, and merely take stock and toll of those hawks—practically only the Sparrow-Hawk with an occasional delinquent Kestrel—which visit the coops with intent nefarious. This the Hobby seldom if ever does. Moreover, being absent in the winter, as well as a late breeder, the Hobby escapes the sportsman's gun during much of the shooting-season, and the misplaced and bloodthirsty zeal of the keeper who looks for hawks' eggs during May,

and who finds broods of Kestrel and Sparrow-Hawk in June and July, attracted to them solely by the droppings and castings at the base of the nest-tree, and by the querulous "chitterings" of the nestlings up above. From which combined causes the Hobby should live long and prosper. Doubtless the majority would do so, only, unfortunately, the bird risks its safety by its love of hunting in the open and by its remarkable tameness. No British hawk normally permits of so near an approach as the Hobby. Let me cite just two cases, both of which ended disastrously for the bird. On July 4th, 1907, a keeper of my acquaintance espied a hawk (which turned out to be a fine male Hobby) standing on the dead limb of an ivied oak at one corner of the "sacred-birds'" field. He proceeded to stalk it, which the foolish bird allowed him to do despite the fact that from the lie of the ground he was forced to stumble along inside a double hedgerow before finally getting within shot. The same sort of thing—only it was very much stranger—happened to this man's brother. One day in October, 1903, he was out getting a pheasant or two. Just as he had flushed one from a hedge-bottom, he noticed a hawk fly into a tree not far away. Not only did he bag the "long-tail," but directly after that strolled towards the spot, where the hawk still remained unconcernedly despite the report, and dropped what proved to be a Hobby.

The Hobby is a thorough member of the woodlands ; it loves a forest-life 'midst the old, gnarled oaks, and smooth-stemmed beeches ; it revels in the lusty growth of the Scots fir. In some districts it is said to delight in oak woods exclusively ; yet in several districts I know it exhibits no such partiality, but is well content with the unbroken solitudes of the fir-forests. The spot it likes best for summer-quarters (I have known occasional pairs well content with a plantation, a clump, or even a thick line of trees) is the margin of a forest or the edge of a big wood bordering some open heath or common, meadows or downs, whence it may readily view its prospective quarries and sally forth to chase them. Often for the best part of the day is the Hobby a hermit, since, usually until about 4 p.m.—and punctuality is not the bird's least virtue—it courts seclusion in the shade of the trees, standing inert yet alert, like some choicely carved image (though with its plumage fluffed out and standing extra low on its perch I have seen it look ungainly) on the limb of a forest giant, its keen hazel eyes taking in every detail of its immediate surroundings.

Just when the intense heat of the summer noon has started to wane is the time for it to shake aside all apathy and sloth, when, with expressive cries of joy, it literally leaps from its seclusion and speeds off to its favourite feeding-grounds. The same foraging-ground is frequented daily, the same hour

for recreation is religiously observed. Once the Hobby's haunt is found and its mode of life ascertained, you can safely rely upon entertainment for a summer's afternoon.

Nearly all the Hobby's food, which consists chiefly of beetles, moths, and dragon-flies, with small birds, such as Pipits, Larks, Tits, and even Swallows, is procured in the air and full in the open, where no tree-growth exists to hamper this dashing hawk's rapid rushes and effective onslaughts. It is certainly a beautiful sight to watch a Hobby, as it careers along, seize without abatement of speed a dragon-fly with unerring talon, and with well-nigh one and the same motion transfer the gauzy-winged insect to its mouth. Only the body is eaten: the now-useless wings flutter aimlessly to the ground. The Kestrel sometimes does the same—only in rather different fashion—with beetles, yet never with such a devil-may-care sort of action as the Hobby.

The Hobby's method of hunting and of quartering likely ground is quite unique. As it sails over the open at a fair altitude, now with rapid winnowings, now with smooth glides, like a well-oiled and perfectly balanced bicycle being alternately pedalled and free-wheeled, and looking very like a little Peregrine, albeit far neater than even that masterful bird, it suddenly sights a quarry, such as a chafer or dragon-fly. Down it dives abruptly on a very steep slant to within a

few feet of the ground, above which and at the same height it rushes along for fifty yards or more, finally flinging itself up again just as spasmodically. Sometimes it hurls itself down only to rise immediately, yet this is a happening which largely depends on as to whether its first effort meets with immediate success. Occasionally it will hover momentarily over a clump of bushes, as, for instance, gorse, with its tail expanded to its very fullest.

This up-and-down flight is quite characteristic of the Hobby, and is extremely beautiful to watch ; and should an observer unfamiliar with this species come across a hawk about the size of a Kestrel, only with far sharper and straighter wings and a shorter tail, practising these aerial manœuvres, he may rest assured of its being a Hobby. No other English hawk hunts in like manner.

The Hobby's flight then is a mingling of abruptness, dilatoriness, and impetuosity. At times even it seems—but only *seems*, I think—to move really slowly ; next second, however, it is hurling itself through space with dash and quickness extraordinary. A peculiar phase of its flight is admirably advertized by the fierce frolics of one soaring some way above a gathering of Swifts collected for their evening game of follow-my-leader. At first the hawk, looking like a small anchor, hangs head to wind, a seeming picture of utter nonchalance. Now mark the sudden change. All at once it drops, head first, like a stone, with tightly

shut pinions, misses a Swift—obviously on purpose—and then there it is up again high in the heavens soaring placidly, as though Swifts and stooping at them played no part in its being. That the Hobby can and does catch an occasional Swift, even in fair flight, is shown by the following incident.

On June 14th, 1907, as I lay in a spacious clearing of a big Sussex woodland, a sudden swirl of wings gave me instant pause in my meditations. Looking-up, my eyes were held by a Swift coasting earthwards in frantic haste, hotly pursued by a Hobby not many yards in his wake. I literally held my breath with excitement, for here was an occurrence of dreamland only. Speeding on about a level with the tree-tops both birds measure the length of the long glade in fractional time, and the hawk gains almost imperceptibly. Then the pursued makes a mighty effort; he rises gamely, even slightly increasing his lead. Indeed it seemed he might shake off his deadly courser. Alas, my friend, it is to no purpose: the Hobby has responded to your challenge, and now exhibits speed for which—glorious flyer though he be—I should never have given him credit. Mounting with ease above his prospective prey, the lithe hawk compels him to describe an arc and once again to start a life—or death—struggle in a headlong slant across the clearing. That flight is his last—the Swift has shot his bolt. Now inches only separate the birds: you could cover both with a very large handkerchief.

Next instant the hawk rises straight and stoops strongly ; pursuer and pursued become one. Binding to his quarry the hawk is away over the trees at my back without so much as the most momentary pause in the continuation of his eminently successful " shikar." Indeed, this continuity of action was possibly the most pleasing part of a praiseworthy performance, since you might reasonably have expected a break—however trivial—after what must have been a long and arduous chase. As a fact, the death-stroke was so featly and rapidly administered that, except that where a moment before there had been two birds there was now one only, and that a muffled clap and a few small, dusky feathers twirling aimlessly in the summer breeze suggested some sort of untoward happening, it was difficult to realize that anything unusual had taken place.

I have seen the irresistible death-stoop of the Peregrine, the lightning rush of the tiny Merlin : I have watched the earthward plunge after prey of Buzzard, Eagle, Kite, and Harrier : I have revelled in the agile snatch of the Sparrow-Hawk, in the silent hovering of the Kestrel ; and all have I enjoyed. Here was something quite different and even far better. Never have I seen skill so superb as was displayed by that Hobby.

On other occasions, as the Hobby flies along comparatively slowly, it suddenly rushes straight down earthwards ; and, as if quite mad, dives, twists,

turns and flings itself about with amazing agility, power, and control, resembling a coil of wire springs hopelessly overwound. Really there is no machinery out of gear ; the bird's steel sinews and strong wings see to all that ; and up the frolicsome bird streaks all animation and dash.

Yet another time a pair will ring up, higher yet and higher, to soar at an immense altitude, calling at intervals, till they look like tiny twin crosses pencilled darkly on a background of blue-grey ; or else they sail round and round in ever-widening circles, then resembling more than ever their big cousin the Peregrine. Then from that giddy height one will dive down almost vertically to within a few feet of the ground, and sweep up with a delightfully deft scoop, to commence turning and twisting with a precision of wing which borders on the marvellous. In a measure this "whirligig" mode of flight—if one may use such a slang expression—only it is, of course, ever more powerful, recalls that of the Nightjar : so much so, that those who in the gloaming have mistaken a Hobby for a Nightjar, may well be excused. For the Hobby hunts late ; it follows its prey far on into the dying twilight ; Owls and Nightjars have fully commenced their day when the Hobby thinks of rest.

Sometimes, especially towards evening, a pair will indulge in what may well be termed an aerial gymkhana. Round and round they ring at top

speed, one behind the other. Then the rearmost bird spurts ahead for forty or fifty yards, when the game is for its fellow to catch it—if it can. It generally can or, as must be the case, is allowed to do so. Anyhow, dashing forward with incredible velocity it glides over the leader's head, sometimes, it seems, actually brushing it. Or else, by way of innovation, it will swerve down sharply under the leader, whereupon he or she—as the case is—will reverse the order of things, and slip over the rising bird; gambols which suggest a game of winged leap-frog.

Much of the Hobby's short day—short, seeing that, except for the hours of early morn, it comparatively seldom really begins work until close on 4 p.m.—is spent on the wing, either in quest of prey or in frolicking with its mate. Every now and again one will settle for a few minutes in some isolated tree standing in the open, or return for a brief rest to the wood of its choice. As the shades of evening begin to steal across heath and woodland you may often approach to within quite a short distance a Hobby quietly digesting its afternoon's meal, when the bird will probably content itself, as well as you, by silently flying to another tree not far off. Often when it is hunting, a Hobby will allow you to stroll up to it within reasonable range; again, as you make the fragrant heath of the common your temporary couch, one will sail by thirty yards or less away.

Quite apart from its characteristic flight, the general cut of the Hobby is undeniable. To me, at any rate, it resembles a compromise between a large Swift and a diminutive Peregrine. The long, narrow, sharp and stiffly pointed pinions, admirably adapted for cleaving the air cleanly and with vigorous precision, are not in the least like the long yet limper wings of the Kestrel, nor yet do they partake of the comparatively rounded wings of the Sparrow-Hawk. Moreover, its tail is perceptibly shorter and more wedge-shaped than that of either of those species. At the same time, to fully appreciate these nice distinctions you should have the good fortune to behold these three birds in the air together, as I have done ere now. On one occasion I was lying hidden in a ditch on a southern common. A Kestrel was hovering characteristically almost immediately above me ; the Hobbies—for there was a pair—had just left the wood hard by to start their evening's work and play ; when a Sparrow-Hawk headed quickly past the trio, making for an outlying covert, where I well knew she had a nest.

With the Merlin, which the Hobby (especially the young Hobby) slightly resembles in some details, there is hardly any need to cite comparison, since the former, being normally a northerly nester, is only likely to be seen in the haunts of the Hobby during winter, when the latter bird is far away in Africa. The Hobby is merely a summer-visitor to Britain, arriving late in April and through May,

and departing in October. Only rarely is a Hobby seen in our islands between November and March inclusive.

By reason of its stretch of wing the Hobby flying gives one the impression of being far bigger than it really is. When at rest, it is quite small, reaching little more than a foot in length, although the female, following the custom of the hawk tribe, is somewhat the larger and finer creature. Small though it be, it may well stand for all that is aristocratic, comely, refined and graceful in the feathered creation. "Little but good" is an adage well applied to the Hobby: the Hobby is fierce and forceful beneath a gentle demeanour and dainty figure. Few birds can vie with it in repose of manner, none in the agile decisiveness of its flight.

The Hobby's plumage is plain, yet pleasing. The back and wings are darkly slaty, the head being slightly darker, the cheeks creamy-white with a dusky moustachial streak: the throat is practically white, as are its breast and belly, the two latter parts being nicely streaked with black, a pattern which suggests a stomacher of ermine, while the thigh-plumes and under tail-coverts are orange-brown. Until fully adult plumage is obtained—and the Hobby takes nearly two years at least to acquire it, though like the Kestrel and Sparrow-Hawk, it will breed in its first year's garb—the slatiness of the upper-parts inclines to brownish, especially

when bright sunlight is playing upon it, whilst the under-parts, though similarly streaked with black, have the appearance of soiled ermine, which, when burnished by a powerful sun, assumes a pinkish tinge. Birds of the year lack the reddish-brown plumes on the thighs and beneath the tail.

The Hobby is no builder of even the meanest calibre: never by any chance—in Britain at any rate—does it construct a home for itself. Where it can get it, nothing pleases it better than a Crow's deserted abode, or a Magpie's. Failing these luxurious mansions, it is quite content with the rougher built nest of Heron, Rook, or Sparrow-Hawk. Beyond furrowing about in the lining—and in the case of a Magpie's nest removing the fibrous roots—no further alterations are effected. The eggs merely repose in a shallow scrape about eight inches across. Now and then, of course, a "pellet" or two are found in the "nest," as likewise a few small feathers and some bits of down from the old Hobbies, but until the young appear not many relics of the chase accumulate therein, though at the base of adjacent trees may sometimes be found many such indications, as well as innumerable droppings. The same haunt and often the same nest is used yearly.

It is a strange fact that in our islands the Hobby seldom lays more than three eggs (I have known of several "fours"), and especially strange when one remembers how our other small hawks

habitually lay from four to six, and in the case of the Sparrow-Hawk, and very occasionally in that of the Kestrel, sometimes seven. This alone would be an obstacle to the Hobby's increase, quite apart from the undoubted fact that from their unusual tameness many a nestling comes to an untimely end. Like those of the Kestrel and Merlin, the eggs of the Hobby are of a reddish or brownish cast—I have seen some which, if specimens of the three kinds, and especially some types of Kestrel's eggs, were placed side by side and unlabelled on a table, are quite indistinguishable—yet many show a strong wash of *yellowish-brown*, a tint which those of Kestrel and Merlin comparatively seldom exhibit. Of course, this character by no means of itself suffices for identification: Hobby's eggs to be fully authenticated must be seen *in situ*, with their owners in attendance. The date, however, is helpful, since the Hobby is an abnormally late breeder, seldom having eggs before mid-June and sometimes not until the end of that month. The earliest lot of nestlings I ever heard of was a trio I found myself one 4th of July. They were then two or three days old, and since the Hobby sits for twenty-eight days, the clutch in this case must have been completed by about June 4th. One brood only is reared in the year. The Hobby is sometimes a very close sitter: I have had to tap the tree containing the eyrie twice before the brooding bird would relinquish her charge, but of course this behaviour is

not of regular occurrence. Before the "nest" is found, the non-sitting bird—for both sexes incubate—may have given its approximate site away by its excited flight and cries as it dashes out from some tree near its home on your approach: or else it may first be seen high in the air driving off some other big bird, such as a Carrion-Crow. At other times, however, it is nowhere to be seen.

When the "sitter" is flushed, both Hobbies are sometimes sorely agitated. Now they winnow about at a fair elevation, now they dive down among the trees to rise again almost vertically. Sometimes they approach the climber so closely—especially when they have young—that he can see their dark moustachial streak and admire the sparkle of their liquid hazel eyes. Then for one moment their bluish-black upper-parts are displayed; next second, as they shoot up, the pale, streaked breast meets the gaze: and they may call repeatedly.

As for the cry of the Hobby, in no work on British birds can I find it correctly described, if indeed described at all. Some writers are content with the statement that it is a chatter; others will tell you that it resembles the ordinary ringing *kwee-kwee-kwee* of the Kestrel. As a fact, however, it does nothing of the kind; and the cry of the Hobby is very characteristic indeed, although nothing like as loud (all the same it is penetrating) as would be expected

from the size of the bird. Many of the birds of prey, however, possess comparatively weak vocal chords. The only other note with which it bears any sort of comparison is one of the young Kestrel's cries for food. It is a double-syllabled cry, which may be likened to a repetition of the word *quir-ic*. It is rather weak and thin, yet whistling, brisk and somewhat peevish ; and although it is not a pretty sound in the strict sense of the word, it yet has something about it which is at once remarkable and attractive, for it is not one's every-day luck to meet with the Hobby.

## CHAPTER XVI.

### THE MERLIN ON THE MOORS.

WHY the Merlin\* should fail to breed—though it would necessarily be local, owing to a dearth of suitable sites—in the southern counties of England, must ever, to me at any rate, remain a mystery. Take, for instance, such apparently likely areas in Sussex as the wide reaches of downland, and the open, heathy portions of Ashdown Forest, and elsewhere; and in Surrey look at the miles of wild, ling-covered waste round Thursley, Hindhead, and the like. Would not these districts—so you would suppose—afford the bird eminently desirable breeding-quarters, resembling, as they do, albeit in a tamer degree, the species' summer mountain-home in more northerly latitudes? Is not the food supply there—Pipits, Larks, and Wheatears (and especially the first two), the Merlin's favourite fare—almost identical with that this hawk so relishes in its normal haunts. The Merlin, moreover, does occur there between autumn and spring.

Putting aside then the "not proven" cases of this species nesting in the southern counties, and the few admitted instances of its so doing in the

\* *Falco regulus* Pall.

south-western shires—from Wiltshire and Hampshire on—the Merlin's true breeding-home is amidst the heather-robed moorlands and misty fells and mountain-sides of England north of about latitude  $53^{\circ}$  (though it does nest here and there in Monmouth, Hereford and Shropshire), the bird being particularly well represented in parts of Yorkshire and the "Lakes"; as well as—and of course—amongst those of Scotland, though in many districts there it has been rendered very rare, and even well-nigh extinct, through the unhappy medium of keepers, because of its fancied depredations amongst Grouse. The Merlin is a much maligned bird. It occurs, too, in most of the Hebrides, and is quite common in the Orkneys and Shetlands. In Ireland it is tolerably to the fore, there frequenting not only—and as you would expect—many of the mountain ranges, but also some of the big, low-lying bogs and plains. After all, elevated moorlands are not by any means a necessity to a breeding Merlin. In Cambria, except perhaps for Anglesey, it is on the whole an uncommon nester, especially in the southern half.

From early spring to late autumn the Merlin may truly be termed the presiding spirit of the moors. There it is a menace to any small birds affecting the same haunts. Meadow-Pipits, Sky-Larks, Twites, Wheatears, and Ring-Ouzels—and particularly the first two sorts (this no doubt being why on "Merlin moorlands" these two species

are comparatively scarce, especially as summer advances, and this too in spite of their fledged broods)—with sundry, passing species, are all chased and often captured. Of larger deer, Dunlins, Plovers, Snipe, and occasionally Grouse—and in my own experience the “cheepers” only of the last-mentioned kind—(indeed, I doubt if an adult Grouse is ever knocked down) succumb to its persistent and rapid attacks, while the bill of fare is pleasantly varied by the easy conquest of large moths and beetles.

I like to watch the Merlin in pursuit of its intended quarry. Swiftly across the heather or along the bare screes—a silent, winged horror to the prospective victim—the game little hawk follows with machine-like precision every twist and turn of its prey. The latter strains its every nerve to out-distance its grim pursuer. It doubles, it redoubles, generally all to no purpose. Practically its only chance—and a poor one at that—of eluding death is to seek and sink into thick covert, not always easy to find on the bleak fell or barren moorland. Should it fail in this almost futile endeavour, it will surely succumb to its relentless tyrant; for skilfully watching its opportunity the Merlin rises somewhat and hurls itself in true Peregrine style on its now dazed and panic-stricken prey: then away to some stone, hillock, post, or stiff bunch of heather, on which to devour its ill-gotten meal. That is the Merlin’s usual way of procuring a

living, though sometimes when the quarry soars—as a Lark will—very exciting flights ensue, pursuer as well as pursued sometimes passing out of the vision of the naked eye. Nevertheless, in the long run the conclusion of the chase is the same—the Lark succumbs. Occasionally a victim, as for example the downy young of Snipe or Plover which are then quite incapable of flight, is snatched off the ground.

During winter the Merlin may be met with on enclosed lands, and down-country generally. Even the covert-shooter may then recognize its slim, thoroughbred form. Except when seen over down or common, the Merlin seems out of place in such situations, situations it selects perforce, since, with few exceptions, the small birds—its daily bread—have then migrated from the moors to more congenial quarters. With the approach of spring, however, it follows the flocks of Meadow-Pipits and parties of newly-arrived Wheatears back to the breeziness of the bracing uplands, where its methods and mode of life are thoroughly in keeping with the hills and the heather. There in those sunless solitudes its low and rapid flight is oftentimes the sole sign of life, there frequently the Merlin's ringing cry alone breaks the intense silence of the summer-noon.

By mid-April at latest, and often as much as six weeks sooner, the Merlins are back on the moors, each pair in its ancestral domain, though,

even where the bird is happily still common, two nests are seldom found within less than a mile or two of one another. None the less I have known of two eyries within a third of the first-named distance. This event, however, is rare, and is generally the result of the food supply in the district being good, but the suitable sites scarce. Not only does the Merlin pair for life and frequent the same haunt yearly, but it also goes a step further by rearing its young annually in the same patch of heather, should that have escaped cutting or burning. So attractive is one special spot that I have known a pair of Merlins return to, and nest in, a tiny remnant of what was once quite a lordly sweep of heather; while it is quite customary for the birds—should all the heather in the old haunt have been “improved”—to repair to the nearest available site in the favourite area. It is hard indeed to drive away a pair of Merlins, though for the above reason they may be made to shift quarters to the extent of half a mile or more. Moreover, even if parents and young are destroyed wholesale this summer, next spring will almost inevitably see the gap filled by an alien couple.

Although habitués of the moorland once again, even as early as March, the most forward Merlins seldom begin laying until early mid-May (I have known full clutches by the 12th), while backward hens—these generally being real mountain birds and frequenters of high and very exposed grounds—

postpone that event until the end of that month or even till early June. The average pair, however, have a full, fresh clutch of eggs between May 17th and 24th.

The chosen site, while it may face almost any point of the compass, is preferably, and indeed generally, on a slope—frequently about half way up it—from the side of a steep mountain or hill to the gentle gradient, bank or other petty eminence of some otherwise level moor (I have, however, seen occasional eyries on perfectly flat ground), so as, of course, to command a good look-out.

Little concern is evinced over a couch for the eggs. In fact, if we exclude the casual and possibly accidental presence in the scrape or hollow in the soil, grass or moss at the roots of the heather (heather of medium height being the rule, lofty or scrubby varieties the exceptions) of a few wisps of cotton-grass, broken moss, heather-twigs, or rootlets—and generally the last two—no nest proper is ever made. Some ornithologists—the late Howard Saunders included—consider even the twigs and rootlets a rarity, others deny it altogether. Yet it is in reality neither one thing or the other. The scrape itself measures from 5 in. to 6 in. across by from  $1\frac{1}{2}$  in. to  $2\frac{1}{4}$  in. in depth.

It is worthy of notice that most eyries are near a moorland fence, wall, butts, or a track or open space of some sort, and anyhow close to the edge

## 274 FIELD-STUDIES OF RARER BIRDS

of the selected carpet of heather. This point—when you have realized it—greatly simplifies the finding of a “ nest ” in a big area of ground. Therefore, when seeking the home of the Merlin, first try the margins of the heather “ fields ” or patches, working in up to say thirty yards from their outskirts. At all events—and these may be taken as fair samples—of the five eyries I saw in 1907 four were under ten yards from the edge of the chosen heather, the fifth being little further afield ; while, in 1912, out of a similar number of nests with eggs examined, three were under five yards from a track or open space, the other two being respectively about fifteen and thirty paces, the one from a sort of wide ditch, the other from a stone wall. Moreover, other two “ nests ” which had previously been robbed (incidentally, a Merlin will often brood at intervals in its eyrie for a fortnight after it has been robbed) were individually close to a stream with rather high banks inciding the moor and an open green patch of ground. Some eyries are—it seems purposely—at the roots of a bunch of rank heather conspicuously taller than its surroundings.

Hard by nearly all nests are found the “ killing-places,” indeed they are seldom more than thirty yards distant, generally closer, though this fact by no means complies with the dogmatic views expressed by “ week-end ” naturalists, who have probably seen but one Merlin’s nest in their lives,

and that by chance a long way from the killing-stations. Perhaps they never "spotted" the latter, though generally these are fairly well pronounced, and very much so when the eyrie holds young.

These stations are variously—as they occur—on boulders or stones, on a wall, post, grouse-butts, or even on a bare earthy patch or hillock, again on a tump of stiff, rounded heather. Here, for instance, in a certain haunt and embedded in the yielding peat, a hoary, weather-worn boulder, on which generations of Merlins have stood to break up their quarry, rears its aged head. In spring and summer this rock-table tells a piteous tale. Little heaps of feathers, moths' wings, the "shards" of beetles and many "castings" (which are usually very diminutive), and droppings cling to, litter and disfigure its already scarred and wrinkled face. The lichen spangling it is clotted here, discoloured there, by the blood of countless victims, it has so become a regular sacrificial altar, it affords mute testimony to many a moorland murder, while on the ground beneath is strewn a medley of bones and skulls—the Merlin's golgotha. All the same, life has gone hand in hand with death, since close here many a lusty brood of Merlins have first seen the sun set—a crimson or orange globe—above the green crests of the rosy-tinted hills; it is here that the "stone-falcon" reigns supreme, where Grouse

crow exultant at early dawn, and where the Curlew's quavering music ripples amongst the heather-clad mountains.

The Merlin lays from three to six eggs, four usually, five sometimes, six rarely, and three often in second attempts after number one has met with misfortune, though occasionally a trio constitutes the original "set." Their general appearance is brown with a tinge of red, closely speckled and freckled all over with shades of a darker tint. They vary somewhat, they may even vary in the same "clutch," but creamy-grounded, red-blotched types are rare; in fact, they seldom show those bright, brick-red and pink tints which make most of the Peregrine's and Kestrel's eggs so attractive. This generally brown, speckly appearance, combined with the fact that they are nearly always appreciably smaller than eggs of the Hobby and Kestrel, renders—some say—most unidentified specimens seen in a miscellaneous collection fairly easy to name. Personally, however, I would not like to swear to an unidentified Merlin's egg, since I have seen small specimens of the brown type of Kestrel's egg which could not possibly be separated from the former.

The eggs are laid at intervals of two days, and incubation, the work of both sexes, though the female is the principal performer, lasts for one egg twenty-eight days, since the first egg or two dropped is often brooded. On the state of incuba-

tion, the weather, and the actions of the non-sitting bird depend not a little as to how close a Merlin sits. On an average the species is a "tight" sitter, sometimes indeed waiting to be kicked off almost under foot, while I have heard of one instance emanating from a first-class and truthful ornithologist of a brooding Merlin being actually caught by hand. It is only fair to add, though, that it was a peculiarly stormy day. Usually, however, as you tramp the heather out in sections, clapping and shouting at intervals, the bird flutters off quite awkwardly—especially the female, who neither is, nor looks, so slim or debonair as her partner—from ten to twenty-five yards ahead or to one side. Occasionally, of course, one will leave her eggs while you are still as much as from fifty to seventy yards away.

On first being flushed a sitting Merlin flies low and guiltily for some little way and not very fast, then it gradually mounts the air on a slant when, increasing its speed considerably, at a fair elevation it cuts out widish circles which are often of the switch-back order, the bird petulantly flinging itself down for some few yards and diving through the air in curves. Both birds do this, perhaps together, perhaps one by itself (the other having sheered off), and both are apt to vent their displeasure in shrill, chattering cries. The usual cry, common to both sexes though pitched in rather different keys, is a mournful but penetrating and rapid chatter of

*quek-ek-ek-ek-ek-ek*, or *quik-ik-ik-ik-ik-ik*, followed by an interval of a few seconds more or less before its repetition. It slightly descends the scale, and is pitched in a minor key. The male, however, often introduces a thin, chirruping *chic*, iterated several times, not too quickly, before the normal note. The cry is usually only uttered at the eyrie, or when the bird attacks another species, such as a Crow, though sometimes a Merlin will cry as it crosses a moor at a fair elevation and when still half a mile perhaps from its home, probably to apprise its sitting mate of its approach and well-being.

If the male is on sentry-go by the nest—as he often is—he will ever be the first to rise and circle, sometimes while you are a good way off. Then, if he hangs about and chatters, you know that the nest must be yours eventually. It is merely a question of time, no matter how close his mate elects to sit. Sometimes, however, the sentinel is absent, or when flushed it may go straight away and not return. Sometimes, too, I have known the “sitter” dash off and keep at a very respectful distance, though all the same crying out. It may even fly clean out of sight. This last contingency is, however, an extremely remote one.

To find a Merlin's nest in a *known* haunt is generally not difficult, while it is a task which becomes absolutely easy once you can get the non-sitting bird a-wing and screaming. If the

sitter is off on recreation, both birds then being in the air, it is not so easy. You must then either watch from a *long* distance, if the lie of the ground permits of it, since the Merlin is of a wary disposition ; or search assiduously—be careful that you do not tread on the eggs—for the eyrie. Even if no birds are present, that is if one proves eventually to be “ on,” the other away foraging, it still becomes no very arduous task to find the “ nest,” so long as you feel satisfied that the birds have not been tampered with in any way, and—in addition—discover *fresh* kills in the immediate neighbourhood. It is no bad plan to have searched for young the previous summer. They are always easy to find, not only by reason of their parents’ noisy remonstrances, but also because of the quantities of feathers from different victims littering the heather around the eyrie, and that in its vicinity.

To be turned down on a vast stretch of moor to search for a “ nest ” without any previous knowledge is, however, quite another affair : for, except at their eyrie, Merlins are not much in evidence—they generally fly so low ; while, of course, even if seen careering across the moorland, they may well be miles from their breeding-haunt. Failing the very problematical chance of walking across an eyrie accidentally, or the meeting with an obviously perturbed Merlin, your safest road towards success lies in looking out for likely killing

places. Therefore examine boulders, butts, posts, or walls. Should you find several of these objects close together all well-used as shambles, you may be sure a " nest " is, or will be, not far away. Perhaps these stations serve as a landmark to the birds, as well as butcher's shops.

In Anglesey — amongst other districts — the Merlin sometimes breeds on the upper ledges of sea-cliffs — perhaps for want of its usual accommodation. I have heard of " nests " in fields of bracken, while more well-authenticated instances than are supposed exist of a pair occupying the deserted nest of a Carrion-Crow or other branch-builder. In fact, one such record came under my own notice in Breconshire during the late spring of 1903. The haunt selected was a delightful dingle situate not far from a hill-farm, and wild enough for anything, though for all that hardly the spot where one would have expected to find the Merlin breeding. This dingle is no more than two hundred yards in length, the one bank sparsely clad with bracken and gorse which culminates in a sapling " nursery " of firs and larches, the other thinly planted with timber of no great age, oaks and birches predominating. That year four large nests were visible in these oaks, three of which had at one time or another been the property of Carrion-Crows, the fourth once a Kite's, though now a site periodically occupied by a pair of Buzzards. Indeed, on April 4th, these birds were frequenting

it and had, moreover, partially refitted their ancient citadel. I fully expected to find eggs when I next visited the locality on May 4th. In this surmise, however, I proved at fault, for the Buzzards had gone, leaving in their stead a pair of small hawks which, owing to the dense mist prevailing in the mountains that day, left me in some little doubt as to their positive identity, though mentally I labelled them Merlins.

The next time I passed that way was on May 22nd—a bright day of clear sunshine. The moment I reached the fern-covered slope opposite the oaks a small hawk—now at once recognised as a female Merlin—left the vicinity of one of the Crow's old habitations, built in one of the topmost forks of a somewhat slender tree growing in about the middle of the thinly-planted bank. However, I first ascended the tree containing the Kite's ancient abode, which the male Merlin had left on May 4th. This was drawn blank, though not so the Crow's nest. That held three Merlin's eggs laid for no accountable reason in a straight line. The male never turned up at all, but the female was very noisy as she dashed round and round the small "cwm" with her rapid though wavering and somewhat erratic flight.

The Merlin loves not at all any big bird which may happen to cross the sacred precincts of its eyrie, and loses no time in giving it battle. I have been guided to several nests in this manner, even

from quite a long distance. Sometimes a Merlin will deliberately dash far down dale to deliver a furious onslaught on some species, such as a Crow, which, for that time at any rate, has given it no provocation whatsoever. Then, after signally routing its fancied foe, it will return to the vicinity of its "nest." Now is the time to watch carefully. All large birds are impartially dealt with as they occur: Herons, Curlews, Crows, Ravens, Eagles, Buzzards, Harriers, Kestrels, and Short-eared Owls, but seldom the Peregrine Falcon. A Short-eared Owl, being of comparatively cumbersome build and flight, experiences many an anxious moment, for though not lacking in courage, neither does its lithe tormentor. Moreover, the latter's movements are quick as thought, as it keeps rising above and dabbing down at the object of its ire with short, vicious stoops, the Owl narrowly avoiding it on each and every occasion.

With perhaps the exception of the juvenile Hobby, only one other British hawk can possibly pass muster for the Merlin, and then, of course, both merely at the hands of the tyro. That is the male Sparrow-Hawk (owing to its much larger size the female, although brown on the back like the hen Merlin, should never offer confusion, even to the beginner), which, when fully matured, superficially resembles the cock Merlin in being bluish-grey on the back. In the hand, of course, the one never-failing distinction between the two birds

—I refer to the males of Sparrow-Hawk and Merlin—is the tint of the irides.\* If they are yellow, then is the specimen a Sparrow-Hawk, if, however, hazel, then a Merlin. At a distance, however, the beginner will find the diagnosis harder. Let him recollect, however, that the Sparrow-Hawk sports comparatively short, rounded wings, and has at any rate a longer-looking tail than the Merlin, while its flight, although at times fast, is not really of the dashing order; whereas the Merlin, particularly the male Merlin, is long, narrow, and pointed in the pinion, with a seemingly shorter tail, while its mode of progression is lithe, eager, and galloping. In a word, it is a true falcon. The flight of the Merlin is extremely light and buoyant, and full of dips and turns, albeit extraordinarily dashing; in fact, a flying Merlin—especially a male—resembles very strongly in many respects a large Swallow, more so indeed, I think, than the Hobby resembles a big Swift. Merlins, too, do not glide so much as most hawks. When they do, the glide is usually of short duration; while the wings, far from being fully extended on either side of the body, are somewhat held in and compressed, being as it were half shut. The lithe little hawks love to fling along a mountain-side at top speed, though their limit does not nearly approach that of a Hobby or, I doubt, that of at any rate an extended Peregrine.

\* Of course this applies to the females as well, except that young Sparrow-Hawks of both sexes have pale brown irides when first hatched.

Moreover—to return momentarily to the Merlin-Sparrow-Hawk question—Merlins are comparatively seldom seen over or round woodlands, and then only passing by or when going to roost in some plantation in their *winter*-haunts ; Sparrow-Hawks often and nearly always. The one is a bird of free flight full in the open, the other a creature of stealth and cautious comings and goings in an enclosed, wooded country.

A paragraph on the Merlin's plumage and general appearance, and I must conclude. To begin with, the bird can boast of being the most diminutive of the British birds of prey, the male seldom exceeding  $10\frac{1}{2}$  in. or 11 in. in length, the female 12 in. or 13 in. at the outside. In fully adult dress the former is blue-grey (some becoming very blue indeed) on the head and back—the nape, however, being reddish—with thin, indistinct dusky streaks to the feather-shafts ; the tail, too, is bluish, banded near its extremity with crêpe, which is in turn tipped with white. The under-parts are reddish-white, except the throat which is whitish, all duskily slashed. The female, however,—if we exclude very old ones which assume the grey garb of the male—is brown above inclusive of the tail which is barred with brown of a lighter shade and tipped white ; below, dirty-white, brown-streaked. Juveniles in their first complete suit run their mother close in general appearance, albeit of a *redder* brown cast : while

the legs and feet of old and young alike are yellow ; their irides brown.

The nestlings in down are delicately dove-tinted, and are at first quiet, well-behaved fellows. When about a fortnight old they degenerate sadly, then becoming fierce, unruly little fiends, all fluff and ferocity, particularly when an intruding hand is presented to them, when lying back and balancing themselves awkwardly, each on its stubby tail, they strike out viciously with their as yet half-sharp talons. Only one brood is reared in the year.

## CHAPTER XVII.

### THE HAUNTS OF THE GADWALL.

ABOUT sixty years ago a pair of Gadwall,\* captured during winter on the decoy at Southacre, were pinioned and then liberated by the Rev. John Fountaine at Narford, in Norfolk. There they bred; and so congenial did their progeny find their new home that they in turn stayed on of their own accord and did likewise. Moreover, they are credited with having enticed reinforcements of genuinely wild Gadwalls to remain for the summer. Anyhow, the Gadwall nowadays breeds commonly in parts of Norfolk, not only at the place of introduction, but also on sundry estates which offer suitable environment. A few pairs, too, nest in Suffolk, but records of the Gadwall breeding in other counties are seldom met with. During winter, however, this bird is more widely distributed, especially in parts of the Hebrides, though in the west of England and in Wales it is of rare occurrence.

The Gadwall's breeding-haunt† which I have visited is not a notorious one; the bird is not by

\* *Anas strepera* L.

† It now, strangely enough, nests in one or two places in Scotland.

any means plentiful there, although it is practically unmolested by sportsmen.

No surging stream runs through the haunt of this duck, but instead there worms its way sadly through the "brecks" and marshes—as though it were too great an exertion to trickle, because weighed down by a submerged wilderness of sodden weeds—an almost lifeless current. Here the low banks bristle with tall razor-edged sedges and flags, sections of which have been laid flat by successive gusts of wind and sheets of rain; there, well-grown heath shrouds the river-edge; there again, jungle-like osier-beds, dotted with immense hassocks of sword-grass, and dashed with pliant-bodied alders and poplars, rudely intrude on the sanctity of the stream, in many spots forming quaking islets lying between two channels of water. These are real pitfalls for the unwary, since innumerable pools full of black slime crop up all too frequently in the already treacherous swamp; while, to make matters worse, many of the trees, having been felled but abandoned, or else having died a natural death from the venom of the wind, interlace, cross, and criss-cross in such a way as to present a formidable barrier to the prospecting ornithologist. A further irritating point is that the banks of these streams are usually so low that a comparatively sober rainfall causes a tolerable flood; while a deluge of rain sends the waters fairly gushing over the outlying country, in springtime

spelling rapid disaster to the nests of Snipe, Duck, Rail, Pheasant, and of any other bird unlucky enough to have selected a sanctuary too near the river.

In May, 1907, I actually swam through one haunt of the Gadwall, clothes and all, examining those high tumps of grass which rose superior to the swash. Yet, except for the nest of a Water-Rail and a few belated Pheasants' homes, my novel nesting-trip ended in nothing but much ruin to kit.

Reports on the Gadwall's general habits are conflicting, and not all the writers on the subject can be correct. One asserts it is shy, skulking, and unsocial; a second that it is sociable, mingling freely with all kinds of water-fowl; a third that it is noisy; a fourth, mute. Others insist that it is indolent and not much addicted to flight; others, again, that it is the very reverse of this. How all these contradictory statements are to be explained I know not; but as a field-naturalist who merely narrates what he has seen, and takes notes on the spot, I can in any case dispose of some of this confusion. To me, then, the Gadwall is the essence of restlessness, especially in the early morning and again towards evening, and a bird assuredly living up to its reputation of vociferousness, and justifying its scientific name, *strepera*; shy in a way, if you will, but certainly no skulker; friendly towards its fellows, and in a minor degree

towards any other species of duck frequenting the same haunt.

Early morning is the surest time to observe the Gadwall, when the birds—like ourselves—are enjoying the freshness of a Norfolk spring dawn. Then they are up and stirring, flying, generally in pairs or small lots, in wide, vagrant circles, now over the “brecks” and any coverts adjoining the stream, now above the stream itself and its wooded quagmires. Generally at an easy elevation, they sometimes ascend to a good height, when (there would, perhaps, be four or five together) high revelry may be held. At first one chases another. Then the tables are turned; pursuer becomes pursued. Then all take the air. A certain pitch is reached, and down they all come again, still on the slant, and often diving about curiously, aerial tactics which, with slight modifications, are common to most ducks during the breeding-season. At another time, as a pair flash over a patch of water, a third Gadwall—a drake, who certainly has a sitting duck not very far away—rises dripping from the pool and buffets the intruding drake of the pair smartly. Periodically, tiring of their aerial play, they will descend waterwards, each pair to its respective domain, pitching with infinite ease; and mid-stream, or at any rate a spot well removed from prospective danger, is vastly preferred to the margin of the water. Occasionally one will seek

the sandy patches of soil chess-boarding the heath-covered waste adjacent, where one might suppose the ducks would nest (and especially in a wet season), instead of, and as they nearly always do, close to the river bank, where they are often flooded out.

The Gadwall is a mixture of trustfulness and wariness, the former because, when flying, it is apt to pass the observer well within range; the latter because, when at rest on land or water, the merest suggestion of a human form—here at all events—even though he be eighty yards or further away, is all sufficient to put the startled fowl on the wing, causing them to rise from the water almost perpendicularly for a short distance before, breaking off at a sharp tangent, they finally get into their full swing.

It is well to be able to distinguish the Gadwall at a good range when on the wing, especially if you lack glasses. To me its chief characteristic then is its very slender neck; as viewed when stretched to its full extent, while its wings appear to be hooked very far back on the body. Its erratic mode of flight resembles that of some gigantic bat, which flies aimlessly about, seeking in vain a suitable retreat. At a distance, especially when flying, the sexes are much alike in size and colour, though if anything, the duck is slightly larger than the drake, a peculiarity not usually met with in the duck family. Save for the thin, slender neck,

the general cut is rather that of a Mallard toned down in every way, unless of course the birds are viewed through powerful glasses, or unless they are close enough for the naked eye to detect the conspicuous white patch on the wings, which is by no means readily seen as the bird flies above a level line of vision, and then only at certain angles of the light.

The Gadwall's garb, if sober, is pleasing, but there is nothing specially attractive in its appearance, for the drake's upper-parts, excepting the rump, which is glossy black, are washed with black and whitish bars on an otherwise brown surface. The under neck-feathers and breast are a mixture of sootiness and white, which, as the bird flies overhead, creates a uniform dark appearance. The rest of the under-parts, however, are like etiolated sateen. His wings alone deserve high commendation; on them you will admire a bold pattern of black, white, and chestnut. The duck has a plumage of brown with creamy-buff markings, and shows no black on the upper tail-coverts. Her throat and neck incline to fulvous, and below she is not so conspicuously bleached, but—apart from the chestnut—she enjoys the same wing-decoration. This description of the plumage, however, must be taken as that seen through binoculars—a sort of bird's eye view, so to say.

The position of one nest I saw may be thus described: A curving riband of steely stillness—the

brook—coils round the base of a big “breck,” dividing that from a morass. On the “breck” side, a widish strip of tawny sedges, with here and there bunches of coarse grass and uninviting clusters of nettles, adorn the lowly bank of the river. Walking about six paces apart, a friend and myself trod out every foot of this aquatic jungle, till at last there only required a 60 ft. by 20 ft. strip to finish the plot entirely. Until then we had nothing to our credit, not even a common wild-duck’s nest, when suddenly a duck, and a Gadwall, too, rose from her nest, only four or five paces ahead. She was easily recognised by her conspicuous white speculum; though, but for that glaring sign fully displayed as she flies directly from us, she savours somewhat of a delicately moulded common wild-duck. Indeed, the upper plumage of the two species, when either sort is seen as now, is not so strikingly dissimilar, certainly the novice might blunder. With low, but not very cumbrous flight, our “find” made for a bed of tall reeds fringing the stream, where she alighted with a scarcely perceptible splash. A little later, however, she flew clean away.

This nest, more exposed than usual, was only a few yards from the river’s brink, and reposed amongst a medley of sedgy grass, nettles, and ground-ivy. It was a substantial structure of flat rinds of sedge and a little dried grass, finished off with a fairly liberal lining of down, chiefly felted

round the extreme rim and upper inside half of the nest, which measured  $10\frac{1}{2}$  in. by 10 in. across, for it boasted a big brim or blanket of down, neatly woven in circular form round the inside edge, ready to be turned down and in over the eggs at a moment's notice, when their owner should desire to leave them voluntarily. The "egg-basin" spanned only 7 in. by  $7\frac{1}{2}$  in. by  $2\frac{1}{2}$  in. deep. It was certainly shallow for a nest of its dimensions.

The down-tufts, which more nearly resemble Wigeon's down than that of any other British breeding duck, though of fair size, are not so large as those of that bird, and are considerably darker. They are nearly black with small greyish centres (the centre of Wigeon's down is much larger), and with white tips, which, though distinct, are not so pronounced nor so long as the Wigeon's; nor so long and wavy as the Shoveler's. The dark portion of the tufts is nearly as dark, though not so sooty, as the down of the Common Scoter. If the Gadwall, however, through the loss of its first nest (like all the ducks it rears but one brood a year) is forced to lay again, the second instalment of down (often very scanty indeed) is frequently of an infinitely lighter shade, occasionally, indeed, as light as or even lighter than Mallard's down, which, perhaps, varies more than that of any other British breeding duck. Normally, however, Gadwall's down is dark, pale-centred, and white-tipped. This certainly does not correspond with the description

given by two authorities, who state that it is (1) "light brown, with a centre star of white, the filaments brown at the ends, not silvery-whitish," and (2) "brownish-grey . . . with the tips almost imperceptible."

The small flank-feathers mixed with the down are fairly numerous, and differ considerably. The bulk, however, are satiny-white, with the faintest of buff tips. Some, on the other hand, are uniform white. Others, while lacking the buff lacing, sport blackish-brown centres or irregular daubs of the same colour on each side of the shaft near the centre of the feather; or else they are decorated with a dark design which recalls a broad-bladed spear-head, the point of which inclines towards the base of the feather, while others, again, have a black band near the tip. The eggs number from seven to twelve, generally nine or ten, and they are of an elegant creamy hue, not unlike the eggs of the Wigeon, ~~albeit~~ a trifle smaller. The full clutch is generally complete between May 1st and 10th (Mr. Witherington has seen a late April nest), in spite of what many of the books tell us about Gadwalls not laying before the end of that month, or indeed not until June.

I know three cries of the Gadwall, and the usual note is a rather querulous quack; the second is a quaint, trilling *quer-r-r-r-r*; while the third, uttered I think by the drake alone, and then but in the breeding-season, is a quickly iterated

*kwuk-uk-uk-uk.* All three are usually heard when the bird is flying, though, in winter, I have heard a "company" of Gadwalls keeping up a continuous subdued quacking as they floated serenely on the middle of a broad pool.

## CHAPTER XVIII.

### THE HABITS OF THE BLACK GUILLEMOT.

WITHOUT being exactly a rare British bird the Black Guillemot\* is sufficiently local to merit the appellation of "uncommon." In Scotland its principal breeding-quarters lie along the north and west coasts, including those of the larger groups of islands, such as the Shetlands, Orkneys, and Hebrides, but it is also found nesting down the eastern sea-board, anyhow, as far south as latitude 58°. The same remarks apply, albeit in a minor degree, to Ireland, though there, too, it is most to the fore on the west coast. Its only English haunts are in the Isle of Man, it having long since ceased to breed in Wales, though why this should be so it is hard to say. During winter, however, it is often met with off coasts where it never stops to breed, though on the east and south of England it is—or seems to be—a rare bird even then.

It is in spring and summer that the Black Guillemot can be studied to best advantage, since, except at those seasons, it is a thorough lover of the ocean, being seldom seen really close in shore.

\* *Uria grylle* (L.)

It is—in its nuptial garb at any rate—quite a striking bird, for the broad white band across each wing and the intense vermilion of its legs and feet afford a delightful contrast to its otherwise sooty livery. The time of its return to the breeding-stations is somewhat variable ; one year the birds begin to dribble in during April's birth week, the next, May has turned before they bethink them once again of their rocky fastness. Let us follow them thither and see what we can.

It is mid-April, and the scene is laid off a certain portion of the Mayo coast. Here, although the Black Guillemots—or “ Mother Carey's Hens,” as they are termed in some parts of Erin, as in Achill for instance—have not all returned to their ancestral domain, we find at any rate a party of ten disporting themselves in a sheltered and tiny bay between the cliffs of the mainland and those of several diminutive stack-rocks close in shore. Half a dozen are placidly floating on the water, the other quartet squatting on some low, partially-submerged boulders at the base of one of the islets. It will be just as well not to attempt too close an approach, for, although fairly confiding, the Black Guillemot is certainly shyer than the common species and the Razorbill. So a perch on the summit of a low cliff presents ample facilities for studying them.

It is very noticeable that, although all the birds are fairly close together, each pair keep somewhat

to themselves. Every now and then one of those on the rocks splashes into the surf flat, or, on the contrary, dives into it very featly ; and here, the vividly green water being clear as crystal, one is enabled to note the creature's every movement, as with extended, fast-beating wings, and rapid propulsions of the legs stretched out at a corresponding angle either side, like two sticks of red sealing-wax, it cleaves the depths full well as any fish. Now watch that other couple. Both birds—at times almost touching—swim buoyantly with body high out of the water and neck and head rigidly erect. First one, then the other, keeps immersing its head ; now one sinks its body so deep that only its head remains visible, whilst its fellow, raising itself out of the brine almost vertically, flaps with vigour its stunted wings. Again, as one is driven or sucked by the surge too near to the jagged crags fringing the base of the cliff, it rises from its bath with some ado, when, after a flight of about thirty yards, it re-aliases with a decided splash. By and by, after a varied and pleasing exhibition of diving and swimming under water on the part of all, one member of the picnic party makes out to sea rapidly for a hundred yards or more, turns, and heads back straight for a spot nearly half way up the cliff on the summit of which you recline. Just before alighting on the broad rock ledge the bird utters its weird, whining cry.

Looking over the precipice cautiously, the

creature may be descried squatting there, half on its feet, half on its tarsus, their rich ruddy hue forming a delicious patch of colour on the funereal grey of the rock. You are soon detected. Nevertheless for an appreciable time ere taking wing the bird cranes its neatly-cut head upwards and sideways with the strangest of contortions, the better to view so strange an animal. When it eventually flies, the legs are at first straddled out on either side, but are shortly gathered up straight out under its tail. As it settles on the sea, it literally ricochets along for a short way, a happening which suggests a game of ducks and drakes played with a largish, pied boulder.

Black Guillemots like to sit on low reefs—bare or be-seaweeded—as well as on ledges in the lower half of a generally broken up cliff ; and from time to time one or several together whine. This is a curious sound, being reminiscent of a doleful, indrawn sigh, and it may be heard from a flying as well as from a resting bird. Whether it is uttered in winter I cannot say, the earliest personal record I have of it bears date of April 11th.

The birds are excessively capricious in the way they frequent their breeding-grounds. This somewhat depends on the state of the tides, yet, all the same, I used to notice that after 12 o'clock noon scarce one was to be seen, and that even if the hens were incubating. The absentees are then fishing out at sea, or at the mouth of some big tidal

estuary. Towards sundown, however, some at any rate return to the region of domestic cares. Others, however, sleep on the rocking billows well out on the ocean, while even those which do roost in a rocky retreat retire there really late.

The flight of the "tystie"—as the Black Guillemot is sometimes called—is performed by a continuous series of quick wing-beats, and is, except when the bird rises towards a cliff, at a low elevation above the sea. If a trifle laboured and erratic, it is none the less distinctly rapid, and there is suggested the appearance of some gigantic, piebald moth a-flying, a likeness which becomes the more telling when the bird—as it often does—proceeds as if lopsided, now the right wing and its contiguous parts being slightly elevated, now the left.

A pair engaged in amorous antics is a pleasing spectacle. The male, recognizable by reason of his brighter plumage—there being no difference in the colour of the two sexes—swims furiously after his lady-love, at times even literally running along the water in his ardour. He fails to catch her. Presently she dives like thought, he after her in hot pursuit, still, however, with no avail. Then he tries fresh tactics. Waiting till she is up and floating he hovers momentarily in the air above her, intending to drop suddenly on her back. Clumsy fellow that he is, he misses his mark, and once again she eludes his advances by diving. So the

chase continues, until at length her swain's repeated gallantries win the day.

Although the Black Guillemot is socially inclined, it is never met with in anything at all approaching the vast crowds so prevalent in a colony of Razorbills or Common Guillemots. Even if the gathering is largish it is scattered, while odd pairs here and there are of quite common occurrence. A normal colony consists of from ten to five and twenty pairs, and even then the breeding-sites are often some distance apart. The breeding-site is invariably a covered one—a hole, a slit, or a small cavern in or under rocks. Now it is in a cliff of almost any height, though generally in the bottom half or third of it, and usually, too, in one which is broken up and studded with big boulders ; again may it be sought beneath semi-detached slabs on more or less level ground—as, for instance, on the grassy top or gentle gradients of an islet. The broken-up, bouldery type of cliff is certainly chosen because the bird, when coming in from sea and gradually rising towards its haven, likes a broad shelf on which to settle before waddling into its home ; and, sometimes, if the ledge adjoining it is of the sloping order, the bird has to make out to sea once again, perhaps indeed to the extent of several times, before it can acquire sufficient way and balance to effect a secure landing. The chosen cavity, which is of annual tenancy, is never altered in any way ; occasionally is one selected—a hole in

turf I mean—which has been enlarged or at any rate inhabited by rats, which, by the way, are often most destructive to this species' eggs.

In the majority of cases there is no attempt at a nest, the eggs merely being deposited on whatever débris that may chance to exist at the bottom of the selected hole or embrasure, such as—and customarily—chips of rock or the crumbling soil, but a slight hollow—in the case of a soil-covered chamber—is often caused by the weight of the brooding bird. On several distinct occasions, however, I have known small fragments of rock or stone and a few shells brought in as a paving for the "bury" and as a reception for the tough-shelled eggs, while on a certain small island off the Irish sea-board I once found two clutches laid respectively on a bed of withered grass and heather, though I feel positive that these materials had originally been conveyed into the holes by some other creature—and that probably a Shag—or else had been drifted into them. That the Black Guillemots brought them there I cannot credit.

Whilst it is true that the normal clutch of eggs is two, one only is sometimes laid. This latter trait was very marked in a small colony breeding on the cliffs of the mainland and on those of some small, adjacent islets off the north-west coast of Mayo, whereas, barely seven miles off, on a mid-ocean island, their fellows were all good for two eggs. Possibly the food supply at the different fishing-

grounds affected by the two colonies decided the matter.

The eggs are rather blunt, and, though their layers are considerably smaller than the Common Guillemot and Razorbill, even so are they small by comparison with the egg of either of those two species. In ground-colour they range from pale greenish white to creamy white and even buff, blotched, spotted, and speckled with dark brown (on some specimens it is almost black), reddish- and yellowish-brown, with underlying markings of grey and lilac-grey. Most eggs are thickest marked at their larger end, and usually a heavily blotched type shows a great deal of ground. One variety is thickly zoned at either end with very dark reddish-black, another is minutely and evenly speckled and freckled with grey, showing only two or three spots of brown, a third is smudged or blotted with irregular daubs and splashes of vivid brown, whilst a fourth is elegantly diversified with spots of dark brown, fawn, and grey. As a rule the two eggs are rather different in the pattern of their markings, though not in the ground tint. Their inner membrane is of a beautifully clear green, their yolk of a vivid reddish-chrome. They are not always deposited on successive days, while incubation, the task of both sexes, lasts about a lunar month.

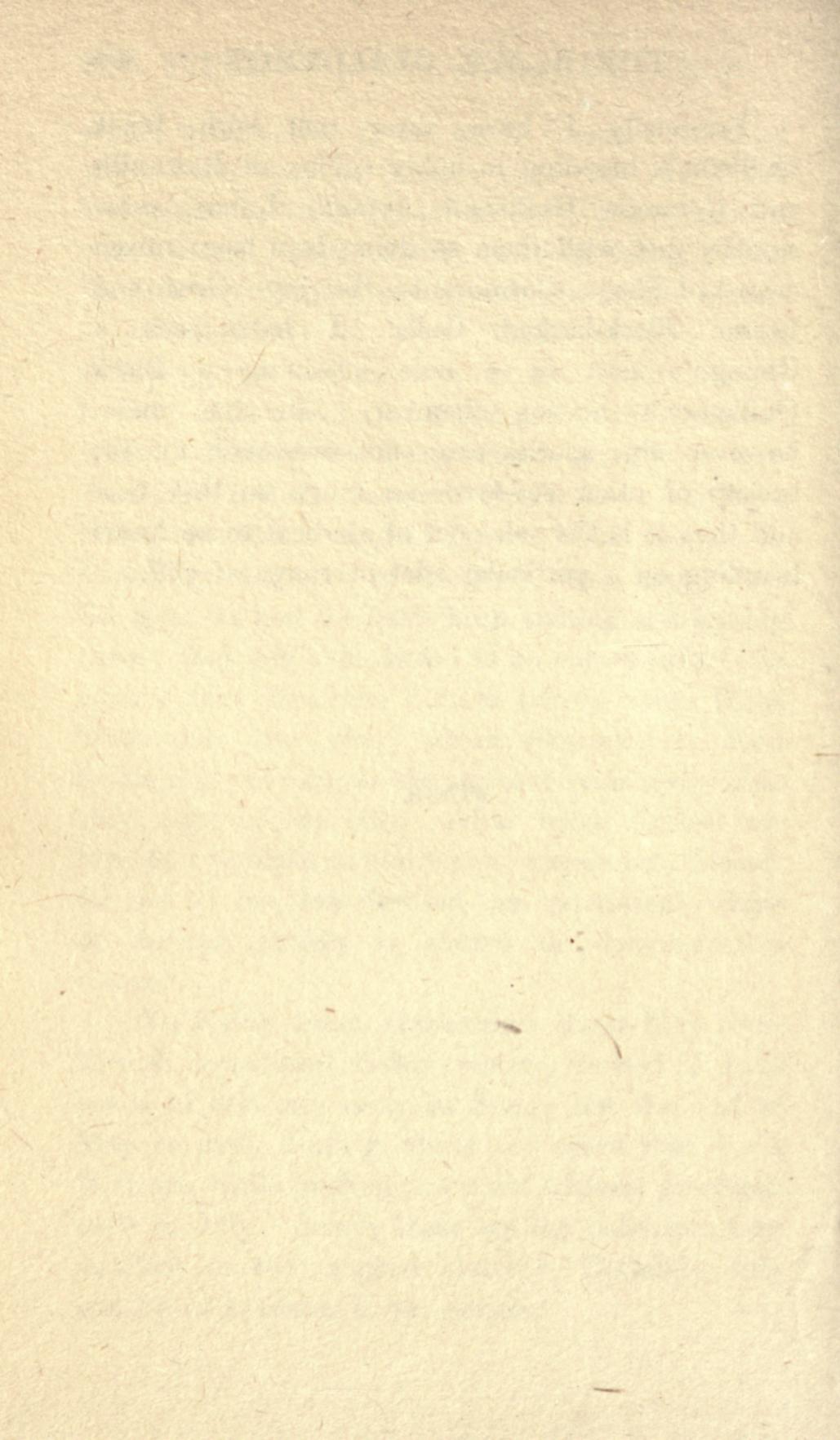
While it is a fact that, when the chosen cavity penetrates the cliff some distance, the sitting bird

—this species sits on its eggs, it does not stand over them—may be caught by hand, the Black Guillemot on the whole can scarcely be called a close sitter. Quite usually a boat being rowed beneath their haunt, or a good clap of the hands, is all sufficient to send them swaying and scurrying into the sea, or, in any event, compel them to appear each one at the mouth of its retreat, where balancing on the platform outside it they watch the intruder inquisitively for some while ere taking to their wings. Apart from this, their homes are often easy of discovery, since long before the eggs are laid the birds keep visiting and leaving them; they will even brood in an empty hole. As against this, however, I have known some Black Guillemots very chary about returning to their belongings, so long as the explorer remained within easy sight of the hole. After being flushed the bird flies straight to the water, sometimes, indeed, far out to sea, but beyond an occasional whine no further anxiety is shown or demonstration evinced.

The laying-season commences about May 20th, though sometimes rather sooner, indeed I have heard of nestlings early in June: but the end of May or early June is about the safest date for a fresh set, while fresh eggs are not without precedent early in July. Surely these are the outcome of an accident to the original clutch? Certainly only one brood is reared in the season.

Personally I have never met with Black Guillemots breeding in a big colony of Razorbills and Common Guillemots, though I have occasionally met with them so doing in a large mixed crowd of Shags, Cormorants, Herring-, Great and Lesser Black-backed Gulls. I have seen a Chough's nest in a hole adjoining a Black Guillemot's nesting-chamber. In the main, however, this species cares not overmuch for the society of other sea-fowl—so much so that now and then it is the sole sort of sea-bird to be found breeding on a particular islet or range of cliff.

*FINIS.*



PRINTED BY WITHERBY AND CO.  
AT THEIR PRINTING PRESS  
MIDDLE ROW PLACE, LONDON.





1877

297091

QL690

G7W3

BIOLOGY  
LIBRARY

6

*Walpole-Bond*

UNIVERSITY OF CALIFORNIA LIBRARY

