

# TRANSACTIONS

OF THE

CARLISLE  
NATURAL HISTORY SOCIETY

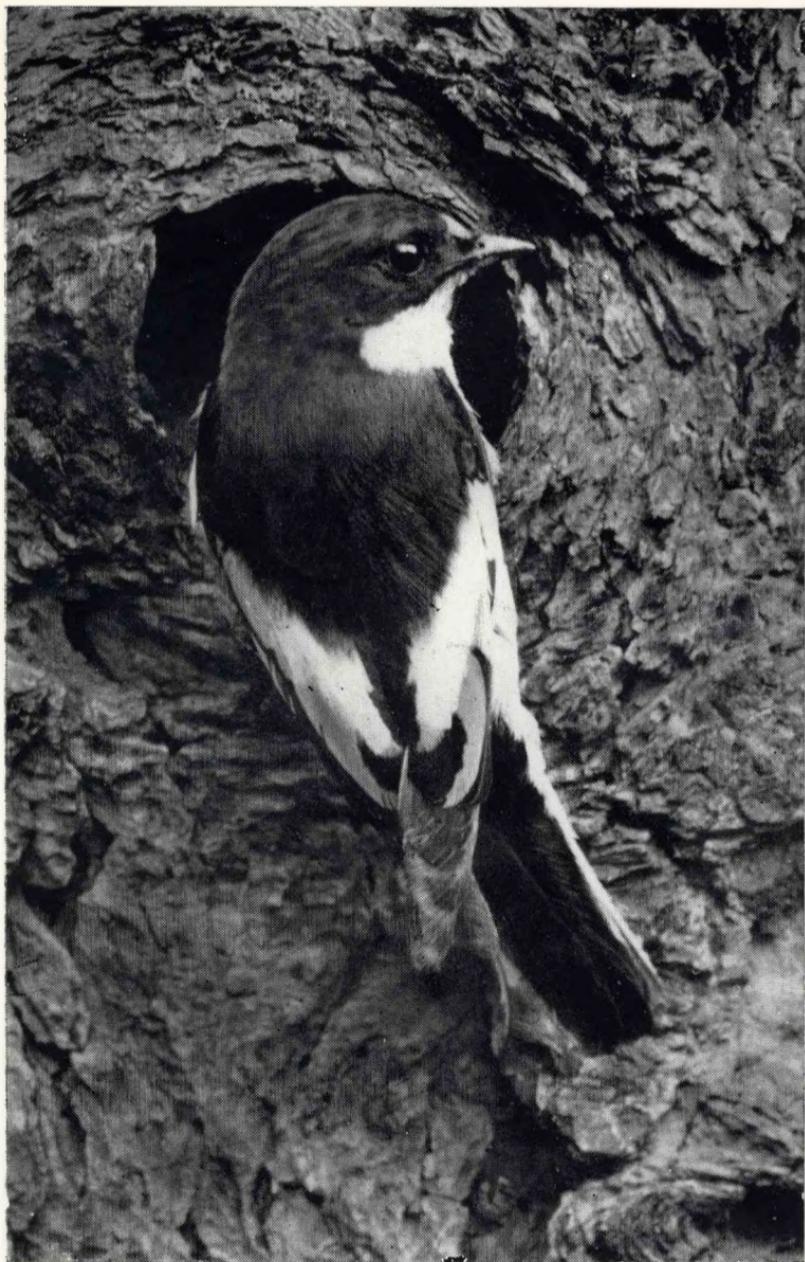
VOLUME VI

PUBLISHED BY THE SOCIETY

ARBROATH

Printed by T. Buncle & Co. Ltd., Market Place

1943



PIED FLYCATCHER.

M. S. WOOD.

THE BIRDS  
OF  
LAKELAND

BY

ERNEST BLEZARD, Editor  
MARJORY GARNETT  
RITSON GRAHAM  
TOM L. JOHNSTON

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## PREFACE.

THIS sixth volume of the Carlisle Natural History Society's publications was projected to fill a gap in local literature by forming a complete catalogue of Lakeland birds and showing the changes in their status and distribution since 1892. It was in that year that the Rev. H. A. Macpherson, first president of the Society, produced his *Vertebrate Fauna of Lakeland*, which has so long remained a standard work of reference.

*Birds of Lakeland* had taken manuscript form as a successor to the ornithological section of the *Fauna* in 1939, when the outbreak of war caused it to be shelved. The delay has provided a gain of historical value among the additional notes garnered during the past four years and now incorporated. Particularly does this apply to the birds resorting to the coastal cliffs of St. Bees Head.

Following upon the separation of local races, the present work names 292 birds for Lakeland, three of them, the Greenland Redpoll, Bonaparte's Sandpiper and Broad-billed Sandpiper, doubtfully considered. Records of bygone residents and rare visitors are recapitulated from the *Fauna*, which gives 263 species, among them, however, the one time much debated Polish Swan.

Classification and nomenclature are according to Witherby's *Handbook of British Birds*, 1938-41. The terms resident, visitor and passage-migrant, qualified or not, are used as applying to Lakeland.

The growing changes in Lakeland bird life began to claim attention soon after the death of the writer of the *Fauna*, which took place in 1901. Eric B. Dunlop of Troutbeck, Westmorland, who presided over the Society in 1913-14, was up to that time adding to his personal studies by collecting information from a number of correspondents with a view to publication. He died in action in France on 19 May 1917, while serving as a lieutenant in the Border Regiment. His paper, *Lakeland Ornithology 1892-1913*, appears in the third volume of the Society's Transactions,

1923, where it is accompanied by an appendix by Linnaeus E. Hope, in whose charge the manuscript had been left. Specialised accounts of Lakeland birds, by various members, also appear in the four other published volumes of Transactions.

The need for a new account of all the birds of Lakeland had constantly been before the Society during the time in which it had been engaged in producing other faunal records compiled by its members. When eventually it was able to begin this new work, compilation was delegated to the four members under whose names it appears. Lifelong students of Lakeland birds, their individual notes had been written in the hope that they would one day help towards an effort of this kind. These notes, together with the entries in the minute books of the Society, were augmented at the outset when the Chairman and Committee of the Carlisle Public Library, Museum and Art Gallery granted full access to the bird specimens and records in their care.

Mindful of a thoroughly representative work, the Society issued the necessary appeals for the further information required. These met with a whole-hearted and generous response from contributors resident throughout Lakeland and further afield.

Several large contributions received in kindly help have materially strengthened the work.

Myles Archibald has supplied bird notes made by his father, the late C. F. Archibald, on birds in the Rusland district, North Lancashire, and dating back to last century.

Miss E. S. Bolam has made and sent extracts referring to Lakeland from the journals of her brother, the late George Bolam.

R. H. Brown has included in an extensive series of notes an extra measure of interest in the vertical range of many species.

Sir Hugh Gladstone has allowed the use of collected records originally intended for the purpose of a work on the fauna of the Solway.

Early in the progress, the Rev. F. C. R. Jourdain lent E. B. Dunlop's diaries containing notes on Lakeland birds dating from 1902 to 1914. These diaries, together with the notebooks and journals of the late Mr Jourdain, have been presented by his executors to the Edward Grey Institute of Field Ornithology.

Mrs Nichol and Miss Nichol, wife and daughter, have lent the written records of the late William Nichol, whose observations, supplemented by those of James Storey, have, over the periods of two long lives entirely spent there, largely built up the bird history of the Cumberland Solway. The portraits of these veteran wildfowlers and bird observers are included as some tribute to two men whom so many have been proud to know, and also to preserve a memory of the lives and activities of the passing race of indigenous Solway punt-gunners.

Dr M. S. Wood has given considerable help towards the accounts of the Pied Flycatcher and the Game-birds, including Snipe and Woodcock, and also supplied the frontispiece.

H. Wright has contributed the notes made by his father, the late T. B. Wright of Gaisgill, Westmorland, a recorder of bird life in one of the more remote districts.

In other directions, the Society is indebted to an anonymous donor for generously defraying the greater part of the cost of a separate map of the "Faunal Area of Lakeland"; to the President for a handsome contribution towards the cost of printing, and to the late Rev. E. U. Savage for literary help and guidance.

In presenting by name all the contributors, the Carlisle Natural History Society gratefully acknowledges their aid towards the work now completed, on the occasion of its fiftieth anniversary.

THE EDITOR.

CARLISLE, July 1943.

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Separate Map of the Faunal Area of Lakeland.

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- The Zoologist*.

## THE FAUNAL AREA OF LAKELAND.

By F. H. DAY, F.R.E.S.

## EXTENT AND BOUNDARIES.

**T**HE area covered by this book is much more extensive than what is generally known as the English Lake District which, to the ordinary tourist, is restricted to the immediate vicinity of the lakes themselves, the surrounding mountains and the radiating valleys.

To the naturalist "Lakeland" extends from the extreme north of Cumberland, where it borders on the Scottish counties of Dumfriesshire and Roxburghshire, to the sands of Morecambe Bay with the point of Walney Island as its southern limit. In brief, "Lakeland" is the compact north-west corner of England and includes the whole of Cumberland and Westmorland with Lancashire North of the Sands.

In the north the Rivers Kershope, Liddell and Sark separate the area from Scotland. On the east the natural barrier of the Pennines and the Lune valley separate it from Northumberland, Durham and Yorkshire; the west is bounded by the Solway Firth and the Irish Sea, while the southern limits are reached in the inlet of Morecambe Bay and part of South Lancashire.

The area from extreme north to south is approximately eighty miles in a straight line, its greatest breadth east to west from Stainmore Forest to St. Bees Head about sixty miles, but at the southern end it narrows very considerably, and in the north it runs up almost to a point.

Roughly, the shape of the area may be described as an elongated diamond, and as viewed on the map it forms a well defined whole for faunal treatment.

## GEOLOGY.

The central mountainous region consists of a group of old rocks of varying degrees of hardness. The sedimentary Skiddaw Slates form the mountains of the northern part, usually fairly smooth in outline, then come the volcanic rocks of the Borrowdale Series, to which most of the rugged character of the central tract is due. The Silurian rocks which are developed in the southern part give rise to features of much lower relief than the foregoing. Surrounding the central tract is a fairly continuous belt of Carboniferous rocks, among which limestones predominate, giving rise often to bare moorland country.

The Permo-Triassic rocks—the New Red Sandstone series—form extensive tracts of undulating country, especially in the Eden valley and the Cumberland plain.

Finally, in the outer girdle of the area the Carboniferous rocks are again in evidence, reaching a very extensive development in the eastern border of the Pennines and in the limestone scars of South Westmorland.

These are the main features of the geology, which in detail, however, is very complex. Of considerable importance are the surface features due to glaciation. These are prevalent not only in the region of the lakes but also in the Cumberland plain, where esker and drumlin topography are very characteristic.

### LAKES.

While the area is very diversified in its physical features, it is the lakes and mountains that are the most outstanding.

The principal lakes are Windermere, Coniston, Wastwater, Buttermere, Crummock, Loweswater, Ennerdale, Thirlmere, Haweswater, Derwentwater, Bassenthwaite and Ullswater, all within the Lake District in its restricted sense. These lie in deep valleys between the surrounding hills but at varying heights above sea level—Ullswater, for instance, is 476 feet above sea level, while Wastwater is round about 200 feet, and is moreover the deepest of the lakes; like Windermere and Coniston its deepest parts are actually below sea level.

The largest lake, Windermere, itself entirely in Westmorland, has its southern end bounded by North Lancashire; the next largest, Ullswater, is shared by Cumberland and Westmorland; Coniston is wholly in North Lancashire, Haweswater in Westmorland; and Wastwater, Buttermere, Crummock, Loweswater, Ennerdale, Thirlmere, Derwentwater and Bassenthwaite are entirely Cumbrian.

In addition to these lakes there are others of smaller size as well as numerous tarns high up in hanging valleys or on mountain plateaux or in lower depressions. Lakes of any size are absent from the Pennines, but Talkin Tarn and Tindale in Cumberland, and Brackenber, Rundale and Seamore in Westmorland may be mentioned, while Sunbiggin Tarn in a continuation of the Shap Fells, which forms a bridge between the Pennines and the Lake mountains, lies somewhat apart. In some respects these smaller sheets of water compare well in ornithological interest with the larger lakes, certain "loughs" near Carlisle being specially attractive.

### MOUNTAINS.

A considerable part of the area is hilly and the highest mountains in England are to be found within its borders. The principal Lake mountains radiate from a common centre and they include the Scawfell group, highest point 3210 feet; the Helvellyn range, highest point 3118 feet; Skiddaw, 3053 feet, and Coniston Old Man, 2633 feet. Extending south from the Scawfell group a broad ridge containing Harter Fell and other lesser heights terminates in Black Combe, 1969 feet, within a short distance of

the sea. Another tract of high ground runs north-westerly from the Scawfell group to stand between Ennerdale Lake on the one side and Buttermere and Crummock Lakes on the other, with Honister Crag as its outstanding feature and High Stile, 2643 feet, its highest point. East of this another outstanding range contains Robinson, Dale Head, Grisedale Pike and Grassmoor, 2791 feet; while close to Scawfell itself Great Gable, Kirk Fell, Langdale Pikes, Glaramara and others combine to make this the wildest part of the area. The Helvellyn range between Thirlmere and Ullswater includes Fairfield, Dollywaggon Pike, Great and Stybarrow Dodds and Helvellyn itself.

The most northerly group of the Lake mountains consists of the imposing Skiddaw, with Saddleback or Blencathra, 2847 feet, and the Caldbeck fells of Carrock, High Pike and others.

On the east side of Kirkstone Pass and of Ullswater is an extensive ridge of high ground culminating in High Street, 2663 feet, with Ill Bell, Kidsty Pike, Harter Fell and High Raise but little less. This group throws out a spur further east to form the Shap Fells which, with the Howgill group east of the Lune valley, make a near approach to the Pennines on the eastern border.

The Pennines themselves, less spectacular than the Lake mountains, but grandly imposing, extend almost the entire length of the eastern limits and cover a great extent of ground, the most continuous mountain tract in the area, grassy for the most part, or with heather-covered moors. Crossfell, 2930 feet, is the highest point, with others from 1500 feet to nearly 2800 feet. 2979.

Crossfell is the centre of activity of the phenomenal Helm Wind which at certain times of the year, but most commonly in late spring, blasts the neighbouring parts of the Eden valley. Blowing from an easterly direction, it sweeps furiously down the western escarpment, sometimes without ceasing for days on end, to blight the vegetation and play freakish tricks with haystacks and other obstacles in its way. It is accompanied by a helm or cap of cloud which settles over the summit of Crossfell, and by the helm bar, a long, single roll of dark cloud which forms in mid-air at three or four miles from the base of the fell. The wind suddenly ceases in violence when it reaches a spot nearly underneath the bar.

#### VALLEYS AND RIVERS.

With so much mountainous country it follows that many well-marked valleys distinguish the area. Most of the lakes lie in broad valleys and in their vicinity well wooded dales are frequently present. Borrowdale, from a scenic point of view, is amongst the most striking of these, while within a few miles the bare and bleak vale of Newlands offers a striking contrast. Near the southern limits of the area the valley of the Duddon combines the characters of both. In the Windermere country there is much well-grown timber and between that lake and Coniston trees in variety greatly diversify the landscape.

The drainage from the hills to the lowlands gives rise to numerous rivers and smaller streams. The area is in fact a region of running water as well as of lakes. In the southern part the Kent, Winster and Leven flow into Morecambe Bay, the last-named river draining Windermere; the Crake, out of Coniston Water, and the Duddon from Wrynose Pass complete the record of streams flowing from north to south, except for the Lune, which rises not very far from the headwaters of the Eden, and after flowing west for a time turns south through the Tebay gorge and finally passes into Lancashire.

The Esk from the Scawfell group, the Mite from the neighbourhood of Burnmoor Tarn and the Irt from Wastwater, after receiving the Bleng from Copeland Forest, tumble down over rocky beds to merge in the sand flats which form the Raven-glass estuary on the south-west coast. The Calder and Ehen enter the sea a few miles further north but form no sandflats, although a broad expanse of rough shingle there is not without attraction to bird life. The headland of St. Bees blocks the outlet of all but the smallest of streams, but beyond, at Workington, the Derwent, from the heart of the lake region and draining both Bassenthwaite and Derwentwater, enters the sea after receiving the surplus waters of another lake, Loweswater, through the medium of the Cocker. The Ellen, sadly polluted through the influence of coal, runs out at Maryport.

Northward lies the broad expanse of the Solway, entered by the twin estuaries of the Esk and the Eden. The Esk for most of its length lies over the Scottish border and of its main tributaries, Liddell and Lyne, only the latter lies wholly in Cumberland. The Eden, however, is of much greater interest to the Lakeland naturalist. Rising in the limestone district of Mallerstang in Westmorland, it has a length of nearly seventy miles, flowing in a northerly direction parallel to the Pennines till near Carlisle, where it turns to the west, and where the Petteiril from Greystoke Park and the Caldew from Skiddaw Forest add their waters before it enters the estuary. Higher up in its course, the Irthing from the Cheviots containing the Gelt from the Pennines, the Eamont from Ullswater with the Lowther from the Haweswater neighbourhood, and the Lyvennet from central Westmorland, show the wide and varied regions from which the Eden draws its waters. Famous for its beautiful scenery as also for its salmon, the Eden valley affords sanctuary to an infinite variety of wild life, and ornithologist, entomologist and botanist have all explored it with pleasure and profit. Scarps and crags of limestone and red sandstone alternate with wooded gills and stretches of pastoral country. For miles of its course the river tumbles over a rocky bed, but when conditions induce a more tranquil mood, a rich and varied vegetation carpets its banks, and passing as it does for the most part through sparsely populated country, with little or no industrial activities to pollute

its waters, the influence of man on its wild life has been negligible.

Independent of the Eden two other streams which enter the Solway should be mentioned. The Wampool and the Waver have had no small influence on the formation of the salt marshes bordering the firth.

#### COAST.

In treating of the rivers which enter the Solway the extensive areas of sandflat and saltmarsh demand attention. Burgh, Rockcliffe, Longnewton and Skinburness Marshes are all famous in local ornithological lore. Formed by the deposit of alluvial matter over centuries of time, cut up by creeks and gutters along which the tides race and on occasion overflow and flood the grassy lands, they are the haunts of a specialized bird life. To the ornithologist there is no dead season here. Always there are birds about. In autumn and winter the various kinds of geese congregate in vast flocks, ducks haunt the water courses and tideways, fighting at times to nearby inland loughs, and waders and other shore birds probe and dibble in the beds of soft sand and mud.

Southwards from the Solway the coast extends to the tidal mouth of the River Kent in Morecambe Bay, and there are other parts under tidal influence in the estuaries of Leven and Duddon and those at Ravenglass. Otherwise the coast is mostly either sandy or shingly, flanked at Silloth and Drigg by considerable sand dunes. Where golf has not taken possession the natural life of the dunes has many fascinations. The rabbit burrows here are often occupied by Wheatears, Stock-Doves or Sheld-Ducks, and the furze clad borders afford shelter to some of the more interesting small birds. The dunes between Drigg and Ravenglass are a famous breeding place of gulls, terns and other species. Walney Island, too, affords sanctuary to similar birds.

The only breaks in the uniform character of the coast are provided by the bold sandstone headland of St. Bees and the lesser limestone Humphrey Head. The latter attracts few birds, but St. Bees has some of the characteristic species which love a combination of sea and cliff for domestic purposes.

#### PLAIN AND LOWLAND.

While a good deal of the area is elevated and mountainous, there is still much flat, low-lying country, especially from central Cumberland northwards, in a high state of cultivation. Along the numerous water courses there is much suitable cover for birds as the streams are often fringed with trees, bushes and rough herbage. Woodlands, too, are frequent, oak being predominant with a good sprinkling of other trees, while extensive plantations of Scot's pine, spruce and larch provide cover and shelter to some forms of bird life. During and after the war period 1914-18, the woodlands were much reduced, but perhaps with little adverse effect, as the cleared ground was frequently

left in a rough state for years afterwards to produce a scrub growth largely of birch, not without attractions to some of the smaller birds.

In recent years much re-planting has taken place, almost entirely of conifers, and what influence this will have remains to be seen. A good deal of this has been and is being carried out on the bare sides of the Lake mountains, and on the uplands adjoining the Scottish borders, ground formerly treeless, and this may in time attract species to which a bare hillside offered little in the way of food and shelter.

In various parts of the area extensive peat-mosses are present, the primitive and little disturbed character of the ground being favourable to birds, while the coniferous growth which sometimes fringes their borders brings others into their vicinity. Some of these mosses or flows such as Bolton Fell and Cumwhitton are high-lying, others like Bowness, Wedholme, Witherslack and Foulshaw little above sea level

#### INFLUENCE OF MAN.

As previously mentioned, Lakeland is a sparsely populated area with few large centres of human activity. For this reason there has been less interference with wild life than in most districts. In the west the coal and iron industries have been long established and in their early history would have some effect in banishing wild life from their neighbourhood. Here and there among the hills slates are quarried, but this industry also is of long standing and the birds appear to have accepted the conditions.

More recent human activities include the forming of reservoirs for the supply of water, sometimes to a far distant town. Thirlmere has for some years been one of these, and another of the lakes, Haweswater, is in process of following suit. The valley in which Thirlmere lies has been much beautified by careful and discriminate tree planting, and trees always have an interest for birds. On the other hand, the raising of the lake may have made it less attractive to some wild-fowl, but in the Pennines a large reservoir was made some years ago for the supply of water to Carlisle, and linked as it is with the small tarns of Tindal and Talkin, has extended the haunts of wildfowl in that neighbourhood.

Problematical in their ultimate influence on wild life are the quite recent establishment of small-holdings in various parts of the area, especially near Carlisle, under the auspices of the Land Settlement Association, and the construction of aerodromes now proceeding rapidly in the interests of national defence.

The extension of town boundaries, and the development of housing estates, may have had some effect in driving bird life further afield, but with the great extent of undisturbed country within the area it is unlikely that this has had any material influence in reducing the bird population.

## THE REARING OF DUCKS AT NETHERBY.

By ERNEST BLEZARD and TOM L. JOHNSTON.

AN account of Lakeland birds necessitates mention of the extensive duck-rearing activities which were conducted by Sir Richard Graham at Netherby, Cumberland. Here, as on other large estates in Britain, towards the end of the nineteenth century, the rearing of wild duck was begun purely from a sporting point of view and primarily to augment and vary the game shooting.

The estate is extremely well suited to the purpose as its wide bounds embrace a varied topography including woodlands, rough pasture and a large expanse of peat moss thickly grown with heather and scrub. The River Esk flows through the middle, where it is reached by several tributaries, and the Solway Firth with its broad salt marshes is within a short flight. As a further great advantage, the underlying glacial clay together with the abundant soil water, particularly in the moss land, simplified the making of rearing ponds. All these ponds, seventeen of them differently situated, were artificial, as many as sixteen of them being in operation at one time. The largest ranged in size from one to two acres, some being much less. The Great Reedmace (*Typha latifolia* Linn.) and the tall grass, Reed Poa (*Poa aquatica* Linn.) were introduced into some of the ponds, as cover, and Willows (*Salix* spp.), Cotoneaster and Rhododendron were planted about them. The surrounding bushes became a lively resort of Long-tailed Tits, Goldcrests and many other small birds. Ultimately, the ponds developed into and were run as wildfowl sanctuaries.

The practical work from pond-making to duck-rearing was carried out by the rearing specialist, William Bell, with the assistance at various times of eight of his sons. He established such a reputation for skill and success that his advice on rearing was widely sought, and several of his sons carried their practical ability to other parts of the country.

The scheme began in 1890 as an experiment with Mallard, which at first were all hatched out under domestic hens. Numbers increased as more ponds were made and more eggs and brooders became available. At first many eggs were bought or received in exchange, then most of them, as time went on, were gathered from cut-winged birds specially kept for laying. In the peak seasons from 8000 to 10,000 Mallard were hatched over and above the usual large numbers truly wild bred. In the season opening in 1902, 6710 were shot on the estate, the record day's

bag of 1317 duck being secured by seven guns which included King George V, then Prince of Wales, and Sir Richard himself.

Teal were started in 1899, mostly from eggs laid by pinioned birds. Some eggs were obtained from the nests of birds breeding wild in the neighbourhood. In a few years Teal became the next most numerous species, 1133 full-winged birds being caught up in 1908.

From 1903 to 1908 about thirty each of Pintail and Wigeon and a few Gadwall were reared annually from an originally pinioned stock, and by the last year full-winged birds of the first two species were nesting on the estate. Many wild-bred Wigeon must have been attracted to the rearing ponds as 257 were caught in 1908 and 420 in 1909.

Some twenty Shoveler were reared annually from 1905 to 1908, when the free nesting of the species had become established.

A few each of Garganey, Common Pochard and Tufted Duck were introduced in 1908 and for several seasons small numbers were reared. Pochard and Tufted Duck were not entirely successful, as the ponds were too shallow to suit them. It may be remarked that the ponds were not attractive to genuinely wild diving ducks of any kind. Incidentally, they drew large numbers of Common Snipe, which came with Teal in August and September, and Sir Richard noted the presence of an occasional Little Grebe in the breeding season.

A pair or two of pinioned American Wigeon were put on the ponds prior to 1914.

There was a complete break from 1914 to 1918 and no Mallard and very few Shoveler were subsequently reared. Also, from 1915 to 1918 there were searchlights operating in the neighbourhood and these apparently had the effect of reducing the numbers of duck coming in to the ponds at night. In 1919 rearing was resumed with a few Teal, Pintail and Wigeon from eggs gathered on the estate. Sir Richard came to prefer Teal to the heavier species and concentrated on their rearing in 1920. He had discovered that Teal and other small duck did not mate satisfactorily with their flight feathers cut, so a system of plucking was introduced to delay the birds until it was too late for them to leave and mate in distant haunts. Some Gadwall and Pintail were reared as well in 1920 from eggs taken at Loch Leven. From 1922, when they were not clipped, Gadwall were breeding at large, and by April 1929, forty to fifty full-winged pairs were frequenting the ponds.

In 1922 and 1923 five pairs of pinioned Garganey were received but not many young were hatched. The eggs of four more pairs received in April 1925 were hatched out under bantams with good results. A pair of Garganey were still nesting at the rearing ponds in 1928 and 1929.

It became the practice to catch up as many ducks as possible during autumn and winter, cut their flight feathers and keep

them on enclosed ponds until the nesting season. They regained full liberty with their next moult. All those birds caught up on the estate and retained for breeding were cut-winged, none being pinioned in the sense that they were rendered permanently incapable of flight.

Other than British species, a few Baikal Teal, Carolina and Mandarin Ducks were reared. Pairs of the last-named bred for some years in a wild state along the River Esk.

Except for a pair or two of Garganey, artificial rearing had ceased by 1926, when William Bell successfully undertook a similar venture with Red Grouse.

Results from a faunal point of view were that autumn numbers of Mallard and Teal were temporarily increased in the Solway region, and that Wigeon, Pintail and Gadwall became established as breeding birds in Cumberland, where they had not previously been known to nest. During the peak years Solway punt-gunners and shore-shooters certainly had increased bags.

The earliest colonist, the Tufted Duck, now well established in the east of both Cumberland and Westmorland, first nested in Kirkcudbrightshire in 1886, as recorded by Robert Service (*Zoologist*, 1887, p. 342). Later it began to breed at no great distance across the Solway from Cumberland at Loch Kinder. Macpherson expressed little doubt that it had bred in Cumberland prior to 1892.

Abel Chapman, who traced the colonisation of the Borderland by ducks, says that the Tufted Duck had become a familiar bird in Northumberland by about 1890, and an abundant nesting species on both sides of the Border there in 1923. In that year he describes Wigeon as almost the commonest nesting duck on the Scottish Border; Shoveler as common and breeding in numbers, especially on the Scots side, and Pochard as breeding at a score of colonies on either side (*The Borders and Beyond*, p. 216).

The nesting of the Pintail on a Cumberland coastal moss in 1917 may be connected with Netherby, but one or two pairs bred in Northumberland in the same and in the previous year, and a pair have since nested at one of the Westmorland lakes.

The trend of breeding ducks into the Border counties now extends to the Red-breasted Merganser, which from 1928 has become established in Dumfriesshire, and to the Goosander, which has since nested there more than once and has also nested in Northumberland. A brood whose specific identity was unfortunately not determined, but either Merganser or Goosander, was hatched in Cumberland in 1934.

Now, in 1943 there is an extraordinary increase in the number of Sheld-Duck frequenting the Netherby ponds.

# THE BIRDS OF LAKELAND.

## Order PASSERIFORMES.

### THE RAVEN—*Corvus corax corax* L.

A staunch old resident, the Raven breeds in all the high fell groups and is tenacious of its ancestral crags, many of which lie between the altitudes of 1500 and 2000 feet. The number of breeding pairs falls not far short of forty, and there are besides many non-breeding birds which become conspicuous in parties at nesting time. Any local reductions in numbers have simply followed upon an increase during the war period 1914-18.

Altogether there are not fewer than fifty nesting crags either constantly or occasionally favoured by the Raven. Some of them are shared by the Peregrine and the Buzzard, and in the curious interchange of sites by these species, each of the three has been known to occupy precisely the same eyrie in successive years. There is a Cumberland tree-nesting site in an aged Scots pine which was unsuccessfully resorted to in 1938. A nearby beech tree was occupied in 1939. In one of the Westmorland nesting haunts erythristic eggs have been found for some thirty years, and for part of this time there was also a bird in Cumberland laying the red type of egg.

The Raven like its lesser relatives has the habit of communal roosting and similarly changes its gathering places. The principal roost is in one or other of three adjacent dales in the Westmorland Pennines. Between 1909 and 1913 E. B. Dunlop found up to fifty or more birds resorting to the centre one, the highest counts being made in autumn and winter. From 1925 to 1927, when twenty-seven were counted one September, they were in changed quarters, sleeping in a crag at nearly 2500 feet, and by 1931 they had moved across to the further dale. No large roost is known in the central region.

The Raven is a great local wanderer at all seasons, and birds that have lost their eggs will spend the day miles afield, returning to their home crags before evening. There are regular movements from one fell group to another in the central region, and constant comings and goings between the Lake Fells and the Pennines. On occasions in winter birds travelling towards the Cheviot Hills have been observed from the Eden valley. Except when passing high overhead, the Raven is rarely seen away from the fells although it will sometimes frequent the lower valleys during winter.

THE HOODED CROW—*Corvus cornix cornix* L.

A winter-visitor, arriving usually in October and lingering into late April. Most often it is solitary but occasionally it is seen in parties and sometimes consorting with Carrion-Crows.

It appears regularly in the Solway region, and near Anthorn, where visitors are fewer since a pine wood roost was felled, six were seen feeding with Rooks in October 1935. During the winter of 1910-1911, seven to eight birds were attracted by flesh manure on fields at Carlisle, and in 1926, one or two frequented a city refuse tip. Some few frequent the Pennine region, especially near Kirkby Stephen, and parties of six, eight and twelve have been seen in recent years in the neighbourhood of Crossfell. Elsewhere the Hooded Crow is casual and least frequent in the central region, although R. H. Brown observed more than thirty feeding together in an uncut field of oats by Bassenthwaite Lake in 1927.

There are rare occurrences of nesting in Cumberland. Dr Moon reports that in 1925 a pair nested at Gowbarrow and that in 1929 one was mated to a Carrion-Crow there. At Anthorn in 1940 a pair built in a pine occasionally favoured by Carrion-Crows, and James Storey, who had the nest under daily observation, eventually saw three young fledged. For several weeks the whole family roosted in a belt of pines at one end of the village.

Only some half dozen occurrences have been noted during the last thirty years in the South Westmorland valleys, and there is a similar scarcity in North Lancashire.

THE CARRION-CROW—*Corvus corone corone* L.

Despite constant shooting and trapping, a common resident, there being few districts and those mostly in the south of the area, where its numbers are small. They are particularly high in the Solway region and in some Westmorland valleys of the central region. Distribution in North Lancashire is comparatively even.

Fell-haunting birds breed up to 1800 feet; and on the northern moorlands and in the Pennines commonly use thorn bushes. There are three recent instances of nests being built in rocks, and there are urban nesters at Carlisle and Barrow-in-Furness.

Only breeding pairs are unsociable, there always being companies representing non-breeders, family parties or roosting flocks. The large communal roosts are occupied from September onwards, and of those harbouring a hundred or more birds, two are in the Solway region at Rattlingate and Burghmoor and one to the west of the Cumberland plain near Sebergham. In Westmorland during 1910, E. B. Dunlop found on to sixty birds roosting at Hilbeck, forty near Windermere, and, in 1909, five or six in larches at an altitude of about 800 feet on Kirkstone Pass.

There was a Carrion-Crow with large patches of white on its wings at Kirkby Stephen in the spring of 1914. An albino, in

the Carlisle Museum, was trapped near Appleby, Westmorland, on 3 May 1924.

Four Carrion-Crows have been recovered in Lakeland, near to where they were ringed as nestlings, one to two years later.

#### THE ROOK—*Corvus frugilegus frugilegus* L.

An abundant and increasing resident. Deserted rookeries are outnumbered by those newly formed or grown in size. One at Easton, near Drumburgh, Cumberland, was for several years established in an orchard. In 1904 a pair of Rooks built their nest between two chimney pots on a cottage adjoining a small rookery in Carlisle.

In winter some rookeries serve as roosts for considerable aggregations of birds, as at Armathwaite and Rose Castle, Cumberland, leaving others temporarily deserted. The latter are, however, visited periodically by their owners. Some birds that frequent the Silloth district in the daytime cross the Solway each evening to roost on the Scottish side. Two large Westmorland roosts, Reston and Dallam, nightly draw birds from very wide areas, and at Dallam the numbers have been estimated by M. E. W. North at ten thousand. In June 1910, E. B. Dunlop found Rooks and Jackdaws roosting together among Bilberry (*Vaccinium Myrtillus* L.) at an altitude of about 1500 feet on a slope of Dufton Pike. During the summer months, birds from the fell-foot rookeries habitually spend the day foraging the high fells even to the summits.

Numbers are augmented in winter by seasonal visitors as is evident in the Solway region, and as noted in the Lune valley by the Rev. E. U. Savage.

In the winter of 1917-18 there was a fawn-coloured Rook at Levens, and in January 1919 a similar one near Heversham.

Recoveries of Rooks ringed as young in Lakeland show some slight dispersal within the area, and a Rook ringed as a nestling in Cheshire in 1926 was found in Cumberland in April 1928.

#### THE JACKDAW—*Corvus monedula spermologus* Vieill.

An abundant and increasing resident.

Sea cliffs at St. Bees, rocky sides of watercourses, Whitbarrow Scar and many more of the lower fell crags, as well as a variety of other sites, including steeply sloping rabbit warrens, all hold strong colonies. There are instances in Westmorland of disused Magpie nests and a Heron nest being adopted, and open nests, entirely Jackdaw structures, are occasionally found in trees. In 1904, an open nest was built between two chimney pots on a cottage in Fingland, Cumberland, after the birds had been evicted from the flue. The Jackdaw is closely associated with the Rook, sharing winter roosts and flocking to rookeries at evening during breeding time. At Reston, where there is a large nesting colony in the scar, there is also a winter roost in company with rooks in

the wood below. Temporary visitors may in some measure account for the large size of winter flocks.

Pied birds are frequent in Carlisle and in 1930 there was a white one in the stock at Furness Abbey.

Ten years of ringing returns show that Lakeland bred Jackdaws remain in the area, the birds being recovered in subsequent years at or near to where they were reared.

#### THE MAGPIE—*Pica pica pica* (L.)

A common resident, breeding up to about 1500 feet, but most numerous on such low-lying grounds as the Solway region in Cumberland and the Foulshaw and Grange districts in Westmorland and North Lancashire. Its numbers thin out towards the north of Cumberland and in the Ullswater district. It is rather local in the Pennine region, especially towards the south-eastern limits, where it is reported as becoming scarcer. In common with several other species it increased during the war years 1914-18 but was later reduced to its former standing. Now with the decline in game preserving it is, in some parts at least, again becoming more numerous and there are districts where it has much increased since 1940.

From autumn to spring Magpies flock together for roosting. E. B. Dunlop noted on to forty at each of two Westmorland roosts, Hodge Howe in 1909 and Cockshot Wood in 1910; and in 1932 S. Spedding counted fifty-two Magpies roosting in a small larch wood in the same neighbourhood. This roost was used well into the breeding season. In the Solway region, E. B. Dunlop and L. E. Hope visited the hedgerow roost of a hundred birds near Kirkbride in 1912 and E. Blezard counted over two hundred resorting to a belt of mixed trees and bushes at Beaumont in 1926 and 1927.

#### THE BRITISH JAY—*Garrulus glandarius rufitergum* Hart.

A resident, kept in check in game coverts, yet contriving to maintain a strong footing in most of the woodlands.

Locally common in Cumberland, it becomes thinly distributed towards the north and again in the Ullswater district.

Its Westmorland strongholds are around Grasmere, Ambleside and Windermere. Here, and in parts of the Lune valley, it is increasing. From the Orton district eastward to the Pennines it is scarce.

The Jay does not penetrate so far into the fell valleys as the Magpie. It shuns the open except when foraging along hedgerows, and is fond of nesting in thickly grown copses, especially of birch. Nests have been found in tall gorse bushes by C. F. A. Ritson and by P. S. Day. During the winter, there are local concentrations due to birds flocking together to roost in some chosen resort.

THE CHOUGH—*Pyrrhocorax pyrrhocorax pyrrhocorax* (L.)

A former resident, breeding near St. Bees, Cumberland, until about 1860, and for perhaps a little longer at Whitbarrow, Westmorland. Its subsequent appearances as a wanderer do not seem to have been continued since two birds were killed in Cumberland, one at Longtown about 1870, and one a few years later near Wigton. Macpherson points to the probability of their having strayed from the then tenanted cliffs on the Scottish side of the Solway.

THE STARLING—*Sturnus vulgaris vulgaris* L.

A very numerous resident, passage-migrant and winter-visitor. In the steady course of its general increase and expansion, the Starling has occupied all types of countryside. In the woodlands penetrated, it evicts the Great Spotted Woodpecker, Green Woodpecker, Pied Flycatcher, Redstart and other species from their nesting sites.

Flocks of non-breeding birds are constantly present and account for certain collective roosts, as at Kendal, being used practically if not quite all the year round. Home bred birds gather up in May and June when they resort to collective roosts. Flocks of these birds roam the fells up to 2000 feet. Some of the largest roosts, occupied by tens of thousands of Starlings when numbers are augmented by winter-visitors, are at Netherby, Rose Castle, Newton Regny and Kirkoswald in Cumberland and Cams-gill in Westmorland. Roosting quarters may be changed two or three times in the course of a winter. At Netherby birds favour birches until the leaves are off and then go into pines and spruces. Beds of reeds, willows and laurels are used in other localities.

Two winter birds ringed in Cumberland have been recovered in Sweden and one in East Prussia. A Starling marked in Denmark in June 1920 was found on Walney Island in April 1922, and another, marked as a young bird in Sweden in May 1937, was recovered in Cumberland in December of the same year. Several ringed as nestlings in Lakeland have been recovered in Ireland before the end of the same year.

White plumaged birds occasionally occur both in local broods and in the winter flocks, and silver-grey individuals have at times been obtained.

THE ROSE-COLOURED STARLING—*Pastor roseus* (L.)

Not more than ten examples of this rare wanderer have ever been obtained in Lakeland. Subsequent to the publication of his *Fauna*, Macpherson recorded a Rose-coloured Starling seen on several occasions at Allonby, Cumberland, during the summer of 1898. (*Vict. Hist. Cumb.*, Vol. 1, p. 189.)

THE GOLDEN ORIOLE—*Oriolus oriolus oriolus* (L.)

A rare wanderer to Lakeland, traced on only four occasions by Macpherson.

An immature male, now in the Carlisle Museum, was picked up dead by the Rev. T. H. Baines at Brathay, Westmorland, on 16 May 1909. (*British Birds*, Vol. 4, p. 79.)

H. B. Turney contributes the information that during the summer of 1933 an adult male was seen near Ulverston, North Lancashire, and that it was probably the same bird then reported from Hawkshead. It was doubtless also the one noted at Holker by D. Kinnard.

THE HAWFINCH—*Coccothraustes coccothraustes coccothraustes* (L.)

A rare Lakeland bird in 1892, which has become a firmly established resident and is still increasing.

In Cumberland, it strongly favours the Carlisle district and the south-centre of the county. It continues at Netherby where it was discovered nesting in 1907, and is evidently settled in other parts of the north and in the Eden valley. Known for some years in the middle of the county, it bred near Plumpton in 1931. In the west it is still known only as a wanderer.

Now a comparatively common bird in parts of Westmorland, the Hawfinch had notably increased by 1913 at Dallam, where it was first recorded nesting in 1890. Other regular haunts are in the Windermere valley, over which it has spread since 1903; at Levens and in the Kirkby Lonsdale district. The last, a known locality for some thirty years, is now favoured by some numbers.

In North Lancashire the Hawfinch has nested regularly around Ulverston since 1909, and at Coniston it has become one of the more familiar bird residents since 1921. It is established at Holker and evidently at Haverthwaite.

Out of the breeding season, parties of a dozen or more birds, and solitary individuals, are of widespread occurrence, the former most frequent in Westmorland. The first Hawfinches noted at Great Salkeld in the Eden valley were raiders on garden peas. Near Carlisle in the winter of 1928, a party of eight was attracted by an abundance of yew berries; and near Kendal, in March 1937, H. Millard found that Hawfinches up to the extraordinary number of sixty, came for damson stones littering an orchard after a very heavy crop.

THE GREENFINCH—*Chloris chloris chloris* (L.)

A common resident and winter-visitor in agricultural districts outside which it may be scarce or absent. Gardens and other enclosed grounds have a great attraction for it at nesting time.

It gathers in flocks by late July and from then on is given to wandering. From some, but not all central fell districts it is

practically absent between August and March. The winter flocks, especially in the Solway region and the Eden valley, occasionally number up to three hundred. Chaffinches, Linnets, Yellow Buntings and Reed-Buntings associate with these flocks.

Greenfinches ringed as nestlings in Cumberland and Westmorland have been recovered from outside counties in various directions during autumn and winter. Others have been found in their home localities in following springs.

#### THE BRITISH GOLDFINCH—*Carduelis carduelis britannica* (Hart.)

In 1892 the Goldfinch had declined until it was uniformly scarce in Lakeland. It has since made a full recovery in every quarter of Cumberland. An increase was noted in the Eden valley in 1907, and the last decade has seen a great general advance, both in and out of the nesting season. Flocks of seventy or more birds are common in autumn but much less so in winter. There are distinct spring flocks, usually up to forty strong, and one at Thurstonfield, in April 1931, numbered about two hundred.

A local increase in Westmorland began before 1922, but while small parties have become more frequent generally, breeding birds are still sparingly distributed, becoming rare in the Lune valley and most of the central region. The large autumn flocks are attracted to the Eden valley near Kirkby Stephen, and in September 1925 a flock of about two hundred frequented Langdale, Ambleside.

The Goldfinch remains uncommon at all seasons in North Lancashire. Formerly common at Rusland, it is now only occasionally seen there, but it has nested at Cartmel and on Walney Island. There have recently been winter parties at Barrow and Haverthwaite.

#### THE SISKIN—*Carduelis spinus* (L.)

There is scant evidence of the nesting of the Siskin in Cumberland since Macpherson learned of its taking place at Netherby prior to 1885. E. Blezard found a nest in the Solway region in May 1923. T. L. Johnston has observed paired birds in suitable haunts there, and on 24 May 1931, he and R. A. H. Coombes watched a pair in Gelt Woods. As a winter-visitor to Cumberland, the Siskin is present in varying numbers from October to March, and regularly arrives overland, sometimes in large flocks, to the west of the county. Its appearance in any haunt is influenced by the fruiting condition of the alder trees. The Lesser Redpoll is a winter associate.

In Westmorland, where the Siskin is known in winter chiefly in the south and east, it is not nearly so frequent, and in North Lancashire it is reported as rare. The only spring record for Westmorland is of a pair observed by the Rev. E. U. Savage to frequent Levens churchyard in April 1919.

THE MEALY REDPOLL—*Carduelis flammea flammea* (L.)

A winter-visitor of which a good many have been taken by birdcatchers in West Cumberland prior to 1928. It has not since been noted there. In East Cumberland George Bolam saw two at Langwathby, and one at Melmerby, on 11 November 1913. During the winter of 1921 a large party frequented a railway embankment at Carlisle and received attentions from local bird fanciers. On 2 December that year, there was a single Mealy Redpoll frequenting the same hedgerows as Waxwings at Todhills, to the north of the city.

A male was obtained at Windermere, Westmorland, on 27 December 1921.

C. F. Archibald noted a Mealy Redpoll on Rusland Moss, North Lancashire, 8 January 1914.

[Over a period of years prior to 1908, two Nicholson brothers, cage bird fanciers and well acquainted with the Mealy Redpoll, took about fifteen Redpolls which they ascribed to the Greenland race, *Carduelis flammea rostrata* (Coues). They were all taken in the neighbourhood of Flimby on the west coast of Cumberland, and during severe autumn or winter weather.]

THE LESSER REDPOLL—*Carduelis flammea cabaret*  
(P. L. S. Müll.)

A widely distributed nesting bird even if, as in some fell localities, represented by no more than a pair or two. In other districts, usually where there are birch thickets or nursery gardens, it is almost colonial, although generally subject to fluctuation in numbers. Markedly gregarious immediately after nesting, it becomes much more numerous in winter after the arrival of visiting flocks. These, varying much in size, commonly frequent growths of alder and birch. A spring passage is indicated by flocks seen into late May.

THE BRITISH TWITE—*Carduelis flavirostris pipilans*  
(Latham)

As a nesting bird the Twite occurs very sparingly on mosses in the Solway region, on the Pennine moors of both Cumberland and Westmorland, and in one or two localities in the central fells. It has been recognised in spring on moors near Tebay, and on two North Lancashire moors, from one of which nesting is reported.

From August onward, it regularly appears, sometimes in fair flocks, on the Solway salt marshes. Rarely, a flock has been seen on the Cumberland Pennines in winter. Usually it is then seen inland only as a straggler or in small parties.

On the fells east of the Lune valley, the Rev. E. U. Savage found the Twite common on autumn migration and witnessed large southward movements, on 26 September 1929 and 12 August 1931.

THE LINNET—*Carduelis cannabina cannabina* (L.)

A common bird at all seasons in much of the low country and tending to diminish until rare, or absent, from some of the innermost fell districts, although found breeding up to 1200 feet. A bird of colonial nesting habit, the Linnet may be found established in some numbers in such a favourite place as a bed of gorse bushes, but perhaps for no more than a period. An extreme inconstancy to nesting sites is marked in Westmorland where colonies grow and vanish within a few years.

A large immigration, beginning in September, is particularly noticeable on the Solway where flocks feeding on the salt-marshes may number thousands of birds. There are wandering flocks, which at times include Greenfinches and Chaffinches, in evidence from August until the end of winter.

A Linnet recovered at St. Bees, Cumberland, in November 1928, had been ringed as a nestling at Kirkconnel, Dumfries, in the previous year.

THE BRITISH BULLFINCH—*Pyrrhula pyrrhula nesa*  
Math. and Ired.

A resident, especially favouring those woodlands affording thickets of blackthorn and birch, and also fond of nesting in gardens and shrubberies. Apart from local fluctuations, it is fairly evenly distributed, if perhaps nowhere numerous, in Cumberland. In Westmorland, though numbers may vary from year to year, it is consistently common round Windermere and in similar well wooded districts, becoming scarce or rare in the more open country but showing a tendency to increase in the south and south-east. It is again common round Coniston and Grange-over-Sands in North Lancashire. Small wandering flocks are general in autumn and winter, some of them frequenting the fells to feed on the seeds of Heather (*Calluna vulgaris* Hull.). Bullfinches were very plentiful at Levens, Westmorland, in the winter of 1918-19.

A pied cock Bullfinch was shot at Meathop, Westmorland, a few years ago.

THE COMMON CROSSBILL—*Loxia curvirostra curvirostra* L.

Time and again, this irregular visitor has remained to nest in East Cumberland, and since the immigration of 1927, it appears to be permanently resident there. Nests were found in 1930, 1933 and 1936.

The first record of earlier Crossbill visitations since 1892 is from North Lancashire, where there was a flock of twenty at Rusland in July 1894. A single bird was seen at the same place in the following December, and a flock at Graythwaite in February 1895.

In Cumberland there was a party at Thurstonfield in November and December 1903 and a large flock near Langwathby during 1905.

Trace of the visitation of 1909 begins with a single bird at Colton, North Lancashire, in September. Around Windermere, Westmorland, varying numbers up to thirty were seen from November 1909 until May 1910, and some few in the August following. Flocks were again present from August 1911 to January 1912. Visitors to Cumberland in 1909 were reported from Penrith Beacon where a nest was found in 1910 and another in 1911, and some birds were reported as still present in 1913, after which year the woods were felled. There was a party near Keswick in October 1911.

From 1915 to 1917 Crossbills were constant to an East Cumberland locality. A handsome red-plumaged bird was found dead near Ambleside, Westmorland, in October 1919, and in the same autumn the birds were seen near Keswick.

Westmorland and Cumberland in succession had early evidence of the large immigration of 1927. Five Crossbills were seen in Kentmere in June; five at Ambleside on 10 July; one, a juvenile, in Carlisle on 12 July, and three at Bowness-on-Windermere on 21 July. Two were seen at this last place on 27 September. From 22 July to 13 August, between thirty and forty Crossbills were under daily observation in Manesty Woods, by Derwentwater, and in mid-July, there were about twelve at Loweswater.

Since 1927 the Crossbill has been noted annually in one part or another of Lakeland from Carlisle to Coniston, and eastward to Temple Sowerby and Barbon. In June 1928 a Sparrow-Hawk brought a male Crossbill to its nest in a Westmorland valley. In December 1930 there was a flock numbering fully forty in the east of the county, where nesting is suspected. The Crossbill is again constant to the Penrith district and presumably nesting there.

#### THE PARROT-CROSSBILL—*Loxia pytyopsittacus* Borkh.

Macpherson gives two Cumberland records of this rare wanderer from north Europe. They refer to two birds shot on the River Irthing, about 1850, and three shot at Newby Cross, Carlisle, in December 1865.

#### THE TWO-BARRED CROSSBILL—*Loxia leucoptera bifasciata* (Brehm)

A male Two-Barred Crossbill which had been consorting with Bramblings, was taken by R. Lewis at Maryport, Cumberland, on 28 September 1908. Brought to notice by J. Wilson, it is the only known occurrence of this rare wanderer since the winter of 1845-46 when, as Macpherson records, there was a flock in North Cumberland. Two of the birds obtained in that winter came with the Edenhall Collection to the Carlisle Museum.

THE BRITISH CHAFFINCH—*Fringilla cœlebs gengleri*  
Kleinschmidt

By far the most widely distributed resident small bird, nesting from sea-level up to the tree limit at about 1500 feet on the fell sides.

In late summer most of the Chaffinch population gathers into flocks which remain about the stubble fields, woodlands and hen-runs until the following spring, sometimes in company with other finches. The summer flocks are mainly composed of juveniles; later on small parties of cocks or hens are sometimes seen but most of the flocks consist of both sexes, even if there is a preponderance of one or the other.

How far the winter flocks are made up of migrants from further north is difficult to estimate. Ringing records and field observations on individual birds show little movement even within the area, and seem to indicate that most of the flocks are drawn together from no great distance. On the other hand, migrations of Chaffinches have been observed in the Solway region and elsewhere, and some of the flocks do not disappear until well into April when the local birds are paired and even starting to nest.

The only Chaffinch yet recovered outside the area was an adult ringed near Kendal, Westmorland, in March 1935, and recovered in Belgium in November 1936.

An albinistic specimen was shot near Carlisle in December 1927; one was seen in Carlisle in February 1932 and another in North Cumberland in 1934.

Miss M. Garnett saw a fledgling with a very conspicuous crest on the back of the head, in a family party at Windermere in July 1920. The parent birds and the other young ones were quite normal. On 19 November 1926 a cock with an exactly similar crest was seen in a nearby wood.

THE BRAMBLING—*Fringilla montifringilla* L.

A not uncommon but very erratic and local winter-visitor.

Bramblings appear rather more regularly in Cumberland than in the southern part of Lakeland. In most districts they are seldom seen far from large beech trees, and although they sometimes feed in stubble or on seeds of sedges and similar plants, their visits depend chiefly on the crop of beech nuts. Nearly every year sees a good crop of mast, but usually the nutshells are empty. If they are full, an influx of Bramblings invariably follows, and the birds, usually in company with Chaffinches and Tits, forage under the beech trees as long as any nuts remain. In other years they either do not come at all or appear only for a few days before moving on somewhere else.

Bramblings arrive from October onward, but usually not before November, and sometimes they do not appear before December or January. They occasionally stay well into April and one was seen by Dr D. G. Garnett at Windermere on 2 May 1927.

F. H. Day heard a male, a solitary bird, in song near Carlisle on 23 March 1941.

Small flocks numbering from half-a-dozen up to twenty or thirty birds are usual, but very large flocks have occasionally been seen in the central region. Miss M. Monro found hundreds of Bramblings roosting in a garden near Kendal in 1933-34. This winter was one in which Bramblings were widely present in great numbers. One bird ringed near Kendal in December 1933 was recovered in Belgium in October 1934.

#### THE CORN-BUNTING—*Emberiza calandra* L.

A very local resident which has increased in the northern part of the area since 1892.

Corn-Buntings are now fairly well distributed in North and East Cumberland and common in parts of the Solway region and the Cumberland plain; especially near Allonby, Skinburness, Wigton and round Carlisle. They are found from Carlisle south to Penrith and Bampton, and along the foot of the Pennines into Westmorland where they are common at Brough and Kirkby Stephen. They have nested at Alston in the Cumberland Pennines since 1913, and in East Westmorland, Miss M. Garnett heard several cocks singing near Orton in June 1942.

Numbers in different localities sometimes vary considerably from season to season.

In the southern part of the western coastal region the Corn-Bunting has become scarce and is rarely seen in South Westmorland, while in the central region it is unknown, except for a single bird seen by E. Cohen at Bowness-on-Windermere, 20 April 1929.

Corn-Buntings flock in autumn and winter, sometimes in company with Yellow- or Reed-Buntings. In stubble fields in Cumberland flocks of a score or more are not infrequently seen, and sometimes larger gatherings, which may, since the bird is a late nester, remain together till early summer. They sing nearly all the year round, the winter song being very subdued.

A white cock bird was seen near Carlisle in October 1933, and in the following summer T. L. Johnston found it nesting in the same locality.

#### THE YELLOW BUNTING—*Emberiza citrinella citrinella* L.

A widely distributed and common breeding bird in most districts but rather local in some parts of North Cumberland and the central region. It nests from sea-level to rough hillsides at about 800 to 1000 feet.

The Yellow Buntings that breed in the Central region and on higher ground leave their summer haunts in autumn to join the flocks in the open country that are to be seen about stubble fields, stack yards and hen-runs in company with Chaffinches and Greenfinches. They return to the nesting places and begin to roost in pairs in February, but although nesting starts in April,

some flocks do not break up until early summer and may be composed of non-breeding birds.

A large immigration was observed by H. W. Robinson on the South Westmorland border on 6 February 1921, and there may be some southward migration in September, but most movements seem to depend on food supply.

#### THE CIRL BUNTING—*Emberiza cirius cirius* L.

It is only in recent years that the Cirl Bunting has been reported from Lakeland.

A male was watched for some time at close quarters in the Carlisle Nature Reserve on 7 April 1914 by Miss S. Mounsey-Heysham. One was seen on Grune Point, Skinburness, on 7 April 1934 by W. Nichol, and a male near Silloth on 22 October 1934 by the Rev. G. F. Courtenay.

Nesting has been reported from two localities: Greystoke, where in 1930, Dr Moon identified a hen bird feeding young which had left the nest; and Seascale where J. G. Roper saw adults and young and later found their old nest in 1932, and again found the birds nesting in 1934.

#### THE REED-BUNTING—*Emberiza schœniclus schœniclus* (L.)

A widely distributed bird, nesting commonly in suitable places round the lakes and tarns and in marshy and reedy pastures from sea-level to 1200 feet.

Reed-Buntings are partial-migrants in Lakeland, leaving the central region and more exposed breeding grounds in autumn, and returning from mid-March to early April. Even round Windermere they are rarely seen in winter.

In other districts they join up into flocks at that season, sometimes in company with Yellow Buntings and finches. On migration in spring they may associate with Pied Wagtails and Meadow-Pipits.

#### THE LAPLAND BUNTING—*Calcarius lapponicus lapponicus* (L.)

A very rare visitor which has occurred once in each of the three counties. The birds noted were all in female dress. The first was taken by a birdcatcher near Milnthorpe, Westmorland, in 1843 as recorded by S. H. Haslam (*Zoologist*, 1843, p. 316).

Macpherson and C. F. Archibald saw the next on Walney Island, North Lancashire on 17 October 1890. The third, which was very tame, was watched feeding on Bowness Moss, Cumberland by T. L. Johnston, J. Storey and T. L. W. Strother on 1 May 1927.

THE SNOW-BUNTING—*Plectrophenax nivalis nivalis* (L.)

A regular winter-visitor in varying numbers to the fells of the Pennines, Howgill group and central region, and to the Solway coastal marshes.

On the fells Snow-Buntings are usually found in small parties, but flocks of fifty to a hundred are occasionally seen. They feed on the seeds of the Field Woodrush (*Luzula campestris* DC.) and Heath Rush (*Juncus squarrosus* L.) as well as on the seeds of grasses, and generally keep above the 1500 foot level. On the coast, where their diet consists largely of seeds of Sea Pink (*Armeria maritima* Willd.), Sea Aster (*Aster Tripolium* L.), Plantains (*Plantago* spp.) and Marram (*Ammophila arenaria* Link.), they are not usually present in any great numbers, though hard weather may bring an increase. They are rarely seen on low ground in other parts of the area though a very large flock was reported near Hawkshead, North Lancashire, on 4 February 1934 by Miss Harrison.

Snow-Buntings begin to arrive early in November, and they leave about the end of March. Several years ago A. Dixon saw a small party on the High Street range about 20 May, an exceptionally late date.

THE HOUSE-SPARROW—*Passer domesticus domesticus* (L.)

An abundant resident nesting commonly in towns and villages and in the more fertile corn-growing country. It is absent from the isolated sheep farms of North Cumberland, rather local in some of the dales and, in general, does not wander far from cultivation.

Loose, untidy nests in apple and other trees and in thorn hedges are often seen in the low country but not in the central region and higher districts.

THE TREE-SPARROW—*Passer montanus montanus* (L.)

Macpherson knew the Tree-Sparrow as an extremely local bird, in Cumberland only. He records its nesting in a few places in the Solway coastal region, and twice in East Cumberland. It is still local, but much more widely distributed, and now nests in all three counties, usually in small isolated colonies.

In Cumberland there was at one time a colony of about twenty pairs nesting in the matted branches of old Scots Pines near Anthorn. This began to dwindle about 1921 and is now reduced to one or two pairs. Smaller colonies are found in other parts of the Solway region, in North and East Cumberland, in the Pennine region and the Cumberland plain. Tree-Sparrows replace House-Sparrows to some extent in the Pennine fell-foot districts where they nest in the isolated stone barns. In the Irthing valley and elsewhere holes in willow, ash and oak trees are favourite sites.

In Westmorland and North Lancashire Tree-Sparrows are less common; the first Westmorland record is of a bird seen by E. B.

Dunlop at Troutbeck on 12 June 1907 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 6). There are now small colonies in the Kent valley, as at Sizergh since 1919, and at Burneside. Others exist in various places near the southern estuaries and in the Furness district of North Lancashire.

Tree-Sparrows are double brooded. Some birds move about the country during the winter in company with Chaffinches and Yellow Buntings while others frequent their nesting haunts all the year round.

#### THE WOOD-LARK—*Lullula arborea arborea* (L.)

Macpherson knew the Wood-Lark to nest in the widely separated localities of Castlesteads, Camerton, St Bees and Ravenglass in Cumberland, and Kendal in Westmorland, but during the present century there has been no record of its doing so anywhere in Lakeland.

The only recent note is by William Nichol who saw a Wood-Lark in company with Meadow-Pipits at Skinburness, Cumberland, on 19 September 1933.

#### THE SKY-LARK—*Alauda arvensis arvensis* L.

A resident, winter-visitor and passage-migrant.

The Sky-Lark breeds commonly from the coastal salt-marshes and sand dunes throughout the low country to the vicinity of the fells where, as is most apparent in the central region, there is a peculiar alteration in its distribution. In its approach to the fell country it takes to high ground, nesting on isolated tops and in upland pastures, and so altogether avoiding the valleys, it ranges to the highest fells, there nesting up to 2600 feet. Song has been heard above a plateau at 2900 feet.

Central fell haunts include the tops of the Skiddaw and Helvellyn groups of mountains, and of the High Street and High Style ranges. As a bird of the fells the Sky-Lark is more numerous in the Pennines, and several pairs nest on the extensive flat top of Wild Boar Fell. The high nesting grounds are abandoned in autumn and begin to be re-occupied in March.

While some districts become deserted, others, especially near the coast, receive large numbers of Sky-Larks in September and October, stubble fields then often being crowded. A good many travel on, yet winter flocks sometimes number up to five hundred. These break up or remove early in the year, and in March and April there is a regular northward passage through the area of small parties and flocks numbering up to fifty or more.

#### THE SHORE-LARK—*Eremophila alpestris flava* (Gm.)

A rare passage-migrant and winter-visitor recorded four times from the Solway and once from Walney Island by Macpherson. Later records are all from the Solway at Skinburness and supplied by William Nichol. He shot one Shore-Lark in January

1895 and four on 23 February 1908. On 7 May 1920 he observed one in company with Sky-Larks and remarked upon the yellow feathers of the head being much brighter than in the birds he had shot in winter.

RICHARD'S PIPIT—*Anthus richardi richardi* Vieill.

Macpherson gives three instances of this rare passage-migrant on the Cumberland Solway, April and October 1889 and September 1891. He mentions a probable occurrence near Derwentwater.

There have been three later occurrences in the Solway region. A Richard's Pipit, now in the Carlisle Museum, was shot by T. Williamson on Edderside Moss on 10 October 1898, and another was seen by T. Mann at Aigle Gill on 9 November in the same year, both places being near Allonby. (*Vict. Hist. Cumb.*, Vol. 1, p. 185.) William Nichol, who supplied one of the earlier autumn records, observed a Richard's Pipit on Grune Point, Skinburness, on 20 May 1920. This bird had sought refuge at the lee side of a hedge during wild weather.

THE TREE-PIPIT—*Anthus trivialis trivialis* (L.)

A summer-resident, arriving from the first week of April onward, and leaving in August. Early arrivals, at least, may be passage-migrants through the area, as also, for example, numbers of birds noted at Alston in August.

In general the Tree-Pipit is evenly distributed throughout the wooded districts. Locally, it is fairly common in North Cumberland and in South and East Westmorland. For some years past it has decreased around Carlisle and Barrow-in-Furness.

Unlike the Meadow-Pipit, the Tree-Pipit usually appears singly or in pairs. It is most constant to its nesting haunts, which are often railway embankments. In fell districts, where its range overlaps that of the Meadow-Pipit, it nests up to about 700 feet.

Tree-Pipits ringed as nestlings in Cumberland have been recovered in Portugal in September.

THE MEADOW-PIPIT—*Anthus pratensis* (L.)

A widely distributed resident, a passage-migrant and a winter-visitor.

The Meadow-Pipit is a common nesting species from the coastal mosses, sand dunes and marshes, through the commons and cultivated land to the fells, breeding up to 2900 feet in the central region and 2800 feet in the Pennines. Fell breeding birds may flock in late July, but usually leave in September and October to return in March. A few cling to the high ground, even up to 2000 feet, during the winter.

The spring passage, from the end of March to late April, covers the whole area, large flocks travelling northward by the river valleys, through the central region and along the coast. Continuous streams of birds regularly travel up the Solway to about



MARJORY GARNETT.

MEADOW-PIPIT SCOLDING BROODING MERLIN.

Grune Point, from where they take a north-easterly direction. The autumn passage is not so extensive but has been noted as occurring strongly in the Eden valley. Wheatears have been seen with an autumn flock, and Pied Wagtails often accompany the Pipits on both autumn and spring migration.

Parties of Meadow-Pipits occur locally both inland and on the coast in winter, but in some parts, especially the central region, only odd stragglers are usually seen at that season.

Two Meadow-Pipits ringed as young birds in Cumberland have been recovered in autumn in the south of France.

In 1934, on a moor in Kentmere, a Meadow-Pipit's nest was found within fourteen feet of that of a Merlin. At first both birds were incubating; later, when the pipit's eggs had hatched, the old pipits came constantly to scold at the Merlin on her nest and to pursue her whenever she left or returned to it. The hawk seemed to take not the slightest notice of them.

#### THE WATER-PIPIT—*Anthus spinoletta spinoletta* (L.)

An example of this native of central and southern Europe was seen on the Cumberland Solway, on 21 January 1938, by Richard Perry and recorded by him. (*Field*, 8.10.1938.)

#### THE ROCK PIPIT—*Anthus spinoletta petrosus* (Mont.)

A very local resident, breeding in small numbers at St. Bees Head, Cumberland, and suspected of occasionally nesting on the Solway salt-marshes. It has also been noted at Silloth in June.

Macpherson states that the Rock-Pipit breeds on Walney Island, but although it has been seen in the vicinity at the appropriate time of year, there does not appear to be any definite nesting record. Both W. Dodd and H. W. Robinson identified the species near Walney in June 1933.

As a passage-migrant and winter-visitor the Rock-Pipit regularly occurs, both singly and in small parties, on the Solway salt-marshes.

#### THE BLUE-HEADED WAGTAIL—*Motacilla flava flava* L.

A rare visitor which has nested in Cumberland. It was not until seven years after his *Fauna* was published that Macpherson first came across the Blue-headed Wagtail in Cumberland when, on 1 May 1899, he saw a single bird on the sea banks near Allonby. (*Vict. Hist. Cumb.*, Vol. 1, p. 185.) Since then Dr Moon has twice noted its occurrence near Ullswater on migration, two or three being seen together in the late autumn of 1923 at Patterdale, and two in company with Yellow Wagtails near Pooley Bridge on 29 April 1931.

George Bolam found two pairs nesting at Alston, Cumberland in 1928. (*Trans. N.H. Soc. N.D. & N., N.S.*, Vol. 8, p. 22.)

THE YELLOW WAGTAIL—*Motacilla flava flavissima* (Blyth)

A common summer-visitor, nesting in the alluvial meadows of delta land round most of the lakes and some of the tarns, and in meadows and rough pastures of the central valleys and fell foot country of the Pennines up to about 1000 feet. It is especially common in some parts of East Westmorland but rather sparingly distributed on low ground away from the fells. For some years a pair nested by some railway sidings in the centre of Carlisle and the nest has been found on a small island in the Eden estuary.

Although Macpherson considered the Yellow Wagtail decidedly scarce in Lakeland it was listed by Dr Gough as common at Kendal in the middle of last century and more recent observers have confirmed his estimate. In the last twenty years it has certainly increased and extended its range. At Alston, for instance, where it was first found nesting in 1917, it is now numerous, and two pairs were noted at Tindale Tarn in the same region in 1939. A pair nested near Raughtonhead, Cumberland, in 1941. The bird appears to be still increasing in other districts.

Yellow Wagtails arrive in the last half of April or beginning of May and leave again about mid-September. Nesting haunts in East Westmorland have been found deserted by their many pairs and offspring by 9 August. Single birds or small parties appear in the Solway region in July and August and considerable numbers pass through the central region near Ambleside on both spring and autumn migration, as many as thirty having been seen together in spring by Arthur Astley.

A Yellow Wagtail ringed as a young bird at Kendal in July 1932 was recovered at Casablanca, Morocco, in November 1934.

There are a few records of birds seen in winter: one near Allonby on 27 November 1890 by T. Mann; one near Alston on 31 October and 1 November 1916, and another at the same place on 30 November 1920 by George Bolam; and one at Bassenthwaite on 4 December 1920 by H. A. Booth.

An albinistic bird was seen by H. H. Farwig among a family party of Yellow Wagtails at Keswick on 25 August 1920. Its general appearance was dirty white, with the top of the head and some tail feathers greyish.

THE GREY WAGTAIL—*Motacilla cinerea cinerea* Tunst.

A partial resident and summer-visitor, nesting fairly commonly beside the becks of the central fell region and Pennines up to 1500 feet, and by some of the rivers where stony banks afford suitable nesting places.

In southern Lakeland the Grey Wagtail is gradually but steadily decreasing though a local increase has been noted east of the Lune valley.

The birds breeding on the higher becks are usually absent during the winter, returning about the beginning of March, but odd birds or pairs are not infrequently met with on lower ground

in the central region even in very severe weather, and some pairs breeding in more sheltered localities appear to be resident throughout the year.

Passage-migrants, either single birds or small flocks, are occasionally seen in the Solway region and on the southern estuaries in September and October.

#### THE PIED WAGTAIL—*Motacilla alba yarrellii* Gould

A partial resident, summer-visitor and passage-migrant, common and widely distributed, nesting from sea-level to 2000 feet in the Pennines, and commonly seen about farm houses far up the dales.

In late summer Pied Wagtails leave the higher nesting haunts, and small or sometimes larger flocks appear on the coast or round the lakes. The autumn migration begins in late August and goes on until about the end of October, passage-migrants coming through at the same time from further north. Numbers gradually dwindle and though some birds remain throughout the winter, even in the central region, the majority are absent from November to February.

During migration and in early winter large gatherings of Pied Wagtails roost in the reed beds at the head of Windermere, and in beds of reedmace and willows at Longtown and other places. In autumn and winter there has been for many years a very large communal roost on the glass roof of Carlisle railway station, birds coming to it nightly from all directions. There are smaller roosts on other glass-roofed buildings in the city. Pied Wagtails have also been found roosting in bracken, and, on spring migration, in gorse bushes.

The return passage begins at the end of February and continues till well into April, the later birds travelling through on their way further north after the local pairs have settled down. In spring as in autumn the migration routes through the central region are used as well as those along the coast.

Pied Wagtails ringed as young birds in Lakeland have been recovered in the month of February in France and Portugal.

#### THE WHITE WAGTAIL—*Motacilla alba alba* L.

A passage-migrant in small numbers. It has nested in Westmorland.

White Wagtails on spring migration are observed regularly in many parts of Lakeland in the last half of April and in May. They usually appear singly or in small parties. The main stream of migration probably follows the western coast and the Solway, but birds are also met with travelling up through the central region.

The return passage, which was almost unknown to Macpherson, takes place in September and October and seems to follow a more easterly route. Birds are seen then in North Cumberland

and the Solway region and in South and East Westmorland but apparently not on the west coast, and very rarely in the central region.

On 23 June 1917 a pair of White Wagtails were seen feeding their young at a place between Grasmere and Thirlmere as recorded by H. W. Robinson. (*British Birds*, Vol. 11, p. 65.)

THE BRITISH TREE-CREEPER—*Certhia familiaris britannica* Ridgw.

A fairly common resident occurring in both deciduous and coniferous woods throughout the area. In some localities it becomes more numerous in winter, when it commonly associates with Tits and Goldcrests, than in summer. This has been particularly noticed in South Westmorland. Seasonal wandering has been remarked from the Solway, as noted by the Rev. G. F. Courtenay, at Silloth, where the Tree-Creeper is seen only from August to December, and then usually singly, an exception being a small party in August 1930. Numbers were much reduced in some districts after the severe winter 1935-36.

The Rev. E. U. Savage was the first to record, from Lakeland, the habit of roosting in holes, evidently self-made, in the trunks of Wellingtonias (*British Birds*, Vol. 16, p. 284). Alder and willow trees are also used in this way.

Unusual nesting sites include a space between post and wall inside a wooden shed; a gap between a stone gatepost and a wall of a stone building, and a crack between a door jamb and a clay wall. Two nests have been found in railway sleepers serving as fencing posts, one behind a notice board nailed to a tree and another behind a large leaden spout head twenty feet or more up on an otherwise bare wall.

THE BRITISH NUTHATCH—*Sitta europæa affinis* Blyth

A rare Lakeland bird, whose nesting in Westmorland has now been proved.

Winter birds, all in Cumberland, have occurred in recent years as follows: one at Langwathby in 1907; a pair near Boot in January 1921; and one, which came to a bird table for nuts, at Castlesteads in the winter of 1934-35.

Several times in May 1928 N. Tracy heard the call of the Nuthatch on the Cumberland side of the Eamont near Pooley Bridge, a locality from which the bird was reported in 1848.

In Westmorland the Rev. E. U. Savage knew of a nest in an orchard between Whitbarrow and Levens in 1916, and for several years in succession a pair bred at Witherslack.

THE BRITISH GREAT TIT—*Parus major newtoni* Prazak

A common resident avoiding only the actual coast and the high fell grounds. After the nesting season it flocks with other

kinds of tits and accompanies them in their winter wanderings. These foraging flocks often include Goldcrests and Tree-Creepers.

The Great Tit is in song from January to May, and again from August occasionally until November.

**THE BRITISH BLUE TIT**—*Parus cæruleus obscurus* Prazak.

The most numerous of all the tits, resident in both town and country, and in the fell districts found as far up as the limit of the trees.

After the breeding season it joins up with related species into small foraging flocks which at first are accompanied by warblers. On the departure of the warblers, the Blue and other tits associate with finches and may be seen feeding under beech trees with Chaffinches and Bramblings. Even during the nesting period, two or three kinds of tits, including the Blue Tit, will gather from time to time into what appear to be food hunting parties.

Blue Tits ringed as adults at Arnside, Westmorland, have been caught again six and seven years later at the same place.

**THE BRITISH COAL-TIT**—*Parus ater britannicus* Sharpe & Dress.

A common resident, but not so plentiful as either the Great Tit or the Blue Tit. The Coal-Tit is much more a woodland bird, showing a preference for pine-woods, in which it is generally distributed in varying numbers. Very commonly a hole in the ground is chosen as the nesting place.

Until the hard winter of 1916-17 so greatly reduced it in the Windermere district, the Coal-Tit was distinctly commoner there than the Marsh-Tit, upon which the severe weather had comparatively little effect. The two became about equally common, the Marsh-Tit being perhaps the more local. In the same district the Coal-Tit showed some decrease after the severe winter of 1939-40 but, with other tits, seemed little affected by the two following almost equally hard winters and it was present in normal numbers in 1942.

**THE BRITISH MARSH-TIT**—*Parus palustris dresseri* Stejn.

In Cumberland, where the Willow-Tit has been distinguished as by far the commoner bird since their separation, the Marsh-Tit appears to be very sparingly represented. A Marsh-Tit sent to H. F. Witherby was shot out of a small flock by George Bolam at Birdoswald, towards the northern limits of the county, on 6 January 1913. A nest has been found near Wigton by the Rev. Father R. H. Kerr, and another near Carlisle by E. Blezard. In the heart of the county, Dr Moon notes the bird as breeding at Calthwaite, Hutton-in-the-Forest and Greystoke. Birds described as Marsh-Tits have been reported from the Eden Valley.

Westmorland shows the converse in having the Marsh-Tit as a fairly common resident, to the exclusion of the Willow-Tit. It is very common in the Windermere and Grasmere districts, at Levens and in the Lyth valley, and eastward to Kirkby Lonsdale and Barbon in the Pennine region. It has also been recognised at Kirkby Stephen. Apart from holes in trees, birds in Westmorland have been known to nest in crevices in rock-gardens and to occupy nesting-boxes.

The Marsh-Tit, of the two forms compared, is the bird of North Lancashire. It is in fair numbers throughout the Furness District, nesting down to Barrow, and locally common at Grange-over-Sands. At Brantwood, Coniston, between 1933 and 1936, when it was encouraged by an artificial food supply, it became as numerous as the Blue-Tit.

THE BRITISH WILLOW-TIT—*Parus atricapillus kleinschmidti*  
Hellm.

The Willow-Tit is sparingly distributed over the northern half of Cumberland and ranges as far as Maryport in the west. It is comparatively common in the Solway region where damp woods and copses, predominantly birch, provide an attraction in the abundance of decayed stumps suitable for nesting. A single bird was identified by M. G. Robinson at Braithwaite, Bassenthwaite, in January 1943.

After the nesting season families or small parties forage together, and during autumn and winter, wander through woods and hedgerows in association with other species of tits. Winter feeding haunts become breeding haunts when decayed stumps are available. In this way the Willow-Tit is increasing and extending its range.

The Willow-Tit excavates a new nesting chamber each year, occasionally returning to the same stump. The nesting cavity may be situated from a few inches up to twelve or more feet above the ground, usually in a decayed butt stump, less often in the stump of a main limb. Birch stumps are principally favoured, but rowan, willow, alder and pine are also used. In one district decayed birch and pine fencing posts have been found in use. Both Great Tit and Blue Tit victimise the Willow-Tit by readily stealing its newly excavated nesting chambers. The actual nest infrequently includes moss, after the fashion of the Marsh-Tit, but typically it is formed of rabbit fur and vegetable down interwoven with shreds of birch or honeysuckle fibre. Often a few small feathers are included. T. L. Johnston, from whose experience the above observations are mainly drawn, found the Willow-Tit nesting near Carlisle in 1903 and his diagnosis of the subspecies was confirmed when a nesting female he took in the same district was sent to H. F. Witherby in 1925.

Except for a record from Shap and a probable nesting record from Ambleside, evidence of the Willow-Tit is lacking for West-

morland where, as in North Lancashire, it is replaced by the Marsh-Tit.

THE NORTHERN LONG-TAILED TIT—*Ægithalos caudatus caudatus* (L.)

A Cumberland occurrence of this rare straggler from Northern Europe is detailed by Macpherson.

On 26 November 1891, Tom Duckworth came across a party of about a dozen Long-tailed Tits in a lane between Orton and Thurstonfield. Three of the birds were conspicuously distinguished from the others by their pure white heads. Failing to secure one of them, he went to Macpherson in order to see a cabinet skin of the Continental bird, and assured him that the plumage agreed with that of the three birds he had seen.

THE BRITISH LONG-TAILED TIT—*Ægithalos caudatus rosaceus* Mathews

A resident, commonest in the woodlands, but found in the open country wherever there are trees and bushes, especially gorse and blackthorn in which it is fond of nesting. More rarely it nests at some height in oak, ash, apple, birch, spruce and other trees and in the central region it occasionally favours the juniper bushes that cling to the fell slopes. At Coniston, in 1936, K. R. Towndrow had under observation a nest in which the young were reared by four adults.

Family parties or small flocks of Long-tailed Tits wander the woods and hedgerows during autumn and winter when they consort with other kinds of tits, Goldcrests and sometimes Redpolls and Siskins. While severe winters, such as that of 1916-17, greatly reduce their numbers for a time, there was, at least in parts of Cumberland, no appreciable reduction after the hard weather in February and March 1929.

THE GREAT GREY SHRIKE—*Lanius excubitor excubitor* L.

A winter-visitor invariably occurring singly, and noted most years in some part or other of Lakeland. Recorded from the Pennine region, the Solway region and down through the interior of Cumberland and Westmorland to Rusland in North Lancashire, it seems to avoid only the western coastal districts. Usually it first appears in November although an early arrival was seen by J. Cropper in Westmorland on 19 October 1937. It has been present in all the winter months, and in Cumberland a late bird was seen by R. H. Brown at the end of April 1917, another by J. Storey in April 1923, and in Westmorland one was seen by H. W. Robinson on 21 April 1924.

THE WOODCHAT SHRIKE—*Lanius senator senator* L.

Macpherson includes the Woodchat Shrike as a Lakeland bird from an account of one seen at Stainburn, near Workington, Cumberland, on 11 April 1872.

THE RED-BACKED SHRIKE—*Lanius collurio collurio* L.

This summer-resident appears to be even scarcer than it was during the last century when it was known to nest with some frequency, if only very sparsely, in both Cumberland and Westmorland. The only definite record since then comes from Workington, West Cumberland, where A. Barton found a nest about 1922.

D. Kinnard met with the Red-backed Shrike near Pooley Bridge, Cumberland, in 1933 and 1934 without finding a nest in either season. Elsewhere in the county, H. Calvert saw a single bird near Lazonby in May 1935, and W. Nichol two at Skinburness in the twenty years prior to 1921.

Arthur Astley had a report of a pair breeding more than once in recent years at Ambleside, Westmorland, and a Red-backed Shrike shot in June 1918 at Dallam was seen there by H. W. Robinson.

T. A. Coward says that some of the scattered Lancashire localities are in Lakeland Lancashire. (*Ann. Rep. Lancs. and Chesh. Fauna Comm.*, 1921.)

THE WAXWING—*Bombycilla garrulus garrulus* (L.)

An irregular and ordinarily scarce winter-visitor which, during some of the periodic, large, general invasions has reached Lakeland in considerable numbers.

Between 1892 and 1912, Waxwings, singly or in small parties, were reported in at least nine seasons from various parts of Cumberland, Westmorland and North Lancashire.

Within the area, the 1913-14 visitation was greatest in Westmorland, parties being distributed throughout the south of the county. There were some in the Carlisle district, and a bird was obtained at Gilsland in North Cumberland.

Next followed the invasion of 1921-22, exceptional in point of numbers, and largely concentrated in Cumberland where flocks of thirty or more Waxwings appeared in the Carlisle district, and one of about twenty at Skinburness. The birds ranged to the west coast, a party of seven being observed at Workington, and further through the central region to the Westmorland and Lancashire border.

In December 1925, Waxwings were seen at Glenridding, Westmorland, and at Cark-in-Cartmel, North Lancashire. In 1927-28 Cumberland had them at Laversdale and Silloth, while at Todhills, a place much frequented in the seasons 1913-14 and 1921-22, there was a flock of about twenty.

Waxwing visitors were only few in 1931-32, couples being seen at Ambleside and Warcop in Westmorland, and at Carlisle. Similarly in 1932-33, they occurred in Westmorland at Ambleside and Bowness-on-Windermere and Crosthwaite, and in Cumberland at Carlisle. The invasion of 1936-37 was not apparent in Lakeland until March. In that month Cumberland had a flock numbering about forty at Cargo-on-Eden, another about twenty at Wigton, and parties of four at Dalston and Carlisle. In Westmorland a party of ten were seen in Easdale.

Waxwings have been present in October, as at Flimby, West Cumberland, in 1911. Late dates are 22 April 1911, when E. B. Dunlop saw two at Troutbeck, Westmorland, and 8 April 1922 when George Bolam saw four among Redwings and finches at Alston, Cumberland.

#### THE SPOTTED FLYCATCHER—*Muscicapa striata striata* (Pall.)

A summer-resident, locally fluctuating in numbers, yet consistently common and generally distributed. It arrives from the end of the first week in May onward, and leaves in September, although eggs have been found in August. A belated bird was seen by R. Mann for two days, 15 and 16 October 1906, at Leegate, Cumberland.

The Spotted Flycatcher follows the tree growth into the fell dales, and in the central region often nests in close proximity to the Pied Flycatcher.

Besides the more usual tree sites, nests are often placed on masonry such as the sides of bridges and garden walls, and not uncommonly in old or recently vacated nests of Song-Thrush and Blackbird. In Kentmere in 1937 a Spotted Flycatcher laid in a Chaffinch's nest without adding to it, two or three days after the Chaffinch's eggs had been taken. A nest in the garden of H. Walker at Grange-over-Sands was robbed of the four eggs by a Red Squirrel.

#### THE PIED FLYCATCHER—*Muscicapa hypoleuca hypoleuca* (Pall.)

This engaging summer-resident, known for a hundred and fifty years as the most notable small bird of Lakeland, has always been very local in distribution, yet common in its chosen haunts. Pied Flycatchers arrive with great regularity about the third week in April, the cocks preceding the hens by a few days. There is a considerable surplus of cocks and for the first week or two much fighting goes on for nesting sites and mates. Miss Armitth noted that Starlings were dangerous rivals for nesting sites at Rydal in 1899, and that Redstarts also competed with the flycatchers for natural holes in trees and loose stone walls in former days. Great and Blue Tits have always been rivals for natural sites, as they are now also for nesting-boxes, but unless the tits are

already in possession when the flycatchers arrive the pugnacious little black and white birds seem well able to hold their own. Where the bird is extending its range it is usually the unattached cocks which colonize new localities, appearing perhaps and singing for one or two seasons in some suitable place before a hen comes to join them. After the nesting season, about the end of June, neither old nor young are often seen. They appear to disperse among the tree tops. C. W. Coward has occasionally seen family parties high in the branches of deciduous trees, and on two occasions, in July and August of different years, Miss M. Garnett has seen a young bird in a mixed company of tits and warblers.

During the last thirty years or more, the Pied Flycatcher has increased very considerably and become more widespread in the central region from Ullswater and Derwentwater in Cumberland to Windermere in Westmorland. In lesser degree its numbers have risen in West Cumberland and in the Lune Valley in East Westmorland. In common with other small migratory birds, the Pied Flycatcher has probably always been subject to fluctuation in numbers from year to year, and Miss Armitt noted a marked increase in the south central region in 1894, '95 and '96. The great advance since the beginning of the century has without doubt been largely due, as Arthur Astley pointed out in 1922, to the practice of erecting nesting-boxes in gardens and private grounds, and at the present time the number of pairs in some favoured localities is apparently only limited by the number of nesting sites available. Dr Moon had sixteen pairs occupying boxes around his home at Ullswater in 1937 and twenty-two pairs nesting in 1939. Twice in recent years very large clutches of eggs in nest boxes in Langdale have led to the belief that two hens were laying in the same box.

In Cumberland, away from the central region, the Pied Flycatcher is found in small numbers principally along the foot of the Pennines as far south as the Westmorland border and beyond to Harbour Flatt, near Murton, and in the river valleys. The rivers Eden, Eamont, Cambeck, Irthing, Gelt, Petteiril and Caldew all have their scattered pairs and some few disperse over the Cumberland plain, including the Carlisle district, which was first colonised about 1820. George Bolam first found a nest at Alston in 1917.

From the great strongholds in Westmorland, round Grasmere, Rydal and Ambleside, Pied Flycatchers have spread east and south and now nest regularly round Windermere village and fairly frequently in some localities in Bowness. This is as yet about the limit of their range to the south in this district and they only occasionally nest in the southern part of the Troutbeck valley. They are absent from Kentmere and Longsleddale, but Mardale, over the hills to the north, has a flourishing colony on the shores of Haweswater, linking up with the old time haunt of

Lowther. In 1942 a nest in a new locality near Burneside may show a tendency to spread out from Windermere towards Kendal. Levens Park, where Pied Flycatchers frequented the banks of the Kent in 1793, was deserted in 1891 when Macpherson visited the place, but the Rev. E. U. Savage knew of a pair nesting there between 1914 and 1921. Pied Flycatchers have been seen occasionally at other places in south-east Westmorland, as at Dallam and Kirkby Lonsdale. They appear to be absent from the Westmorland Pennine region south of Harbour Flatt except for the Barbon district where they are reported to be increasing.

In North Lancashire the chief haunt is round Coniston, where Pied Flycatchers have increased in recent years. The thickly populated Westmorland region ends rather abruptly south and west of Ambleside at the River Brathay, which here marks the county boundary, and on the North Lancashire side the birds are absent from many apparently suitable localities in the valleys between Coniston and Windermere. Only a few scattered pairs nest from time to time in the Ulverston district and near Grange-over-Sands.

Two Pied Flycatchers ringed as nestlings at Rydal, Westmorland, in June 1932, were found again in their home county at Ambleside in May 1934. A bird recovered at Deux Sevres, France, in April 1937 had been ringed as a nestling at Ullswater, Cumberland, in June 1934. Another, ringed as a young bird at Ullswater, in June 1938, was found to have returned to the same place in May 1939.

#### THE BRITISH GOLDCREST—*Regulus regulus anglorum* Hart.

A resident in both coniferous and mixed woods throughout the area, and a winter-visitor.

Though one of the small birds nearly exterminated in parts of South Westmorland during the severe winter of 1916-17, it had regained its numbers by 1923. It suffered again very badly in the Windermere district during the great frost of 1940 and to a lesser extent in the two following hard winters.

Nests in spruce or pine trees have been found at heights varying from four to forty feet. Other nests have been found behind ivy stems on deciduous trees, and among honeysuckle trailers. T. L. Johnston has twice found nests in gorse bushes. On two occasions in Westmorland, two nests have been found in the same tree, one a pine at Knock in 1933, the other a yew at Ambleside in 1934. Also at Ambleside, birds nested in one particular yew tree for sixteen consecutive years. Many nests are destroyed by Squirrels and Jays.

There is usually a considerable increase in the numbers of Goldcrests during winter, and flocks which commonly include various kinds of tits, then roam the woodlands up to the fell slopes. The Tree-Creeper is another winter associate. There was a large scale winter movement on the Solway in December 1932

when numerous Golderests with tits in their company were seen congregated on Grune Point, Skinburness, by William Nichol.

**THE FIRECREST**—*Regulus ignicapillus ignicapillus* (Temm.)

A winter-visitor or passage-migrant infrequently recorded.

Miss S. Mounsey-Heysham found one dead near Harker, Cumberland, on 6 October 1911.

Dr Moon records the occurrences of single birds around Ullswater in December 1929 and on 17 and 24 April 1932, the last two over the Westmorland border in Glenridding. In the following winter, 1932, he notes the Firecrest as present in some numbers in the Ullswater district.

**THE CHIFFCHAFF**—*Phylloscopus collybita collybita* (Vieill.)

A widely, though sparingly distributed summer-resident, becoming rarer towards the fell country. It favours both deciduous and coniferous woods and is notably faithful to its nesting haunts.

The earliest warbler to arrive, the Chiffchaff is often heard before the end of March, but is not present in full numbers until the second week of April. A Chiffchaff seen at Windermere on 23 March 1936, and one at Coniston on 24 March the same year are the earliest local records. A few notes of song are produced in September, the month of departure.

**THE WILLOW-WARBLER**—*Phylloscopus trochilus trochilus* (L.)

A common and widely distributed summer-resident, and, notwithstanding its fluctuations, the most numerous of the warblers. There were pronounced local shortages in its numbers in 1934.

A most adaptable bird, its haunts are extremely varied, and amongst the fells it ascends as far as there are trees and bushes.

It has been noted at Coniston, North Lancashire, on 2 April, but it begins to arrive in full force at the end of the second week of April. Return migration starts in July and continues to the end of September, there being a late period of song in August and this month.

A Willow-Warbler ringed as a nestling at Ullswater, Cumberland, in June 1925, was recovered at Blackpool, Lancashire, in May 1926.

**THE WOOD-WARBLER**—*Phylloscopus sibilatrix* (Bechst.)

A summer-resident, arriving from April onward, whose numbers and distribution vary with the extent and location of the more open deciduous woodlands, especially those where oak and beech predominate. It is plentiful in many parts of Cumberland and Westmorland, and in parts of the central region, where it ranges up to 1000 feet, it is the prevailing warbler of the native fell woodlands. In the Westmorland Pennines it penetrates to

the limits of the birch wooded gills. In North Lancashire, where it is comparatively no less numerous, it is rather more local in its distribution.

THE YELLOW-BROWED WARBLER—*Phylloscopus inornatus inornatus* (Blyth)

At 7.30 on the morning of 14 October 1920, William Nichol found a small bird perched on the cord of a stake-net in the Waver estuary, Cumberland Solway. At less than six feet distance, besides noting the general greenish plumage, he was particularly impressed by the double yellow wing-bars and the light eye-stripe. On a subsequent visit to the Hancock Museum, Newcastle-upon-Tyne, he examined a specimen of the Yellow-browed Warbler which left no doubt in his mind that the bird he had seen belonged to this subspecies.

This warbler is now considered to be an almost regular passage-migrant in very small numbers along the east coast of England from mid-September to late October.

THE GRASSHOPPER-WARBLER—*Locustella naevia naevia* (Bodd.)

A rather local summer-resident in variable numbers.

Fond of the low peat-mosses, it is not uncommon in the Solway region and a few pairs frequent Foulshaw Moss in Westmorland and Rusland Moss in North Lancashire. Other haunts include rushy fields, woodland clearings, young plantations and gorse patches, and at times nests are found in the overgrown sides of roads or lanes. Although heather ground is favoured in the low country, it is not followed to any height on the fells, birds in the central region seldom occurring away from the rough cover around the lakes and larger tarns.

The distinctive song is heard before the end of April. On one occasion in early May some moss-land lanes by the Solway were full of Grasshopper-Warblers which sang incessantly all day as though signalling their arrival. Song usually ends when the eggs are being incubated and may be resumed when they are hatched.

THE REED-WARBLER—*Acrocephalus scirpaceus scirpaceus* (Herm.)

A scarce and rather erratic summer-visitor in all three counties.

Macpherson records a nest and eggs taken in the Eden valley in 1840 and a single bird shot at Bassenthwaite. Besides these two occurrences he only knew of a doubtful instance of nesting near Kirkby Lonsdale.

A Reed-Warbler, probably a straggler on migration, was seen near Allonby, Cumberland, in the spring of 1899, and in more

recent years Dr Moon found a nest at a place in mid-Cumberland where some three pairs have since nested, perhaps annually.

A small nesting colony was discovered in North Westmorland by J. Oliver Wilson, and he has had birds under observation in a second nearby haunt.

In the Westmorland part of the central region a nest of the Reed-Warbler was found at Grasmere in either 1904 or 1905, by J. Davidson, and a nest, apparently of this bird, was destroyed by storm and flood on another lake in 1936. A nest containing eggs was found by E. Wightman in a small marsh in the Windermere district on 5 June 1938.

K. R. Towndrow was satisfied that a pair of Reed-Warblers were breeding in a North Lancashire locality in 1934.

#### THE SEDGE-WARBLER—*Acrocephalus schoenobaenus* (L.)

A summer-resident in suitable haunts throughout the area, not so numerous around the lakes as about the lesser sheets of water and boggy ground intersected by ditches. In the low country it often nests in hedgerows or bushes at some distance from water.

It arrives generally in early May and leaves in August and September. A bird on passage occurred at Skeggles Water, a Westmorland moorland tarn at 1000 feet, on 3 May 1926.

#### THE GARDEN-WARBLER—*Sylvia borin* (Bodd.)

A common summer-resident, and after the Willow-Warbler and Common Whitethroat, the most numerous of the warblers, even outnumbering the Whitethroat in some wooded districts in Westmorland.

It breeds throughout the area in woods, thickets and gardens, there favouring tangled undergrowth or low bushes and sometimes hedgerows. Occasionally it is found nesting in the lower branches of a tall tree.

It arrives rather late in April and leaves in August and September.

A Garden-Warbler ringed as a young bird at Cumdivock, Cumberland, in June 1929, was recovered in the Basses Pyrenées the following September.

#### THE BLACKCAP—*Sylvia atricapilla atricapilla* (L.)

A summer-resident of wide but local distribution, and though attracted by similar, or often the same haunts, much less numerous than its near relative the Garden-Warbler.

It is rare in the Ullswater district, comparatively common locally in South Westmorland, and fairly well represented in Furness. In one North Cumberland locality the ascendancy of the Garden-Warbler is only recent, the Blackcap being formerly the more numerous.

It arrives usually from mid-April onward but has been noted at Windermere on 9 April, and in 1926, a nest near Carlisle contained a clutch of five eggs by 30 April. Two broods are sometimes reared and most birds are gone by September.

A late Blackcap was shot at Allonby, Cumberland, on 17 November 1898.

**THE WHITETHROAT**—*Sylvia communis communis* Lath.

A common summer-resident, fluctuating in numbers like the Willow-Warbler, after which it is the most abundant of the warblers.

Its numbers are comparatively small in parts of the central and Pennine regions, although, where its chosen type of cover occurs, it breeds up to about 1300 feet. There was a decided increase in the number of pairs breeding on the higher moors around Kentmere, Westmorland, in 1942 when shortages were reported from the lower ground.

The Whitethroat begins to arrive at the end of April or beginning of May and a few remain until late September.

A late spring migratory movement was observed by the Rev. E. U. Savage at Raughton Head, Cumberland, on 20 June 1921, when at 6.0 a.m. hedges and banks were full of passage White-throats. They had gone by 10.0 a.m., leaving only the nesting pairs which had arrived on 6 and 7 May.

A young Whitethroat ringed at Ullswater, Cumberland, in 1928, was recovered two years later at the same place.

**THE LESSER WHITETHROAT**—*Sylvia curruca curruca* (L.)

A sparsely distributed summer-visitor, yet possibly often overlooked, since in the Carlisle district it has been found nesting fairly consistently since 1920. Further north in the county it nested near Brampton in 1912; in the Pennine region at Alston in 1916 and 1918; in the Solway region at Abbeytown and in mid-Cumberland at Calthwaite in 1930. In the south-west the bird was recorded from Muncaster and Ravenglass in 1906.

The Lesser Whitethroat is equally widely recorded from Westmorland. In the south it nested at Windermere in 1911 and 1923, at Ambleside from 1921 to 1923, at Kendal in 1930 and at Arnside in 1935; in the south-east at Barbon in 1927, 1931 and 1933 and at Kirkby Lonsdale in 1934 and 1935; and in the north-east at Temple Sowerby in 1935, 1936 and 1938. It has also been observed at Levens and Staveley.

In North Lancashire the Lesser Whitethroat nested at Rusland in 1915 and recently near Barrow-in-Furness.

Birds evidently still on passage have been heard by Dr M. S. Wood near Arnside, each April for some years. Sometimes three or four have been in song but only, as it seems, before moving on in the early days of May. A single bird was observed on Grune Point, Solway, on 26 April 1930.

THE FIELDFARE—*Turdus pilaris* L.

A common but rather erratic winter-visitor and passage-migrant.

The earliest Fieldfares arrive in September and exceptionally at the end of August, but it is not until October that any numbers are present. From that time onwards flocks, sometimes accompanied by Redwings, may be seen, chiefly in the open country and eastern districts. They move from place to place according to the food supply and their numbers vary much from year to year. Some flocks visit the high fellsides up to 2000 feet or more, where, as stated by R. H. Brown, the birds feed on the seeds of Field Woodrush (*Luzula campestris* DC.). They are seldom found in the wooded parts of the central region.

In Cumberland the greatest numbers are to be seen when the return passage sets in, from the beginning to the middle of April. Most leave towards the end of that month but stragglers and even large flocks are occasionally met with in all districts up to the middle of May. A bird which had probably been injured was caught in Carlisle in July 1899, as recorded by Macpherson, and a few were heard at Alston on 11 July 1918, by George Bolam.

The general trend of their migrations is from north-east to south-west and back in spring. Most of those visiting the southern part of Westmorland seem to come from the east but some probably use the passes of the central region. Irregular movements on a large scale are sometimes observed. There was a big migration of Fieldfares with a smaller number of Redwings, north-east over Skinburness towards Cardurnock on 27 October 1933, and on 29 October there were large numbers in the fields between Glasson and Anthorn, also moving north-east. These movements were observed by W. Nichol and T. L. Johnston.

Macpherson mentions several white and cream-coloured specimens which had been obtained in Cumberland.

THE MISTLE-THRUSH—*Turdus viscivorus viscivorus* L.

The Mistle-Thrush is less numerous than the Song-Thrush in summer but very common and widely distributed throughout the area and nesting up to 1500 feet in the fells where trees are available.

In late summer flocks of Mistle-Thrushes visit the wild cherry and rowan trees and also frequent the higher fellsides in search of the mountain berries. These flocks, consisting mainly of birds of the year, usually disperse before winter. There is a certain amount of southward migration through the central region in September and October, but numbers remain fairly constant and some breeding pairs at least seem to stick to their haunts throughout the year.

A Mistle-Thrush ringed as a nestling at Langwathby, Cumberland, in 1932 was recovered at Thernay, Loire-et-Cher, France, in November 1933.

A very light fawn-coloured bird was seen with a migrating flock near Hartsop on 22 September 1907, by E. B. Dunlop.

THE BRITISH SONG-THRUSH—*Turdus ericetorum ericetorum* Turton

A resident and passage-migrant, very common throughout the area in summer and not usually ranging so far from cultivation as the Blackbird, though George Bolam records a nest in an old building at over 2000 feet on Crossfell. The breeding stock is sometimes temporarily reduced by a hard winter.

There is some local movement after the nesting season, when small parties appear on the fellsides in search of bilberries and other fruit, but not in such numbers as the Mistle-Thrushes.

In autumn a southward passage has been observed at Skimburness and other places, and most birds leave the area. The valleys of the central region are almost deserted in November and December and numbers elsewhere are very much reduced. Ringing records show that though a few birds remain near their nesting haunts, the general trend of migration is towards the west of Ireland, where many Song-Thrushes, bred in Lakeland, have been recovered in winter.

The return to the nesting places starts in January and song begins then or in early February. It is only exceptionally that certain individuals sing throughout the winter. In the Carlisle district numbers are not up to breeding strength till about the end of February, and it is about this time and in early March that small parties of passage-migrants are noted travelling north through the central region and on the Solway.

A Song-Thrush's nest observed by Miss S. Graham at Arthuret in 1931, held two Thrush's and four Blackbird's eggs. Incubation was at first shared by both species, but finally the Blackbird sat alone and four Blackbirds and one Thrush were reared. A similar occurrence, near Kendal in 1936, of Song-Thrush and Blackbird using the same nest was reported to the Rev. E. U. Savage. In neither case was there any suggestion of interbreeding.

Small, dark-plumaged Song-Thrushes have been reported in winter from South Westmorland, particularly near Levens, where the Rev. E. U. Savage has seen small parties of them about the fields regularly during the winter months. On 27 October 1935 C. W. Coward saw near Grasmere large parties of Song-Thrushes which appeared smaller and much darker than the local birds. Similar migratory flocks of Song-Thrushes seen annually passing through Lancashire and Cheshire were ascribed by T. A. Coward to the Hebridean race, but their true identity is at present doubtful.

THE CONTINENTAL SONG-THRUSH—*Turdus ericetorum philomelus* Brehm

Birds considered to be Continental Song-Thrushes have been observed twice in Cumberland. Five or six were seen among a

flock of Redwings near Alston on 19 January 1913, by George Bolam, and one on Geltsdale fells on 3 March 1935, by Ritson Graham.

A flock of seventy-five to a hundred thrushes, which, judging from their light coloration belonged to this race, were seen by Arthur Astley in a garden at 580 feet near Ambleside, Westmorland, on 9 October 1921 (*British Birds*, 15, p. 209).

#### THE REDWING—*Turdus musicus musicus* L.

A common winter-visitor and passage-migrant.

Redwings often accompany the winter flocks of Fieldfares in the open country and on the fells, but are seldom so abundant as that species. They are however much more regular in their appearance in the wooded southern parts of the central region.

Although they have occasionally been recorded as early as August, most of the migrants appear from early October onwards, when great numbers are heard during the night flying south-west or south-south-west over Carlisle. It is interesting to note that flocks are sometimes observed travelling north-east at this season, as at Brampton on 4 and 8 October 1911 and on the Solway on 27 and 29 October 1933.

In spring their twittering song is sometimes heard before they depart, usually rather earlier than the Fieldfares, though in some years both remain in Cumberland well into May before leaving in an easterly direction.

There are two recent summer records. Two or three Redwings were seen by George Bolam at Alston in July and August 1918, one of them being finally killed by a Sparrow-Hawk. Another was seen flying north across the sands at Grune Point, Skinburness, on 14 June 1920 by W. Nichol.

The Rev. E. U. Savage noted a great mortality among both Redwings and Fieldfares, but especially the former, at Levens in the hard winter of 1916-17. Very few of either were seen the following winter.

Three pied birds have been obtained in Cumberland, one in recent years.

#### THE RING-OUZEL—*Turdus torquatus torquatus* L.

A summer-visitor nesting sparingly in the fells of the central region. Numbers vary from year to year, but there is evidence that in some of the southern valleys the birds were formerly much more plentiful and widely distributed. It is fairly common in the Pennines and increasing in some districts.

The nest is commonly built among heather or bilberry in a cleft or on a crag, up to 2000 feet, occasionally in juniper or gorse bushes on the lower moors and very often in the derelict buildings about abandoned fell mine workings.

Ring-Ouzels arrive on the fells of the Barbon district at the end of February or in early March, but not usually before late

March or early April in the central region. They are rarely met with away from the fells, but single birds or pairs have been seen on several occasions near the coast from Workington to Skinburness, usually in spring or early summer but once in autumn.

After the nesting season family parties and sometimes larger flocks wander about the fellsides where bilberries (*Vaccinium Myrtillus* L.) and rowan berries (*Sorbus aucuparia* L.) are favourite foods. Local movements then depend chiefly on food supply and an increase in numbers in the central region which has been noticed by G. Temperley may be due to migration from the Pennines.

Most Ring-Ouzels leave in September but they have been seen exceptionally as late as the end of November, and there are a few records of individuals spending the winter in the area. One visited Mrs Marshall's bird table in Patterdale from December 1921 to February 1922. R. A. H. Coombes found one wintering in a quarry at 2000 feet in Longsleddale in 1927-28, and one was seen near Ings, Westmorland, in November 1934 and February 1935 and again during the winters of 1935-36 and 1938-39, by the Rev. E. U. Savage and others.

#### THE BLACKBIRD—*Turdus merula merula* L.

An abundant resident all through the area, summer and winter, and also a passage-migrant.

It usually nests within the limits of cultivation but occasionally on moors and fellsides, up to 1000 feet or more, where its range overlaps that of the Ring-Ouzel. This overlapping is especially noticeable in the Pennines.

Two and sometimes three broods are reared in a year but the number of breeding birds remains very constant. The young broods cause a temporary increase in late summer, and there is little local movement then, though a few Blackbirds sometimes join the thrush flocks on the fellsides. Later on, gatherings of a score or more Blackbirds are sometimes seen which disappear after a day or two, and a gradual thinning off brings the numbers by the end of winter down to the level of the normal breeding stock.

There is a northward passage through the area in March. A large number of Blackbirds were observed on migration at Grune Point, Skinburness on 28 March 1909, and small parties, evidently on migration, have been noted in other places. The appearance of odd birds on the fell tops at this season is less easy to account for. Two cocks were seen on Blencathra, 2847 feet, on 20 March 1932 by Ritson Graham, one hen on Gavel Crag, Kentmere, 2250 feet, on 23 March 1932 by Miss M. Garnett, and one cock on the top of Howgill Fell, 2000 feet, on 4 March 1937, by T. W. I. Cleasby. It seems unlikely that these birds would nest near where they were seen, though George Bolam records finding a young bird with half grown wings in August on the top of Cross-

fell, 2930 feet, where a year or two before he had seen a single cock in spring.

Most of the recoveries of Blackbirds ringed in Lakeland, either as adults or nestlings have been near home; but several have been reported from Ireland in winter, one from Northumberland and one from South-west Scotland. One or two adults marked in Cumberland in winter have been recovered in Scotland the following summer.

Pied varieties are not uncommon, sometimes appearing in certain localities over a long period of years. A pure white young bird was seen near Alston on 10 October 1926 by George Bolam and females of a light chocolate brown have been noticed by R. H. Brown.

#### THE WHEATEAR—*Ænanthe œnanthe œnanthe* (L.)

A common summer-resident in the more open fell country, nesting up to nearly 3000 feet in the Pennines and central fells. It is also found in suitable places on lower ground and fairly commonly along the coast. There has been a marked decrease in the last ten or fifteen years, though numbers have gone up again in some districts since 1934.

The Wheatear arrives on the fells of the Barbon district, on the south-eastern border of Lakeland, in the first half of March, but elsewhere not as a rule until the middle or end of that month or early April.

Birds on spring migration travel north through the valleys of the central region as well as along the coastline. On 17 April 1921, after a sudden snowfall, Arthur Astley saw hundreds of Wheatears in some flat fields at the head of Windermere, unable to continue their journey. All were gone next day.

In late summer, small parties, mainly of juveniles, begin to move away from the nesting places, and most Wheatears have left by the end of September though a few may linger into the following month.

A young bird with its entire plumage of a very pale buff colour was seen at Mardale in July 1921 by J. F. Peters and Miss M. Garnett.

#### THE GREENLAND WHEATEAR—*Ænanthe œnanthe leucorrhœa* (Gm.)

A regular though not numerous passage-migrant. On spring passage it may be observed in many parts of the area, including the Carlisle district, Solway region, western coast, Walney Island, central region and on the south-eastern border near Silverdale.

The cocks, especially, are very conspicuous when they appear in late April and May after the summer-visiting Wheatears have settled down, and often in places where the latter are not found. The through travellers are usually solitary but sometimes in couples or small parties and they travel northward through the

central valleys rather later than they appear on the west coast. A party of eight was seen by T. L. Johnston on Longnewton Marsh, Solway, 21 May 1934.

The return passage in September and October has been observed in the Carlisle district, Solway region and near Silverdale but apparently not on the western coast or in the central region. This is particularly interesting, as George Bolam states that in Northumberland Greenland Wheatears are more often seen in autumn than in spring.

#### THE ISABELLINE WHEATEAR—*Ænanthe isabellina* (Temm.)

The first British example of the Isabelline Wheatear was shot by Thomas Mann at Aigle Gill, near Allonby, Cumberland, on 11 November 1887 as recorded by Macpherson (*Ibis*, 1888, p. 149) and included in the *Fauna*.

Only four others have since been taken in the British Isles, and all in Sussex.

#### THE WHINCHAT—*Saxicola rubetra* (L.)

Once a common and widely distributed summer-resident but now comparatively scarce and local, the Whinchat ranges over most of the lower lying ground and rough land at the foot of the fells up to about 1000 feet. A nest containing young was found by Miss M. Garnett at about 1300 feet in Kentmere, Westmorland, in 1942. In the east of that county the bird favours hay-fields where it nests in company with Corn-Buntings and Yellow Wagtails.

Numbers have fluctuated considerably over a long period, and in 1917 after two or three years of scarcity, there was a decided increase. The present decline, however, which began in some districts about 1920, has been much more marked and widespread and has resulted in the disappearance of the bird from many old haunts particularly near the Solway, round Carlisle and in the plain in Cumberland and in the district south of the central region. Temporary increases, as in 1937, have not so far done more than delay for a time the gradual fall in numbers. In a few places in North-east Cumberland, East Westmorland and the central region no decrease or even a slight increase has been noted and a local recovery was apparent in Geltsdale in the Pennines in 1940.

Whinchats arrive at the end of April or in early May and leave in August or September, though seen exceptionally as late as the end of October.

Among those ringed as nestlings in Cumberland and Westmorland, two have been recovered in the Gironde district of France in September, and one in Portugal in October of the years in which they were ringed.

THE BRITISH STONECHAT—*Saxicola torquata hibernans*  
(Hart.)

A common breeding bird all round the coast and on some of the coastal moorlands, but very local inland. A few pairs nest in widely scattered localities on the moors and fells of the central region and Pennines up to 1600 feet, also in the Shap and Tebay district, on the moors west of the Lune valley in Westmorland and on the low fells to the west of the Eden valley in Cumberland.

Stonechats were increasing and gradually extending their range in the central region where they are very faithful to certain places, and if one pair is killed another arrives in a year or two. Three successive hard winters, beginning 1939, appear to have taken a toll of numbers in this and other parts of Cumberland and Westmorland.

Although the young birds leave the inland haunts in late summer and a large proportion of the coastal birds are absent during the winter months, the movements of adults seem to depend chiefly on food supply, and, in some seasons, birds remain throughout the winter even on high and exposed nesting grounds.

Breeding begins rather later inland than on the coast, where nests containing young have been found as early as the first week in April.

THE REDSTART—*Phœnicurus phœnicurus phœnicurus* (L.)

A summer-visitor and passage-migrant, arriving usually in the second half of April and leaving in September.

Except in the western coastal district, where Redstarts occur chiefly on passage, breeding pairs are scattered over most of the area wherever suitable nesting sites are available; but in spite of local fluctuations and considerable increases which have been noted from time to time in certain districts they have on the whole become less common than they used to be.

Both on the low ground and on the fellsides up to the limit of the trees, dry stone walls and old buildings are favourite nesting places, as also are wooded crags and hollow trees. One site in a wall in Cumberland, known to T. L. Johnston, has been occupied every year since 1899. A. Dixon found a nest strangely situated on a Kentmere fellside in 1940. It was placed on the ground at the foot of a single gorse stem among dead bracken.

A bird ringed as a nestling in Westmorland in July 1915 was recovered in Portugal in the following October.

THE BLACK REDSTART—*Phœnicurus ochrurus*  
*gibraltariensis* (Gm.)

A scarce visitor. Since 1898 six single occurrences have definitely been recorded from Cumberland in winter. Four were in November and two in December, and except for one at Carlisle, they were on the Solway and western coast. The most re-

cent was noted by R. S. R. Fitter on Rockcliffe Marsh on 28 December 1939.

Autumn visitors have twice been identified in South Westmorland, one at Windermere on 28 October 1907, the other at Kirkby Lonsdale on 29 September 1937.

A single bird is reported as having been seen on Walney Island, North Lancashire, a few years ago.

There are a few spring records. A bird was taken by W. Nicholson at Workington, Cumberland, on 23 March 1906; one was picked up dead by F. Astley at Heversham, Westmorland, in the last week of March 1934, and a pair was seen by the Rev. E. U. Savage in Levens Park, Westmorland, from 28 March to 10 April 1916.

#### THE WHITE-SPOTTED BLUETHROAT—*Luscinia svecica cyaneacula* (Meisner)

The first record of the occurrence of this rare passage-migrant in Lakeland was made by Richard Perry, who observed a White-spotted Bluethroat in adult male plumage, at Rockcliffe, Cumberland, on 15 April 1938 (*Field*, 14.5.1938).

#### THE BRITISH ROBIN—*Erithacus rubecula melophilus* Hart.

A common resident, which although a familiar figure about roadsides, lanes and gardens, is somewhat retiring during the breeding season and then often retreats into large woods and plantations.

Generally nesting in hedgerow banks, and frequently showing its partiality for flower-pots, discarded tins and kettles as sites, it has also been known to occupy the disused nests of other species. A nest of the Wood-Warbler, vacated on 3 June 1922, was on 10 June found by T. L. Johnston to be in possession of a Robin which had already laid four eggs.

Robins ringed as young or adults in Lakeland have been found very constant to their haunts, birds being recovered where they had been marked up to five years later.

In April 1922, T. B. Wright saw a cinnamon coloured Robin nest-building at Gaisgill, Westmorland; its throat and chest were red and its wings and tail nearly white. A white Robin with faintly rose-tinged breast frequented Blackwell, Carlisle, during the summer and autumn of 1922.

#### THE BRITISH HEDGE-SPARROW—*Prunella modularis occidentalis* (Hart.)

A common resident, seldom seen far from cultivation, and usually nesting in hedgerows and gardens.

In May 1936, a pair observed near the head of Geltsdale in the Pennines were presumably nesting about the ruins of an old stone building.

Recoveries of Hedge-Sparrows ringed as nestlings or adults in Lakeland are evidence of the sedentary habit of the species.

THE WREN—*Troglodytes troglodytes troglodytes* (L.)

A common resident, at home in every type of countryside from the salt-marshes to the high moorlands. Frequenting the fells all the year round up to 2000 feet, it is the only small bird seen regularly on the higher grounds during winter. In the craggy haunts of Raven, Peregrine and Buzzard it breeds up to 1700 feet, and one crag nest containing incubated eggs was lined with feathers unmistakably traced to birds brought in as prey by Peregrines.

THE BRITISH DIPPER—*Cinclus cinclus gularis* (Lath.)

A common resident, characteristic of the rocky streams and fell becks, and also a frequenter of the lakes. It breeds from the low country up to fully 1500 feet and further ranges the becks up to about 2700 feet. The higher nesting birds descend from the fells in late autumn to winter round the lakes and larger tarns.

Nesting begins in the low country early in March and is not much later in some of the fell haunts, where, as on the larger rivers, two broods may be reared in a season.

Local decreases in numbers are reported from West Cumberland and the Furness district of North Lancashire.

R. H. Brown has heard the Dipper in song in Lakeland in every month of the year except June and July.

THE SWALLOW—*Hirundo rustica rustica* L.

A common but much reduced summer-resident and passage-migrant.

The decline of the Swallow as a nesting bird applies generally to each of the Lakeland counties, and in parts of Cumberland and Westmorland has been well marked over a period of twenty-five years. But in one locality, Grange-over-Sands, North Lancashire, the Swallow is stated to be more often seen now than it was a few years ago.

The arrivals of Swallows increase as April progresses, and continue into May. The period of departure normally extends into October. Early and late dates, all referring to single birds, are 24 March and 24 November for Cumberland, and 29 March and 21 November for Westmorland.

Many spring passage-migrants travel right up through the area, daytime movements of small parties often being observed in Westmorland. A northward movement up the Solway, studied by the Rev. G. F. Courtenay, occurs in late April and early May. On some days it is constant, on others intermittent, and in 1934 it was not noted until 2 June. The only approach to a corresponding return was observed on 22 September 1911 when an

intermittent stream of Swallows, including a few House-Martins, made a direct crossing from the Scottish side. There were unexpected autumn movements in September 1931 and 1934 when many Swallows were seen following the spring line of travel up the Solway.

In 1916 the Rev. E. U. Savage found a pair of Swallows nesting under an overhanging rock by the River Kent at Levens, Westmorland. A pair has been known to nest under a low stone bridge in the Lyth valley, and on the Solway marshes nests are built under wooden foot-bridges over drainage cuts, and thus below the level of the marshes, and only a few feet above the water. Swallows in the fell country commonly range above the 1000 feet line in pursuit of insects.

Two Swallows ringed in Cumberland have been recovered in winter in South Africa; and, in the spring after they were ringed, one forty miles W.N.W. of the Scilly Isles, and two in Scotland, on the Isle of Islay and in Ayr respectively. Other Lakeland birds have been found to return to their home county and in some cases their native locality.

A white Swallow was shot at Windermere, Westmorland, on 3 September 1903, and another was seen near Langwathby, Cumberland, on 19 July 1933.

#### THE HOUSE-MARTIN—*Delichon urbica urbica* (L.)

While still ranking as a common summer-resident, the House-Martin, in the last twenty years, has decreased considerably in numbers around Carlisle and in South Westmorland, and to some extent in the Furness district. A remarkable scarcity is reported from Workington, West Cumberland. The loss of nesting material through the tarring of roads is believed to be, in some measure, responsible for this decline. Numbers normally fluctuate more than those of the Swallow but in the Pennine fell foot villages of both Cumberland and Westmorland nesting colonies are constantly strong. There is at least one local increase in North Lancashire.

In 1925 a pair appeared to be breeding in the crags of Blencathra. At the end of August and beginning of September 1940 many House-Martins were seen hawking over the grassy slopes of Fairfield, well above 2000 feet. On one occasion a Merlin, perhaps a bird of the year, appeared and made stoop after stoop without success at the graceful and excited Martins.

The Martin begins to arrive in early April and pairs are commonly still feeding young in September and even until the end of October. Two broods are usually reared, and birds are often delayed in their nesting through being ousted by House-Sparrows. A belated Martin was seen by Arthur Astley at Rydal, Westmorland, on 14 November 1928, and another by R. Robson at Grinsdale, Carlisle, on 7 November 1934.

On spring passage a few Martins very occasionally travel up the Solway with the regular stream of Swallows. George Bolam noted a strong autumn passage at Alston in the Pennines in 1933. On 19 August there was a flock of about a hundred distinct from the local birds. Another flock was seen departing at a great height on 16th September and about fifty, with a few Swallows in their company, passed over on 4 October, a fortnight after the local birds had gone.

A white juvenile Martin was seen at Dalston, Carlisle, on 23 July 1932.

#### THE SAND-MARTIN—*Riparia riparia riparia* (L.)

A common though more local summer-resident than either the Swallow or the House-Martin, and a passage-migrant.

Numbers and distribution vary locally with the suitable nesting sites available, being greatly influenced by temporary artificial sites in sand pits and gravel pits. There are strong colonies on the banks of most rivers; a number nest at St. Bees Head, and a few pairs take to the sides of creeks in the salt-marshes. Colonies are fewest in the rock-bound central region where the birds depend more on sammel pits and the low banks of becks running through alluvial meadows in some of the dales.

A few Sand-Martins arrive in March and the main body in early April. J. F. Peters saw one at Windermere on 14 March 1921. T. L. Johnston saw one at Grinsdale, Carlisle, on 23 March 1938, R. Robson noting considerable numbers on 3 April. They leave in September.

Birds either in search of food or on passage are occasionally seen in the fells away from nesting haunts. There is a regular northward passage by the Solway of the three native members of the Swallow family, and on 29 April 1930 the Rev. G. F. Courtenay witnessed an intermittent passage exclusively of Sand-Martins.

A white Sand-Martin was shot near Carlisle in August 1896.

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### Order APODIFORMES.

#### Sub-Order APODES.

#### THE ALPINE SWIFT—*Apus melba melba* (L.)

The only example of this rare wanderer from Central Europe known to have occurred in Lakeland was shot by Sir Robert Brisco, Bt., near Egremont, Cumberland, on 4 July 1842. It is mentioned by Macpherson and is now in the Carlisle Museum.

#### THE SWIFT—*Apus apus apus* (L.)

A summer-resident in all districts, numerous in many of them, and generally more abundant during recent years.

Swifts begin to arrive, singly or in small parties, at the end of April but are not conspicuously present until the first or second week in May. After the nesting season they gather into flocks which leave rather abruptly in early August although a few birds not infrequently linger into September. A belated party was seen at Grinsdale, Cumberland, on 12 October 1942 and the birds in it were noisy and actively feeding. They were gone the next day. A single bird was seen in the same county on 9 October 1919 and an even later in Westmorland on 15 November 1903.

On clear sunny days in June and July, companies of Swifts go hawking insects over the tops of the fells. With no sound but that of their wings, as many as three hundred birds will suddenly appear above a 3000 foot fell, to career wildly in every direction, now high, now low over the summit, until, moved by a common impulse they disappear as suddenly and as quietly as they came. On high moorland Miss M. Garnett has seen a Swift take an Oak Eggar Moth (*Lasiocampa quercus* L.). On two occasions while flying over Carlisle in July 1941 R. A. Carr-Lewty found parties of Swifts, numbering six and twenty, at 2800 and 3400 feet respectively. They were hawking insects which had been carried to these heights by the strong up-currents prevalent in fine, sunny weather.

The Swift also occurs as a passage-migrant.

At 4.30 p.m. on 7 May 1936 T. L. Johnston observed a flock numbering about one hundred and fifty birds arrive and stay for an hour at Grinsdale, near Carlisle, before continuing in a northerly direction.

An adult Swift ringed at Langwathby, Cumberland, in June 1936 was recaptured at the same place two years later.

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#### Order CAPRIMULGIFORMES.

##### THE NIGHTJAR—*Caprimulgus europæus europæus* L.

A summer-resident, arriving in May, departing in September and nesting throughout the area on peat-mosses and commons, in woodland clearings and on the lower moorlands and bracken-covered slopes of the fells. It ranges, and probably nests, up to an altitude approaching 1500 feet on the central fells. At a lower level in the Pennines, around Alston, George Bolam found it infrequent.

For the most part thinly distributed, the Nightjar is comparatively numerous on the low-lying mosses of the Solway region where not unusually four to six birds may be heard churring at once.

It appears in fair numbers around Kirkby Lonsdale and Ambleside in Westmorland, and the Rusland, Coniston and Barrow-in-Furness districts are among its North Lancashire nesting haunts.

**Order CORACIIFORMES.****Sub-Order CORACII.****THE HOOPOE—*Upupa epops epops* L.**

A passage-migrant five times recorded in Cumberland since 1892.

The only spring record among these is of a female shot on Drumburgh Moss in April 1894 (*Vict. Hist. Cumb.*, Vol. 1, p. 191). Another female was shot near Silloth on 6 October 1913 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 30). A Hoopoe near Carlisle, on 25 August 1923, repeatedly raised and lowered its crest while it was being closely observed by J. Carrick. Near Lazonby, in October 1926, an immature bird was shot in mistake for a Jay.

Macpherson mentions a Hoopoe killed on Walney Island, North Lancashire, in the spring of 1884, and one seen near Shap, Westmorland, in September 1889. These are the last known to have visited those parts of Lakeland.

**THE ROLLER—*Coracias garrulus garrulus* L.**

Macpherson describes two Rollers shot in North Lancashire, one at Dalton-in-Furness in May 1827, the other on Walney Island in June 1860. Two more he records for Cumberland both occurred in 1868, one at Carleton, near Carlisle, in the month of July, and one near Thornholm.

The only Roller since recorded was shot at Knorrens, near Brampton, Cumberland, on 17 June 1907 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 10).

**Sub-Order ALCEDINES.****THE KINGFISHER—*Alcedo atthis ispida* L.**

A resident on all suitable rivers and streams, local but not rare, and constant to its nesting haunts. On the whole its numbers remain remarkably steady except for temporary local scarcities which may follow exceptionally severe winters. J. F. Peters notes that in the Windermere district the bird was nearly exterminated during the hard winter of 1916-17, but was present in normal numbers again by 1923. Three successive hard winters beginning 1939 have had some adverse effects in the area. Under ordinary conditions, a local decrease in West Cumberland, for instance, may be counterbalanced by an increase in the Eden valley.

The Kingfisher seldom ranges to the headwaters of rivers and avoids the fell becks, but it regularly frequents the lakes, particularly in winter, and nests in the vicinity of Ullswater, Windermere, Grasmere and Coniston Water. It occurs as far up the Tyne as Alston. The larger rivers on which it is common are the Eden, Kent and Lune.

Sometimes two broods are reared in a season, young being found in April and again in July.

As an urban visitor the Kingfisher regularly appears in winter at Barrow-in-Furness; and in Carlisle, where it occasionally nests within the boundary, it is often to be seen on each of the three rivers that flow through the city.

During autumn and winter, Kingfishers regularly move to the tidal reaches and the coast, even frequenting the creeks in the salt-marshes.

A young Kingfisher ringed by the Lune at Barbon on 4 August 1931 had, by 31 October, travelled to Sunderland Point at the mouth of the river.

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**Order PICIFORMES.**

**Sub-Order PICI.**

**THE GREEN WOODPECKER—*Picus viridis pluvius* Hart.**

A very local resident, which, although Lakeland is on the northern fringe of its regular breeding range, has a longer history in Cumberland than in the south of the area. In the south-east of the county it has long been established in the Eden valley, nesting being recorded in 1887 at Edenhall, and very recently, by A. G. Britten, in the same neighbourhood. From the Carlisle district, where a nest was taken in 1840, the latest report is of a single bird seen in February 1906, although at Netherby, not far away, this woodpecker was noted by Andrew Bell in 1923. H. Calvert found it nesting near Plumpton in 1942. It continues to frequent the Bassenthwaite district where Captain W. J. Farrer found a nest in 1905 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, pp. 10 and 30).

Westmorland is the Lakeland county in which the Green Woodpecker is now most strongly established. It has been known in the south-east for thirty or more years, and C. Hulme Wilson gives the present strength near Kirkby Lonsdale as three or four pairs. Since 1918, when a pair came to Rydal, the length of the valley between there and Grasmere has become the principal nesting haunt, with perhaps three pairs at Rydal alone (*British Birds*, Vol. 12, p. 141). The bird had previously occurred casually in this district. It has appeared in other parts of Westmorland, and may nest in one locality in the north, adjoining a Cumberland breeding haunt.

There are two North Lancashire localities, Coniston and Holker, where the Green Woodpecker may prove to be more than a casual visitor, and it has also been reported from Grange-over-Sands on 9 April 1933, and lately from the Duddon valley.

**THE BRITISH GREAT SPOTTED WOODPECKER—**

*Dryobates major anglicus* (Hart.)

Formerly a rare resident, the Great Spotted Woodpecker has steadily increased during the present century until it is now found in most of the suitable haunts throughout Cumberland, Westmor-

land and North Lancashire. These haunts, extending from the margins of the coastal marshes to the fellsides at about 1000 feet, embrace mixed woods, coniferous woods and the old timber of park lands. Mixed woods primarily are favoured, and birch, alder and poplar are commonly chosen as nesting trees.

Common as the bird has become, it is still increasing and in one North Lancashire locality in 1936 there were six nesting pairs within an area of one square mile. Starlings are great enemies, as, not always content with a disused nesting hole, they often evict the Woodpeckers from one newly excavated.

There is some local wandering by the Great Spotted Woodpecker in autumn and winter, when it appears more in the open, often following hedgerows.

#### THE BRITISH LESSER SPOTTED WOODPECKER—

*Dryobates minor comminutus* (Hart.)

A scarce resident, of which in his four Cumberland records Macpherson includes the nesting of a pair at Edenhall in 1882. One of two was shot near Carlisle in 1896. In other parts of the county, G. Massicks has found the Lesser Spotted Woodpecker nesting in Eskdale, and Dr Moon has recognised it at Hutton-in-the-Forest in June 1928, and at Ullswater in May 1930 and 1933.

There is evidence of the presence of a pair at Rydal, Westmorland, in 1922.

From North Lancashire, H. B. Turney supplies the information that the Lesser Spotted Woodpecker is established, though sparsely, in the Ulverston district and that its call is to be heard in spring around Penny Bridge.

#### THE WRYNECK—*Jynx torquilla torquilla* L.

A decidedly rare bird in Cumberland, only recorded three times during the last fifty years. Earlier than this it was a local rather than a rare summer-resident, breeding in a number of places, and not uncommon in parts of South Westmorland.

A Wryneck, previously unrecorded, was shot in Kentmere, Westmorland, some seventy years ago, but since about that time the bird is not known to have visited the county until 1920, when the Rev. E. U. Savage saw one at Dallam on 4 April.

Two Cumberland records are of a female in breeding condition killed against telegraph wires at Drumburgh on 27 June 1909, and a bird taken at Broughton, near Workington, on 12 September 1927.

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#### Order CUCULIFORMES.

#### THE CUCKOO—*Cuculus canorus canorus* L.

A summer-resident throughout the area, and most plentiful in the fell foot districts. Numbers vary from year to year but in the Solway region there has been a decline for several years.

The period of arrival is from the second to the fourth week in April, many of the fell-country haunts not being reached till about the 25th of the month. Adult Cuckoos are seldom seen after the end of August but the young birds remain a month longer. Occasionally Cuckoos, perhaps belated passage-migrants, occur much later, one being seen by Andrew Bell at Longtown, Cumberland, on 21 November 1934.

On the fells and peat-mosses the principal foster-parent of the Cuckoo is the Meadow-Pipit, and most frequently elsewhere the Hedge-Sparrow, Robin, Pied Wagtail, Whinchat and Sky-Lark. There are instances of the Linnet, Reed-Bunting, Wren, Spotted Flycatcher and Blackbird being victimised.

A Cuckoo marked whilst on autumn migration in Heligoland was found in Cumberland the following summer.

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#### Order STRIGIFORMES.

##### THE SNOWY OWL—*Nyctea scandiaca* (L.)

While snipe shooting at West Moor End, Aspatria, Cumberland, one day in January 1930, Dr Ian Macquarrie came upon a Snowy Owl which he several times purposely flushed from the ground. This is the first and only recorded occurrence of the species in Lakeland.

##### TENGMALM'S OWL—*Egolius funereus funereus* (L.)

Macpherson records that one of these rare vagrants was shot at Gosforth, Cumberland, on 3 November 1876.

##### THE LITTLE OWL—*Athene noctua vidalii* A. E. Brehm

Although so well established elsewhere in England, since its introduction, the Little Owl is still no more than a casual visitor to Lakeland.

The earliest record, given by Macpherson, is of a bird killed at Westward in 1856. The next Little Owl authenticated for Cumberland did not occur until 9 February 1924, when one was accidentally trapped at Irthington. Others follow comparatively closely. Dr H. J. Moon reports one from near Ullswater in February 1932. George Bolam heard one calling at Alston during the night of 6 November 1933. W. H. Little had one under close observation at Hole of Lyne, Bewcastle, on 11 June 1935. R. Martindale had the opportunity of closely studying one at Dalston, near Carlisle, in the winter of 1935.

One was seen by George Bolam on the Westmorland side of Crossfell in May 1921. E. B. Dunlop records that a Little Owl shot by his gamekeeper at Troutbeck, Windermere, in December 1909, was no doubt one of several that he himself had turned out, and there have been more recent reports of Little Owls seen in this district.

The presence of two in a garden at Cartmel, North Lancashire, in 1931 is reported by W. H. Walker.

#### THE LONG-EARED OWL—*Asio otus otus* (L.)

A less familiar resident than the Barn and Tawny Owls, with a preference for the woods bordering the mosses, although also frequenting the woods on the lower slopes of the fells. Not so adaptable as the other two, it has been affected in its distribution by the felling of woodlands during the war period 1914-18.

The Long-eared Owl has greatly declined in the Solway region, has become scarcer in the Cumberland plain, and excepting a northern district where it remains fairly common, it is sparingly distributed over the rest of the county.

In Westmorland it is of local occurrence and has decreased in some localities in the last twenty years, while in the Lune valley and parts of the Pennine region it is reported as scarce or not observed.

In North Lancashire it is not uncommon except in the Barrow district, where a decrease has been noted, and in the Rusland valley and near Grange-over-Sands.

This owl commonly uses old nests of the Carrion-Crow and Magpie. In 1938 a Cumberland pair reared their family in a disused tree eyrie of the Buzzard. There are three recently recorded instances of ground nesting in North Lancashire and one in Cumberland.

#### THE SHORT-EARED OWL—*Asio flammeus flammeus* (Pontopp.)

An irregular and scarce breeding bird and also a passage-migrant and winter-visitor.

It nests most often in the wild Border district and on one of the low-lying Cumberland mosses. At rarer intervals it is found nesting on the moorlands of the Pennines and the central fell region. Nests were found in both Cumberland and Westmorland in 1933, and at least two in the former county in 1934 when there was a minor vole plague in the Borderland. Nesting was again proved in Westmorland in 1939 and 1943. Not less than four pairs of Short-eared Owls bred on Walney Island in 1906 when a nest containing ten eggs was found there. Two of the North Lancashire mosses are also known as occasional haunts.

A wanderer, far from nesting haunts, has been noted quartering a newly cut field of hay in July, and from early September onward, individuals sometimes appear on the salt-marshes. A Short-eared Owl, not so far removed from nesting haunts, was hunting over Tailbridge Fell in the Westmorland Pennines one August evening when it wildly scattered seven Blackcocks by dropping right amongst them.

The winter-visitors usually arrive in October, being most often seen singly, although they visit one North Cumberland locality

in considerable numbers. Thirty to forty were flushed here one day in October 1930, and a good many were present throughout the winter of 1933-34. About a dozen kept to a narrow strip of salt-marsh at Anthon in the same county during the frost and snow of January and February 1942.

#### THE SCOPS-OWL—*Otus scops scops* (L.)

Since Macpherson described the occurrence of one of these rare visitors at Renwick, Cumberland, on 15 May 1875, one other example has been obtained, and in the same county. It was shot by Captain W. H. Parkin at Broomrigg, near Armathwaite, in the Eden valley, on 6 November 1907 (*British Birds*, Vol. 2, p. 100).

#### THE BRITISH TAWNY OWL—*Strix aluco sylvatica* Shaw

The commonest resident owl, and increasing on every hand. To some extent it is a town-dweller. Both the rufous and the grey types occur and they have been found in the same brood. There are intermediate colour forms showing a gradation from one to the other.

At breeding time, old nests of the Carrion-Crow and the Magpie, chiefly the former, are greatly favoured. The eggs are also laid in hollow trees, in the dense, abnormal growths that occur in lime, beech and pine trees, and in diverse situations in a variety of buildings. Ground nests are usually under tree roots or in rabbit burrows, and occasionally quite open or at the foot of a tree. Disused tree nests of the Buzzard are not uncommonly occupied in one part of the fell country, and in other parts there are crag-nesting sites. A pair of Tawny Owls and a pair of Barn-Owls nested in the same barn in a Westmorland valley in 1937.

Tawny Owls have been seen up to 1500 feet on the fells. Some local reduction of the residents in Westmorland fell country was noticeable after the winter of 1939-40 when a foot or two of snow covered the ground for some weeks. The birds had difficulty in obtaining food and the shortage apparently affected fertility in the following season as no more than two eggs were found in any nest.

#### THE WHITE-BREASTED BARN-OWL—*Tyto alba alba*

(Scop.)

A resident, breeding in hollow trees, rocky sides of water-courses, and fell crags as well as in buildings of various kinds. On the fells it breeds up to an altitude of 1200 feet. It is a frequent daytime hunter during the winter months, and when feeding young it is often abroad long before dusk. A brood has been known to fledge in December. The Barn-Owl is perhaps less persecuted than formerly.

Fairly strongly represented in Cumberland, it is on the increase, at least around Carlisle where several pairs nest within the city boundary.

There has been a recovery in numbers after an earlier decline in the south of Westmorland, where, in the Kendal district, as in the east of the county, the bird is far from uncommon. There is the exception of one East Westmorland locality where a rapid decrease, attributed to the use of rat poison, was reported in 1930.

A decrease is also reported from Barrow-in-Furness and a scarcity from Coniston, but numbers are being maintained, if they are not increasing, in other parts of North Lancashire.

M. E. W. North records that, in 1932, three pairs of Barn-Owls nested at one farm in the Lyth valley.

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#### Order FALCONIFORMES.

##### Sub-Order FALCONES.

#### THE ICELAND FALCON—*Falco rusticolus islandus* Brünn.

There have been no occurrences recorded of this rare wanderer since three mentioned by Macpherson. The bird taken at Deanscale, Cumberland, in 1835, was thought to have been an escape. The young female shot at Winton, Westmorland, about 1842 has since been successfully remounted and is now in the Carlisle Museum. A second female was shot near Crossfell on 13 October 1860.

#### THE GREENLAND FALCON—*Falco rusticolus candicans* Gm.

The adult shot at Crosby Ravensworth, Westmorland, in February 1865, and recorded by Macpherson, was included in the Edenhall collection of birds given to the Carlisle Museum by Sir N. C. Musgrave, Bt.

One of these rare falcons was reported by William Nichol as seen about 1915 at Skinburness, Cumberland, where it was being mobbed by Jackdaws.

The presence of a Greenland Falcon at Ambleside, Westmorland, during the winter of 1940 is recorded by S. Moorhouse (*North Western Naturalist*, Vol. 16, p. 82).

#### THE PEREGRINE FALCON—*Falco peregrinus peregrinus* Tunst.

Nearly twenty pairs of this distinctive resident annually attempt to rear their young in the central fells of Cumberland, Westmorland and North Lancashire, and in the Lakeland Pennines. St. Bees Head in Cumberland is the one coastal breeding haunt.

The nesting sites, as is usual with the larger crag-nesting birds, outnumber the settled pairs, and the complexity of their use renders difficult an exact check on the Peregrine population.



ERNEST BLEZARD.

JUVENILE PEREGRINES ON THEIR HOME CRAG.

Breaks in the occupation of certain sites, the distance apart of what may or may not be alternatives, and whether they are used at a first or second attempt all contribute. Even the most favoured of age-old haunts may have their periods of desertion varying from one to several years, in some cases as the result of persecution. There are irregular sites used perhaps once in many years. Occasionally an extra pair of birds in a district will frequent a crag not used within memory, only to disappear before laying time.

Many eyries are situated between the altitudes of 1500 and 2000 feet. Sometimes the Peregrine adopts a disused nest of the Raven, and when both birds tenant the same crag range their sites are usually held in common, one or the other taking turn in different seasons. A Pennine haunt provides another aspect of this breeding association. For forty or more years Peregrines have reigned alone. Previous to their coming, and as far back as memory could go, the place was held by Ravens, and only during a gap in the tenancy of the Peregrines did a pair of Ravens again appear. The two are for ever in conflict, and when either rises from the crags it is usually the signal for both to display their superb powers of flight in aerial skirmish enlivened by deeply contrasting battle cries.

As exceptional nesting instances, eggs have been found before the end of March, and young still in the eyrie in October. The clutch of eggs very often numbers four, and in 1924, an eyrie in the central region held four eggs, while on the ledge immediately below lay a fifth freshly broken.

During winter the fell haunts are deserted or not according to their position, the state of the weather or the food supply. Dependent on these conditions, the birds may stay throughout the winter, come and go, or leave for lower parts.

Wandering Peregrines, mostly immature, and either locally bred birds or passage-migrants, begin to appear in August on the coast, particularly the salt-marshes of the Solway region, and to a less extent in the inner lowlands. In winter and early spring there appears to be a greater proportion of adults among the temporary visitors to these districts. Some thrilling encounters have been witnessed in the low country as when one valiant young cock Peregrine gave long and fierce battle to two Herons over Burgh Marsh. An encounter of different and much more unusual nature took place on Longnewton Marsh. A shore shooter ensconced below the edge of the marsh suddenly felt his head sharply gripped from above, and after the moment of surprise in which, however, he resolutely gripped his gun, he found that a Peregrine had chosen him for a perch. Most likely the bird had mistaken his head for one of the sods broken away from the marsh edge and cast up by the tide. These sods are favourite perches of the marsh-haunting Peregrines. On the Solway, both the Grey Lag and the Barnacle-Goose have been seen struck

down by Peregrines, and among other birds here seen taken as prey are Sheld-duck, Wigeon, Redshank, Knot, Curlew, Grey Plover and Oyster-catcher. J. F. Peters records that among more usual prey he has found the partly eaten remains of a Peregrine tiercel on the feeding place at one Lakeland eyrie, a Buzzard at another and a Sparrow-Hawk and a Great Spotted Woodpecker at a third.

A Peregrine found dead below an eyrie in Westmorland in May 1924, was five miles away from where it had been ringed as a young bird in the previous May. Another, ringed as a nestling near Ullswater also in May 1923, was recovered in Perthshire in spring two years later.

#### THE HOBBY—*Falco subbuteo subbuteo* L.

A rare summer-visitor.

A farmer, lately living at Hutton, Cumberland, stated that a pair of Hobbies had nested there. Such an event is not unlikely. Hobbies have appeared three times in recent years on an estate in the north, the last occasion being September 1930, when an adult pair were killed. In May 1935 two birds were killed in one part of the Cumberland plain.

From 31 May to 15 June 1937, a pair frequented a pine wood in the Solway region and were under observation by W. Mulcaster. After the latter date, on which they were also seen by T. L. Johnston, they disappeared, and with them the hope of establishing a nesting record.

A juvenile male, shot at Melkinthorpe, Westmorland, on 25 August 1899, was secured by Macpherson for the Carlisle Museum. This is the only Lakeland record outside Cumberland (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 31).

#### THE MERLIN—*Falco columbarius œsalon* Tunst.

A resident, rather sparingly distributed, yet found in all the different groups of fells and on some of the low-lying mosses. It is perhaps more numerous in the Pennines than in the central fells.

From coast level the Merlin breeds up to 1500 feet on the moorlands. A favourite nesting site is a heathery slope above a small stream, usually with a wide look-out and a few rocks or small knolls where kills can be plucked in sight of the nest. Sometimes the heather-crowned top of a crag buttress is chosen, and on a few occasions Merlin's eggs have been found in disused nests of the Carrion-Crow and the Magpie, and in 1939 in a crag nest of the Buzzard. A pair in one valley nested for two seasons among heather and bilberry at the foot of a small rowan on top of a huge detached mass of rock. On the coast Merlins have been reported nesting in marram grass on the sand-hills.

Fluctuations in the number of breeding pairs may depend to some extent on the food supply. Small birds, especially Meadow-

Pipits, the staple food, become noticeably scarce in localities where Merlins have reared their broods for a year or two, and though pipits soon recover in the absence of the hawks, the same cannot be said of Wheatears, a very favourite prey. In one locality where Merlins have ceased to be shot and trapped, their freedom from persecution has coincided with the decline and virtual extinction of the once flourishing Ring-Ouzel and may have been at least a contributory cause.

Should their nesting have been ordinarily successful, the breeding birds have left some fell haunts by mid-August; in others they may linger into October. Their return begins with that of small birds at the end of February and goes on into April. From August to early spring Merlins frequent the salt-marshes and other lowlands, and in winter are not altogether absent from some of the more open fell valleys. The early arrivals to the salt-marshes are usually juveniles.

Three Merlins ringed as young birds have been recovered away from their home county, Cumberland, one in the following October at Broughton-in-Furness, one the following March at Formby and one in March eight years later at Lydiate, Lancashire.

Two young birds from the same brood, ringed on the Howgill Fells, Westmorland (erroneously recorded as Yorkshire), in June 1938, were recovered later the same year, one at Dax, Landes, France, in October, and one at Warrington, Lancashire, in December. Two from another brood, also ringed in June 1938 in the same district, were found at Burgh on the Humber, and Bridgnorth, Shropshire, in the following August and December respectively.

#### THE KESTREL—*Falco tinnunculus tinnunculus* L.

The commonest bird of prey, and as a resident, as much at home in the small woods of the coastal districts as in the remote dales. It breeds on St. Bees Head. In the fells, where it chooses crag ledges, even to occupying vacant eyries of Raven and Peregrine, it nests up to 1700 feet. At lower altitudes it commonly uses old nests of the Carrion-Crow, sometimes disused tree nests of the Buzzard, and occasionally some recess in a derelict building.

To some extent it leaves the fell valleys in winter. The Rev. G. F. Courtenay noted it as being more frequent on the Solway shore during the last four months of the year when it may occur as a passage-migrant.

A Kestrel ringed as a nestling near Keswick, Cumberland, in June 1926, was recovered next April near Wexford, Ireland, and another Cumberland bird was found in its second June at Gretna, Dumfries. As incoming birds, one at Netherby, Cumberland, in August 1933, had been ringed the previous May at Portmore, Peebles, and one taken in Kentmere, Westmorland, in August 1936, had been ringed the previous June at Sedbergh, Yorkshire.

THE RED-FOOTED FALCON—*Falco vespertinus vespertinus* L.

George Bolam records of this rare accidental visitor that on 5 May 1932, a male, in full black plumage, appeared at Alston, Cumberland, and remained until 10 May, when it was last seen pursuing a westward course high overhead (*Trans. N.H. Soc. N.D. and N., N.S.*, Vol. 8, p. 73).

An adult male was shot at Lowther, Westmorland, in 1929, and was examined in the flesh by Dr Moon.

THE GOLDEN EAGLE—*Aquila chrysaetus chrysaetus* (L.)

The Golden Eagle has been so confused with the White-tailed Eagle that its separable history as a former resident rests mainly on allusions to its nesting near Keswick and Patterdale. It is certain that eagles of either species ceased to breed in Lakeland before the end of the eighteenth century.

The specific identity of the infrequent wandering eagles is usually difficult to determine. More than one eagle spent some time in the Northern Pennines during the winter of 1920-21. George Bolam, who mentions these birds under "White-tailed Eagle," says they were never satisfactorily identified (*Trans. N.D. and N., N.S.*, Vol. 8, p. 69). In the same region, E. Blezard saw an eagle soaring over Geltsdale, Cumberland, in May 1921, and in the next month came a report of one frequenting Helvellyn.

A one-day visitor to Grasmere, Westmorland, about 1922, was identified as a Golden Eagle by James Davidson, who is familiar with the species. J. Macdiarmid, who also knows the bird well, saw an eagle flying high over Barbon, Westmorland, towards the west on 3 June 1930.

Two recent newspaper accounts referring to eagles in Lakeland are of one said to have been seen at Glenridding, Ullswater, in October 1937, and another in Eskdale in August 1938.

THE SPOTTED EAGLE—*Aquila clanga* Pall.

The body of one of these rare wanderers was washed ashore on Walney Island in 1875 and the finding recorded by Macpherson.

W. Nichol held the opinion that an eagle he saw mobbed by Rooks as it was flying north-westerly past Grune Point, Solway, on 15 October 1920, was a Spotted Eagle (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 31).

THE ROUGH-LEGGED BUZZARD—*Buteo lagopus lagopus*  
(Pontopp.)

An infrequent winter-visitor.

Towards the end of 1903 a number of Rough-legged Buzzards appeared in Geltsdale in the Pennines and four of them were eventually received by Robert Raine of Carlisle for preservation. Single birds have since been seen or obtained in Cumberland at

Lanercost in October 1913, Castletown in spring 1922, Skinburness in March 1925, Geltsdale in April 1930, Crossfell in January 1932, and Penton in December 1934. R. Stokoe identified one at the foot of Grassmoor in the central fells in November 1941.

In Westmorland, one was taken at Elterwater about 1894, two near Kirkby Lonsdale in recent years, and one was found dead at Brothers Water in November 1932.

#### THE COMMON BUZZARD—*Buteo buteo buteo* (L.)

A familiar resident whose numbers increased considerably over the war period 1914-18. They have since undergone local changes yet remain high for so large and unwary a raptore not free from persecution.

Nesting on the fell crags is general up to 1500 feet and occasionally up to 1750. At times vacant Raven and Peregrine sites are occupied or a disused Raven structure adapted to use, but Buzzards often nest in much smaller crags than those frequented by the other two species. Tree nesting, now much more common on the fell slopes and at varying distances from them, shows a variation in choice from lofty pines to gnarled thorns and hollies.

The long deserted Cumberland part of the Eden valley had a pair of Buzzards re-established in 1925 and another pair from 1926 onward. For the first time within living memory a pair of Buzzards attempted to nest in the Mallerstang valley, Westmorland Pennines, in 1937. The female was shot at the eyrie by a man living in the valley. In 1941, two pairs of Buzzards built and had eggs in the fells surrounding the valley. Both of these ventures, through different causes, were unsuccessful.

Clutches of four eggs are not uncommon, and in Westmorland in 1909, J. F. Peters found a clutch of five eggs as well as three clutches of four. It is probable that variation in the size of clutches is at least partly correlated with food supply, as in 1940, after a very hard winter when there was at the same time no great mortality among the fell sheep, clutches were uniformly small. Fell mutton is an important part of the Buzzard's dietary.

Even during the nesting season several Buzzards may sometimes be seen hunting or soaring together, and later in the year they are inclined to be gregarious, as many as forty having been seen together, though so large a number is unusual.

From August onward a good many birds, mostly juveniles, come down to winter in the lowland woods, some wandering to the salt-marshes and other coastal parts, and occasionally lingering into May. Others remain on the high ground throughout the year. There are other local movements in winter such as to some broad valley, or from the lake fells to the Pennines.

Two marked Buzzards have been recovered outside Lakeland in their first autumn, one from Ullswater at Pencaitland, Had-dington, and one from Westmorland at Marske in Yorkshire. Of two nestlings ringed at Rydal in June 1917, one was recovered

near the same place in May 1920 and the other at Kingsdale, Yorkshire, in June 1920.

**THE MARSH-HARRIER**—*Circus æruginosus æruginosus* (L.)

Long extinct as a resident and now a rare wanderer. The bird killed at Netherby, prior to 1880, and described by Macpherson as possibly the last of the Marsh-Harriers that had so long frequented the wild moors of our borders, is now in the Carlisle Museum.

An immature bird closely observed by T. L. Johnston and Ritson Graham at Skinburness, Cumberland, on 12 September 1931, was very likely the same individual seen the previous day by James Storey at Anthorn. On 13 December of that year R. H. Brown watched a Marsh-Harrier hunting at Abbeytown in the same region. Again at Anthorn, one was seen by W. Storey on 2 October 1935. It was being harassed over the peat moss there by a Peregrine. An adult seen quartering a rushy field near Basenthwaite Lake on 25 December 1941 is recorded by R. H. Brown (*British Birds*, Vol. 37, p. 35).

An adult male Marsh-Harrier was found dead on Rigmaden Moor, Westmorland, by Laurence Arden on 24 May 1926 (*British Birds*, Vol. 20, p. 130).

**MONTAGU'S HARRIER**—*Circus pygargus* (L.)

The nesting of this otherwise accidental visitor might have been established in North Cumberland in 1923 had not the male of a pair which arrived at the end of April been accidentally taken in a crow trap baited with eggs. The female remained until August. T. L. Johnston saw these birds on several occasions, and on 13 May watched the female being mobbed by Black-headed Gulls. Other Cumberland occurrences are a juvenile at Kirklington on 2 November 1892, which was recorded by Macpherson (*Vict. Hist. Cumb.*, Vol. 1, p. 193), and an adult near Newton Regny, in September 1929, seen by Dr H. J. Moon.

An immature Montagu's Harrier was reported to Dr Moon from Hawkshead, North Lancashire, in October 1932.

**THE HEN-HARRIER**—*Circus cyaneus cyaneus* (L.)

A common resident during the eighteenth century, still plentiful in the early years of the nineteenth, but now known chiefly as a winter-visitor. Both adult and immature birds occur.

Certain Cumberland peat mosses are favoured, and to one in particular, winter visits have been regular since 1927. In 1927-28 a pair stayed until the end of February, and again a pair were present in December 1934. An adult male shot here in January 1940 had just devoured a Common Snipe. A male was seen in April 1925 on another moss which was frequented by a pair during the summer of 1934. Single birds were observed in other parts of the county in winter in 1925, 1927, 1929 and 1930. In

1925 a pair nested in North Cumberland but their venture was not successful.

There is no recent nesting record for Westmorland, but T. W. I. Cleasby describes a pair of Hen-Harriers as frequenting a moorland valley from the summer of 1936 to the spring of 1937. A single bird was seen by George Bolam on Shap Fells in July 1917, and another by Dr E. S. Steward and A. Dixon in Kentmere in August 1934. The last observer also saw a grey-plumaged bird in Kentmere on 1 February 1939.

An adult male Hen-Harrier was found dead on Rusland Moss, North Lancashire, by C. F. Archibald on 5 June 1910. This bird had been in the district for some time.

#### THE GOSHAWK—*Accipiter gentilis gentilis* (L.)

Evidence indicating the nesting of the Goshawk in Lakeland in the thirteenth century is given by Macpherson, who goes on to say that the only specimen known to have been obtained in Cumberland in modern times is an immature bird preserved in the Edenhall collection. This bird has since been given to the Carlisle Museum by Sir N. C. Musgrave, Bt.

In November 1920, Dr H. J. Moon had an immature Goshawk under observation for nearly half an hour at Dalemain, Cumberland.

#### THE SPARROW-HAWK—*Accipiter nisus nisus* (L.)

A resident breeding wherever there are suitable woods and copses up to about 850 feet, and one markedly constant to its nesting haunts.

There is a passage movement in both spring and autumn evidenced by the numbers, considerable during the latter season, that have been trapped.

It is also during the autumn that Sparrow-Hawks are most frequently seen on the salt-marshes and in the neighbourhood of the coast generally.

Twenty Sparrow-Hawks recovered in Cumberland from 1925 to 1938 had all been ringed as young birds in the same county.

#### THE KITE—*Milvus milvus milvus* (L.)

This now rare British resident formerly nested in the central region and in the Eden valley.

The bird shot at Portinscale, Cumberland, in 1840, and described by Macpherson as perhaps the last of the indigenous race of Lakeland Kites, is now, through the kindness of D. Losh Thorpe, in the Carlisle Museum.

Macpherson records occasional wanderers down to 1891 when he himself saw one over Carlisle. In June 1921, Dr M. McKerrow observed at Workington, Cumberland, a large fork-tailed bird which he became convinced was a Kite. It was travelling high from east to west.

THE WHITE-TAILED EAGLE—*Haliaeetus albicilla* (L.)

In bygone days the breeding places of the White-tailed Eagle, Sea-Eagle or Erne included Eagle Crag, Borrowdale, and Eskdale in Cumberland, and Buck Crag, Martindale, and Wallow Crag, Mardale, in Westmorland. The last eyrie occupied appears to have been in Eskdale in the year 1791.

No longer resident in Britain and now only a passage-migrant or wanderer, the Sea-Eagle is of very rare occurrence in Lakeland.

On 9 June 1929, W. B. Housman saw what appeared to be an eagle flying in a westerly direction over the shore at Workington, Cumberland. J. Gregson Roper estimates that it was at or about this time that he had under close observation an immature White-tailed Eagle perched on the shore at Seascale, further south along the coast.

A great dark-plumaged bird with broad, white tail, seen high over Coniston Water by Mrs K. R. Towndrow, on 21 March 1934. was believed to be an adult White-tailed Eagle.

THE HONEY-BUZZARD—*Pernis apivorus apivorus* (L.)

An occasional visitor, the Honey-Buzzard would probably nest in Cumberland if its summer visits did not usually end fatally.

One was shot at Scotby, near Carlisle, on 23 October 1908 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 15). On 21 June 1913, in a North Cumberland wood, then the site of a heronry, one of a pair was trapped at a Pheasant's nest which Andrew Bell had previously found raided, as he thought, by ground vermin. A pair came to grief in the same district in May 1917, the female being nearly ready to lay. Again, on 23 May 1925, William Bell watched one taking eggs from a Teal's nest, and the same bird, or another, was seen on several more occasions.

In October 1901, a Honey-Buzzard was shot by M. Nicholson at Clifton, Westmorland, the second recorded for the county.

THE OSPREY—*Pandion haliaetus haliaetus* (L.)

Macpherson shows that the Osprey formerly came to nest, possibly until towards the close of the eighteenth century, and gives two bygone Westmorland haunts, Whinfell Park and the crags above the southern shore of Ullswater. It is now a rare passage-migrant.

In Cumberland an Osprey that proved to be an adult female was shot at Lynefoot, on 16 May 1923 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 39). One was seen by D. F. Jobson, near Keswick, on 31 August 1930, and one heading north-east over Alston by George Bolam on 2 May 1931 (*Trans. N.H. Soc. N.D. and N., N.S.*, Vol. 8, p. 74). T. A. Coward mentions a caller at Crummock Water that went away towards the north (*Birds of the Brit. Is. and their Eggs*, Ser. 1, p. 347). M. G. Robinson saw an Osprey pay a brief visit to Whins Tarn, Edenhall, on 28 April 1941. It

appeared from the direction of the River Eden, circled the tarn twice or thrice, poised once as if about to plunge, was set upon by Rooks, Jackdaws and Black-headed Gulls, and went away, as it might have been, for Haweswater (*British Birds*, Vol. 35, p. 87).

E. B. Dunlop notes a previously unrecorded Westmorland Osprey, shot near Appleby in 1886 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 11). A bird that stayed three days on Windermere in July 1922 was observed by Messrs Richardson, and J. Oliver Wilson saw one flying westerly over the River Eden at Temple Sowerby on 2 May 1940.

### Order CICONIIFORMES.

#### Sub-Order CICONIÆ.

#### THE WHITE STORK—*Ciconia ciconia ciconia* (L.)

A White Stork shot on Windermere, Westmorland, early in 1867, and described by Macpherson, remained the only one noted in Lakeland until William Nichol saw a wanderer near Silloth on the Cumberland Solway on 17 March 1911.

Three White Storks, artificially reared at Comlongon Castle, Dumfriesshire, in 1936 halted on their southward journey at Upperby, Carlisle, on 1 August. One was killed against telegraph wires, and its origin proved by the rings with which it was marked.

#### THE SPOONBILL—*Platalea leucorodia leucorodia* L.

Macpherson traced five Lakeland occurrences of the Spoonbill, the earliest being at Dalton-in-Furness, North Lancashire, in 1833. The others, all in Cumberland, were one on the Solway in the winter of 1840-41, two at different places in the north of the county towards the end of 1859, and one on the west coast on 22 October 1864.

Thomas Peal saw a Spoonbill, which stayed in the Eden estuary, on the Cumberland Solway, for one day in April 1904.

#### THE GLOSSY IBIS—*Plegadis falcinellus falcinellus* (L.)

The first Glossy Ibis to be obtained in Lakeland, an adult in winter plumage, was shot by T. Lightfoot at Moorhouse, near Carlisle, on 25 September 1921 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 35). It is now in the Carlisle Museum.

A second, an immature, and also a Cumberland bird, was shot in November 1932 near the headwaters of the River Irthing, on the Gilsland moors, by J. Maughan of Horseholm, in whose possession it remains.

#### Sub-Order ARDEÆ.

#### THE COMMON HERON—*Ardea cinerea cinerea* L.

A widely distributed resident.

The Reports on the Census of Heronries, 1928-29, give eighteen colonies in Cumberland, three in Westmorland, and three in North Lancashire (*British Birds*, Vols. 22 and 23).

There are no large heronries now in Cumberland. Several colonies were divided or scattered when the nesting woods were felled in the war years 1914-18, and in later years. Some of the birds from Riddings Wood, which was felled in 1916, moved to Netherby. Castletown heronry at Floriston persists, in reduced numbers, since it was shifted in the same year. Manesty on Derwentwater, Uldale and perhaps Lorton, all small heronries, were established after the felling of Wythop Wood, Bassenthwaite, which once held nearly fifty nests. Birds from Walton Wood, which was partly thinned, have moved from place to place in the district, and Armathwaite heronry apparently became extinct, although odd pairs may linger thereabouts. There were sixty nests on two sites at Edenhall in 1889, but the last of the old trees were felled in 1929 and the birds dispersed. The twenty pairs of birds estimated to be present in 1942 have again been disturbed by further felling operations. The heronry at Crofton, in 1928 the largest, with fourteen nests, is much reduced since the estate was acquired under the Land Settlement Scheme. Great Corby, which at the time of the Census had four nests, has grown to be one of the largest with a maximum of thirteen nests. Muncaster Castle heronry, the oldest of which there is a record, was in existence before 1621, and now has about five nests. Ennerdale, whose early history has not been recorded, had two or more nests in 1910 and four in 1911. Ulpha Park, Ponsonby, Dent Wood and Eskett Wood at Cleator Moor, Wanwood, Greystoke and Lamplugh, ranging in order from four to eight nests, make the total of existing Cumberland heronries covered by the Census. There is an unrecorded heronry of five nests at Warwick, Carlisle, and two with at least two nests in the Solway region, while since the general dispersal a greater number of isolated pairs of Herons or occasionally two pairs shift about from place to place.

The ancient heronry at Dallam Tower which had twenty-nine nests in 1928 had, by 1940, grown to between forty and forty-five nests (*North Western Naturalist*, Vol. 15, p. 227). The next in size is at Bleatarn, near Kirkby Stephen, where about nineteen nests have been counted. The heronry at Elterwater, where a pair of birds nested in 1911, seven years earlier than given in the Census, now has up to four nests. There are other Westmorland heronries not previously recorded. Two pairs nest or have nested near Gaisgill, one or more pairs near Longsleddale, and a pair have nested in two localities near Windermere. For many years up to 1929 a pair nested on an island in Grasmere, and possibly at times since that year. There were perhaps three pairs, not more, nesting at Temple Sowerby in 1941. Two of the better known old heronries, Rydal and Killington, were founded and

became extinct during the last century, though a pair occasionally nests at Lily Mere near Killington.

The largest heronry in North Lancashire, on Holker Moss, had about twenty-four nests and the old established one on Rusland Moss about twelve. Considerable decreases in these heronries corresponds with the increase at Dallam (*North Western Naturalist*, Vol. 15, p. 227). The birds moved from Roudsea Wood, on Holker Moss, when trees there were felled in 1886, but some few have returned to nest. Two pairs of Herons nested at Rusland Pool in 1929.

During autumn and winter, when Herons are most widely spread, they frequent the shores and salt-marshes sometimes in small flocks. Almost any inland stream, pool or ditch is then a haunt, and very often the birds follow the fell becks to a considerable altitude.

A large percentage of the recoveries of Herons ringed as young birds in Cumberland shows a northward movement into Scotland. Other distant recoveries include one in the Isle of Man and one in Montgomeryshire. One Heron was found four years later at the place where it had been marked as a young bird.

#### THE PURPLE HERON—*Ardea purpurea purpurea* L.

A Purple Heron included in the Edenhall collection of birds, lately presented to the Carlisle Museum by Sir N. C. Musgrave, Bt., was believed by Macpherson to be the bird shot near Alston, Cumberland, about 1850.

#### THE SQUACCO HERON—*Ardeola ralloides* (Scop.)

A Squacco Heron, formerly in the Edenhall collection, and now in the Carlisle Museum, was shot at Lazonby, Cumberland, in June 1845, as recorded by Macpherson.

#### THE NIGHT-HERON—*Nycticorax nycticorax nycticorax* (L.)

A wanderer from Central Europe of which four occurrences are mentioned in the *Fauna*.

A Night-Heron shot near Milnthorpe in May 1848 is the only one recorded for Westmorland. All the other records are for Cumberland.

An immature bird was shot near Carlisle late in 1847, an adult near Brampton about 1850, and another immature in the Abbey

Macpherson later recorded a young Night-Heron shot at Cargo-Eden, on 21 October 1900 (*Vict. Hist. Cumb.*, Vol. 1, p. 196). Holme, Solway region, in 1866.

Very near the same place another was found dead on an island in the lower reaches of the River Eden at Grinsdale, on 10 December 1903 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 15). Both exhibit the white-spotted brown dress of immaturity. They are in the Carlisle Museum.

THE LITTLE BITTERN—*Ixobrychus minutus minutus* (L.)

John Hancock informed Macpherson that a Little Bittern in the Newcastle Museum was captured on the River Petteril in Cumberland in 1850. T. C. Heysham in 1850 wrote that this bird was caught about three years earlier, in the month of July.

THE BITTERN—*Botaurus stellaris stellaris* (L.)

An irregular visitor, chiefly in winter.

Three Bitterns were shot in Cumberland in January 1892 (*Vict. Hist. Cumb.*, Vol. 1, p. 196). There were five more between 1893 and 1906, four of them in the Solway region, the fifth and last on Derwentwater. No others were reported until November 1921 when a Bittern was several times seen at Anthorn. The next was found in a dying condition at Netherby in January 1922 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 35). During a minor visitation to the Solway region in January 1924 three Bitterns were shot within ten days. Others were seen during this month, and two were sent to Carlisle from neighbouring Scottish counties. The five examined were in perfect plumage but all were emaciated. The last of five to occur in this part of the area between 1925 and 1930 was seen on an exceptionally late date, 18 April 1930. In the same year there was one in the north of the county and another reported to have been heard at Ullswater. The remains of a Bittern were found at Monkhill Lough in September 1934 and there was a bird at Carlatten on 26 December 1939. The latest Cumberland record refers to a bird shot in January 1943 (*Field*, 20.2.1943).

A Bittern was shot at Orton, Westmorland, during hard weather in about 1900. There was one on Windermere in December 1921 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 35) and another seen at the edge of that lake on 11 August 1933. A late bird was flushed at Crooklands, near Kendal, in April 1927, and one had visited Rydal Water some years earlier.

A Bittern at Rusland, North Lancashire, in January 1896 was followed by another in January 1929. One was caught on the Lancashire-Westmorland border in March 1923, and Esthwaite Water and Whitestock are places which had been visited by single birds in earlier years.

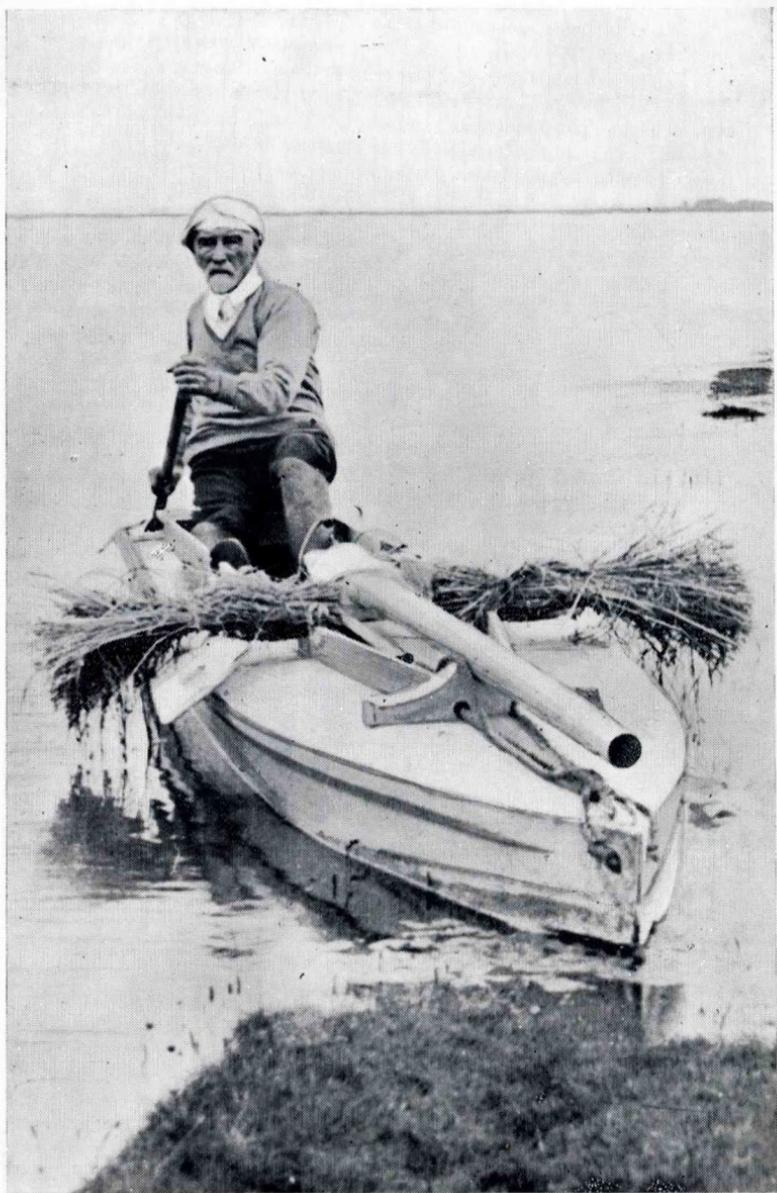
Order ANSERIFORMES.

Sub-Order ANSERES.

THE WHOOPER SWAN—*Cygnus cygnus* (L.)

A regular winter-visitor, present from October occasionally till early May.

Whooper Swans annually visit the Solway region but are not usually numerous in the tideway except when frozen out of inland haunts. In open weather one or another of three tarns



MARJORY GARNETT.

WILLIAM NICHOL, 1854-1934.

within a short flight of the firth may harbour from six to three times as many of these birds. Two lingerers, an adult and a cygnet, were picked out by E. Blezard and T. L. Johnston on Thurstonfield Lough on 2 May 1942. A herd of eighteen Whoopers was seen by J. Storey in the Wampool estuary after hard weather in November 1919, and the largest herd lately known, about fifty strong, was seen by W. Storey near Bowness-on-Solway on 26 December 1934. Twenty-nine Whoopers were noticed heading for the Solway from a northerly direction on 11 November 1924 by T. L. Johnston, and twenty-two from a southerly direction on 15 December 1929 by R. H. Brown.

Whooper Swans, long known as irregular but not uncommon visitors to the lakes and tarns of the central region, now appear annually in at least one locality. They are most often in small parties but Arthur Astley saw about thirty over Langdale on 30 November 1917, and Miss M. Garnett twenty-two flying south along Windermere on 24 March 1922. There was a herd of twenty, including one cygnet, on Little Langdale Tarn in January and February 1938, the birds having moved to there from Elterwater where there had been twenty-six. Rather smaller parties of Whoopers have since frequented these tarns each winter.

On 29 December 1942 there were three old birds and three second winter cygnets on Skeggles Water, Kentmere, a place not previously known as a haunt of swans. M. G. Robinson saw a single Whooper on Ullswater on 21 January 1940 and counted twenty-six on Bassenthwaite Lake on 21 February 1942. Two late birds were seen by K. R. Towndrow to alight on Coniston Water on 11 May 1934. Miss C. M. Clarke records that, during the hard weather early in 1942, several Whoopers, which had been driven on to Windermere by the freezing of the tarns, became frozen into the ice near Ferry Nab for several days, but were finally able to make their escape.

From time to time single birds or small parties visit the tarns in the Pennine region and East Westmorland as well as the southern estuaries. On Whins Tarn in East Cumberland, M. G. Robinson found two Whoopers present during February and March 1940, and seven on 18 December 1942. In the Kent estuary nine were seen by J. A. G. Barnes on 31 December 1940. Hard frost occasionally drives a few for a time to the coast between Millom and Barrow-in-Furness. Dr M. McKerrow saw one which had a freshly dead companion at Siddick Ponds, Workington, on 25 April 1940.

An account by L. E. Hope of Whooper Swans on the River Eden at Carlisle is one of the most interesting chapters in the history of Lakeland ornithology (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 2, p. 189 et seq.). Briefly, a young Whooper arrived in December 1904 and stayed until 8 May 1905, by which time it had assumed clear white plumage. The same bird, identified by a circular black mark on the yellow of the beak, and later proved

to be a female, returned alone to join the Mute Swans each successive winter up to 1908-09. She and her mate arrived with another pair in 1909-10, and finally, in 1910-11, they came with one cygnet and accompanied by two other adults and their two cygnets. Whoopers were not seen again on the Eden at Carlisle until six adults appeared on 15 February 1929.

#### BEWICK'S SWAN—*Cygnus bewickii bewickii* Yarr.

A regular winter-visitor to the Solway region but rare elsewhere in Lakeland.

Bewick's Swans much prefer to winter on salt water, and from late October onward they appear on the Solway in herds of up to fifty birds as well as in small parties. They are far more numerous there than Whooper Swans.

One of William Nichol's most memorable days of wildfowling was on 30 December 1908 when, off Cardurnock Point, and during a snowstorm, he punted up to a sandbank on the lee side of which was gathered a great company of wildfowl comprising fifty Bewick's Swans, eighty Bean Geese, two hundred Barnacle-Geese, a large flock of Mallard and several thousand Oyster-catchers. The swans, unwary by nature, remained even after the punt gun had been discharged at the Mallard.

Bewick's Swans have been noted on inland waters more frequently in recent years. Small parties, numbering up to half-a-dozen or so, now regularly visit Thurstonfield Lough in the Solway region. The neighbouring Monkhill Lough was frequented as well in the winter of 1938-39, and in February there were four on the River Eden at Carlisle where two adults had been seen on 17 November 1921. During January and February 1942, M. G. Robinson had a cygnet under observation on Whin's Tarn, towards the eastern limits of the area.

On Ullswater, where two Bewick's Swans were shot from a party of five at the beginning of 1905, M. G. Robinson counted a herd of sixteen on 10 January 1943. In other parts of the central region, two cygnets were observed on Windermere during February and March 1919 by Miss M. Garnett and J. F. Peters, and two adults accompanied by a cygnet on Whinfall Tarn, near Kendal, on 25 November 1942 by Miss M. Garnett.

#### THE MUTE SWAN—*Cygnus olor* (Gm.)

A resident which has increased until, in some districts, it is considered too numerous.

Pairs or parties travel to and fro between different haunts and in winter, numbers up to fifty or sixty herd together on some waters, particularly Thurstonfield Lough, while a few resort to salt water close inshore.

The very wary attitude of occasional birds frequenting the Solway in winter has given rise to the idea that genuine wild Mute Swans may sometimes visit the firth.

Dr H. J. Moon has for some thirty years noticed an extraordinary mortality among Mute Swans on Ullswater, the death of many visitors following within a few weeks of their arrival. A form of mineral poisoning is suspected.

#### THE GREY LAG-GOOSE—*Anser anser anser* (L.)

A regular winter-visitor and passage-migrant.

Almost to the end of the nineteenth century the Grey Lag-Goose was so little known as to be described by Macpherson as the rarest of the grey geese to visit Lakeland. A change had set in on the Solway with the present century and a marked increase on Rockcliffe Marsh was noted by Miss S. Mounsey-Heysham in 1906. There was even a period up to about 1918 when the Grey Lag was judged to have replaced the Bean-Goose as the commonest grey goose of the Solway, but in point of numbers it is now overwhelmed by the extraordinary increase of the Pink-foot. On Longnewton and Skinburness Marshes, not particularly favoured by Pink-feet, the winter numbers of Grey Lags were constantly between thirty and fifty from 1900 to 1909. They steadily grew until, by 1914, they had reached three hundred or more and, in 1919-20 and 1934-35, they approached five hundred. Although there was a decline between these last two seasons, one hundred and fifty Grey Lags were seen together in 1923, two hundred and fifty in 1926, and two hundred in 1932. Numbers fell away after 1935 and, in 1942-43, hardly any Grey Lags visited these two marshes.

The Grey Lag-Goose is the predominating wild goose on the Lakeland shores of Morecambe Bay which it has visited in growing numbers since 1920 when Leighton Moss, just outside the area, became attractive through being allowed to revert to its undrained condition. S. Moorhouse also points out that the gradual withdrawal of the tide in the bay appears to have a great deal to do with the establishment of geese here by causing the formation of new feeding grounds (*Naturalist*, 1941, p. 213).

For the Kent estuary alone, J. A. G. Barnes estimates two hundred as a fair average number of the Grey Lags wintering up to 1939. They then began to increase and he counted three hundred and twenty-five together in March 1940 and about three hundred in the following December and in March 1942. His largest count for a single gaggle in the winter 1942-43 was three hundred and forty but he saw more Grey Lags, perhaps nearly six hundred, in flight. Besides the Kent, the estuaries of the Duddon and Leven have become regular winter haunts.

On 5 September 1914, T. L. Johnston saw a skein of Grey Lags crossing from the Scottish to the English side of the Solway, where the normal period of arrival is from late September to late October. From the Solway there is a regular continuation of the southward movement towards Morecambe Bay, and flocks arrive in South Westmorland punctually in the third week of October.

Some appear to come from a north-easterly direction without touching the Solway, which is very likely as Grey Lags have been recognised travelling south-westerly over Alston in the Pennines. Skeins of grey geese, the species not definitely known, have been seen flying northward from South Westmorland early in the season; one near Crook on 21 September 1919 by Miss M. Garnett, one at Ambleside on 10 October 1929 by Arthur Astley, and three large flocks at Grasmere on 6 October 1933 by C. W. Coward.

Irregular winter movements to and fro between the Solway and Morecambe Bay, and from Morecambe southward, are influenced by weather changes, birds going south, at the signs of prolonged frost and returning with milder conditions. Their inland routes, while following roughly the lines of the main valleys, are very complicated; near Staveley, Westmorland, for instance, flocks are not infrequently seen flying east or west, apparently crossing over from one regular north and south line to another.

A general northward return by way of the Solway begins in late February, continues through March and ends usually in April but late flocks are sometimes still present in May and, in 1926, one did not leave the Solway until 15 May.

Grey geese, including Grey Lags, occasionally visit the lakes and tarns and one spring a flock, not specifically identified, was seen by Miss Cheetham on high ground near Kentmere which lies on a Morecambe Bay to Solway flight line. Small gaggles of Grey Lags were seen feeding at Tarn Wadling, Cumberland, in the winter of 1937-38 by W. J. M. Gubbins. During 1942-43 grey geese came by night to a park pond in Carlisle, and on one occasion were found settled on the water.

It is noticed on the Solway that, where Grey Lags and other wild geese frequent the same marsh, the Grey Lags are inclined to keep apart.

An albinistic goose, pale cinnamon in colour, shot on Rockcliffe Marsh on 31 January or 1 February 1917, and previously recorded as a Bean-Goose shot in January 1916 (*British Birds*, Vol. 10, p. 276) has, since it came to Carlisle Museum, been submitted to Dr G. Carmichael Lowe, who has pronounced it to be a Grey Lag-Goose.

#### THE WHITE-FRONTED GOOSE—*Anser albifrons albifrons* (Scop.)

A regular though not numerous winter-visitor.

Solway flocks usually number less than a score of birds, but on 12 March 1908, W. Nichol saw a skein of about a hundred White-fronted Geese flying north-easterly over Skinburness Marsh, and one wild morning in January 1920, Miss S. Mounsey-Heysham saw a similar number at rest in a field adjoining Rockcliffe Marsh. After Longnewton Marsh had become more favoured by grey geese than it used to be, twenty White-fronts were seen

on it by W. Storey on 10 April 1932, and twenty by J. Storey in December 1934.

Inland in Cumberland a bird was obtained at Greystoke in November 1898, and R. H. Brown saw a low flying skein of six near Welton on 8 February 1924.

White-fronted Geese are regular if uncommon visitors to South Westmorland, as perhaps they are to the northern shores of Morecambe Bay generally. A. P. North and M. Bratby saw a skein of about twenty over the Kent estuary in January 1935. W. Dodd records that they were present in fair numbers in the bay during the winter of 1933, and H. B. Turney that a few have accompanied the Grey Lag-Geese frequenting the Leven estuary in North Lancashire.

#### THE BEAN-GOOSE—*Anser fabalis fabalis* (Lath.)

A formerly plentiful winter-visitor, now rare on the Solway and still rarer on the northern shores of Morecambe Bay.

Once the common grey goose of the Solway, the Bean-Goose had apparently become displaced by the Pink-footed Goose by 1898, and it has since declined while the Pink-footed and Grey Lag-Goose have steadily increased. Miss S. Mounsey-Heysham noted the Bean-Goose as quite rare on Rockcliffe Marsh in 1904, represented by odd individuals in 1906, and very rare in 1923.

Fair numbers of Bean-Geese continued to visit Longnewton and Skinburness Marshes for a rather longer period. W. Nichol saw a flock of about a hundred and fifty there on 14 May 1906, and a skein passing over in a north-easterly direction on 3 March 1908. Later in 1908 he saw forty on 5 October and eighty on 30 December. Bean were the most numerous of the geese on these marshes in January 1909, and there was a gaggle of twelve in March and another of seven, from which James Storey got three, in November. Records fail until January 1920 when T. L. Johnston shot one of five which had been feeding to the outside of some two or three hundred Grey Lags on Longnewton Marsh. None were reported or shot again until three were shot out of a gaggle of sixteen in January 1930, one out of seven by James Storey in January 1936, and one from a flock of twelve by W. Storey in November 1938.

Two out of three were shot in the Esk estuary, off Rockcliffe Marsh, in November 1937.

#### THE PINK-FOOTED GOOSE—*Anser fabalis brachyrhynchus* Baillon

A regular winter-visitor and passage-migrant.

The Pink-footed Goose, previously rather rare, seems to have displaced the Bean-Goose as the common grey goose of the Cumberland Solway not later than 1898. Miss S. Mounsey-Heysham noted four hundred Pink-feet on Rockcliffe Marsh in December of that year and five hundred in October 1904. They now visit this marsh in thousands, arriving from mid-September onward

through October. Four thousand has been reckoned a good number present at one time but, at 5.30 p.m. on 20 October 1941, R. A. Carr-Lewty took his aircraft over the marsh and in an aerial survey estimated fifteen thousand geese on it, the most he had ever seen in his frequent flights there. Most come overland by way of Bewcastle Fells from a north-easterly direction; others cross the Solway from about the Nith estuary in Dumfriesshire.

Pink-feet occasionally visited Longnewton and Skinburness Marshes in small numbers up to 1928. They then became more regular, and in October 1933 James Storey saw his largest number in a flock of about two hundred which stayed for a few days on Longnewton Marsh.

From the time of the earliest arrivals, and apart from weather movements, there is a regular and continuous movement from the Solway in a south-easterly direction, the birds often following the line of the Eden valley. The travelling skeins, evidently heading for east coast haunts, commonly strike the Pennines near Cross-fell and follow the escarpment until they pass through by way of Stainmore. Many geese following a north-west to south-east flight line, and probably Pink-feet, travel over the upper Lune valley still further south in Westmorland. Grey geese, believed to have been Pink-feet, have occasionally been heard travelling south-easterly through Cumberland without halting at the Solway, very early in the season, as noted by G. B. Routledge and Miss H. Blezard in July and August 1931.

A skein of fifteen Pink-feet on a westerly course over Carlisle were encountered at 7000 feet above ground by R. A. Carr-Lewty whilst piloting an aircraft on 16 October 1941.

Pink-feet as well as Grey Lags leave the Solway in the direction of Morecambe Bay, and though the latter predominate in the southern estuaries, the Pink-feet are regular visitors to South Westmorland, and in some years stay in considerable numbers for a short period in October and early November, notably in 1936. Many apparently pass over, without halting, on their way to the Ribble estuary.

Wintering birds, besides grazing on the marshes, habitually flight in to feed in the mosses and fields during the day time. Owing to constant comings and goings, including weather movements, their numbers are very variable but usually large from February onwards, when there is a steady return lasting into April. Flocks are sometimes present in May, and Mr and Mrs W. J. M. Gubbins saw one numbering between two and three hundred on Rockcliffe Marsh on 5 May 1934.

Albinistic Pink-feet, one or two at a time, have been seen on Rockcliffe Marsh in various seasons between 1909 and 1937. One shot by Miss S. Mounsey-Heysham in October 1912, and later presented by her to the Carlisle Museum, is pale cinnamon in colour and so is one shot in November 1937 and in the collection of R. A. H. Coombes.

THE SNOW-GOOSE—*Anser hyperboreus* ? subsp.

A rare winter-visitor to the Solway region.

Macpherson himself twice had the pleasure of seeing Snow-Geese in Cumberland; a single bird at Allonby on 22 August 1884 and, with D. Losh Thorpe, a skein of four fighting down the River Eden on 22 January 1891.

Four or five Snow-Geese frequented the Solway during the winter of 1920-21. One of them, shot on the River Dee at the Scottish side, on 18 February 1921, proved to be an immature Greater Snow-Goose, *Anser hyperboreus atlanticus* (Kennard), and is now preserved in the Royal Scottish Museum. On 13 November 1921, James Storey saw a skein of four adult Snow-Geese at Anthorn. Two were seen by Miss Mounsey-Heysham on Rockcliffe Marsh in September 1922, and one adult at different times in the next month by T. Percival and T. L. Johnston. These were associating with Pink-footed Geese (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 32). On 5 April 1923, E. Blezard flushed at close range in the Esk estuary two adults which joined five grey geese on their way to Rockcliffe Marsh. Again on this marsh, Ritson Graham found two adults among the Pink-footed Geese on 11 October 1925.

THE RED-BREASTED GOOSE—*Branta rusticollis* (Pall.)

A rare wanderer from West Siberia, of which a single individual has been recognised on the Cumberland Solway. During the last week in November 1918, William Nichol saw a Red-breasted Goose in company with Barnacle-Geese on Longnewton Marsh. Its smaller size and distinctive coloration were the more evident as it kept to the outside of the flock in flight. Later in the winter, a local shooter obtained on the marsh what was to him a very strange goose, and, from the description he gave to E. Blezard, a Red-breasted Goose. It was alone at the time it was shot and was afterwards cooked and eaten, but in spite of this unfortunate end there can be little doubt that it was the bird Nichol had seen earlier in the season.

THE BARNACLE-GOOSE—*Branta leucopsis* (Bechst.)

A regular, though lately decreased, winter-visitor to the Solway, and an irregular and uncommon one to the northern shores of Morecambe Bay.

Before 1900, when most of the favourite feeding ground was washed away, Barnacle-Geese were the commonest of the geese on Rockcliffe Marsh. As this marsh gradually became deserted there was an increase on Longnewton and Skinburness Marshes where new expanses providing good grazing were forming, and there were often between four hundred and five hundred birds there until after 1931. There were a thousand on Longnewton Marsh on 12 December 1929. Perhaps because very little new marsh

had been forming, numbers were down to fifty or sixty at the most in the winter of 1935-36, but in December 1938 about two hundred birds were present. In any winter, numbers fluctuate, as the birds are continually travelling to and fro between the marshes of the English and Scottish sides of the firth. Through changes in the marsh vegetation, and through other causes, Longnewton was practically deserted by Barnacle-Geese in the winter 1942-43 but, on Rockcliffe Marsh, only occasionally visited by small flocks in previous years, the first geese seen by W. Percival, the herdsman, there in the autumn of 1942 were between two and three hundred Barnacles. This visitation may presage a return of wintering packs as new feeding grounds are forming.

Barnacle-Geese begin to arrive on the Solway early in October, sometimes in late September. An exceptionally early gaggle was seen on 15 September 1913. Like the Pink-footed Geese, most of them come overland by way of Bewcastle Fells from a north-easterly direction. Incoming flocks have also been seen flying up the Solway from a westerly direction. A small party generally arrives first, to be followed, often from the next day onward, by larger numbers until the wintering flocks are in full strength. On arrival the geese flight up and down the marsh in full cry, eagerly seeking their feeding ground and settle down as soon as they locate it. They will come in to feed in daytime until too much disturbed and then they resort to the marsh by night, spending the day out on the exposed sand flats, but their movements are governed above all by the flow of the tides, the state of the moon and the prevalence of frost. A change of habit was noticed by W. Storey in March 1935 when a pack came in on several days to feed on farm land at Longcroft, near Anthorn. The birds favoured a "seeds" field, that is, one in which grass is sown at the same time as oats to come on after the harvest.

As the time of their departure draws near the Barnacle-Geese become very restless and keep up a constant clangour. Between short spells of feeding they suddenly take to the air, different parties repeatedly breaking away from each other and rejoining until the whole pack is assembled for the final flight. The geese leave, usually in a body, generally within the week following 21 April. On 22 April 1928 the pack left Longnewton Marsh at exactly 5.0 p.m. and made away towards the north-east. A party of three Barnacles, not injured birds, were flushed from Rockcliffe Marsh on 28 May 1925 by E. Blezard and Ritson Graham.

A gaggle of sixteen Barnacle-Geese frequented Rampside, near Barrow-in-Furness, in December 1933, and a single bird which had been in company with the grey geese was shot in South Westmorland in December 1934. On 2 December 1938 Roger Robinson saw three near Arnside, and the following day he saw a flock of fourteen flying north.

Barnacle-Geese rarely appear inland in winter and then perhaps only in severe weather. One was shot out of a party of five

near Temple Sowerby in the Eden valley, Westmorland, in 1933 by J. Oliver Wilson.

During the winter of 1923-24, there was a white Barnacle-Goose among those frequenting Longnewton and Skinburness Marshes and it was last seen that season in a pack heading for the Scottish side one day in March. It reappeared on Longnewton Marsh in November 1924 and was eventually shot at the Scottish side on Bowhouse Merse, Dumfriesshire, on 3 January 1925. At Cardunock Point, on 1 January 1935 a white Barnacle-Goose was seen in a pack which had crossed from the Scottish side of the Solway, and on 9 November 1939 another, which proved to be a young male, was shot at Bowness-on-Solway and is now in the Carlisle Museum.

W. Nichol made a record in bagging forty Barnacle-Geese to one shot of his punt gun in the Waver estuary on 12 December 1892.

THE DARK-BREASTED BRENT GOOSE—*Branta bernicla  
bernicla* (L.)

THE PALE-BREASTED BRENT GOOSE—*Branta bernicla  
hrota* (Müller)

Brent Geese are irregular winter-visitors in small numbers to the Solway and the southern estuaries, their scarcity being perhaps due to the absence of that favourite food, Grass Wrack (*Zostera marina* Linn.).

An early solitary bird was shot on Rockcliffe Marsh one September by Miss S. Mounsey-Heysham, and a spring party of six was seen in the Esk estuary on 8 April 1923, by E. Blezard. Winter parties usually number between four and twelve, and sometimes there are only single birds, either solitary or in the company of other geese. James Storey shot one out of a pack of Barnacle-Geese at Anthorn on 12 February 1933. Not since the severe winter of 1880-81, when W. Nichol saw about a hundred Brents flying in an easterly direction, has such a flock been reported from the Solway. Macpherson noted a flock of between thirty and forty at Allonby in November 1895 (*Vict. Hist. Cumb.*, Vol. 1, p. 198), and James Storey saw one of twenty at Anthorn in November 1913.

In December 1913 J. P. Rogers saw a flock of eighteen on the Duddon, the most favoured of the southern estuaries. A recent record for this region is of a single bird which, in January and February 1938, frequented Meathop and Arnside Marshes where it was seen by M. Bratby and others (*Grey Goose*, p. 118). Brents have been reported from Walney Island on several occasions.

Both the light and the dark forms of the Brent Goose occur on the Solway and both are represented by Cumberland specimens in the Carlisle Museum.

THE CANADA GOOSE—*Branta canadensis canadensis* (L.)

Although the Canada Goose has been so long introduced in England, it has not become at all familiar in a feral state in Lakeland.

Macpherson, in 1892, said that H. E. Rawson informed him that two pairs bred every year on Rydal Water, Westmorland. More recently, birds were brought to Grasmere, but at present there are none breeding on either of these lakes though a party of twelve visited Grasmere on two successive days in June 1932. One was shot on the River Esk, Cumberland, in October 1930.

THE SHELD-DUCK—*Tadorna tadorna* (L.)

The Sheld-duck is a common and increasing nesting species, present at all times on most parts of the coast. Abundant as it is on the Solway, it appears to be even more numerous, in winter at least, in Morecambe Bay where gatherings of about five and seven hundred birds have been seen on different occasions at the mouth of the Kent. The sand dunes of the Ravenglass district on the west have some attraction for it at nesting time.

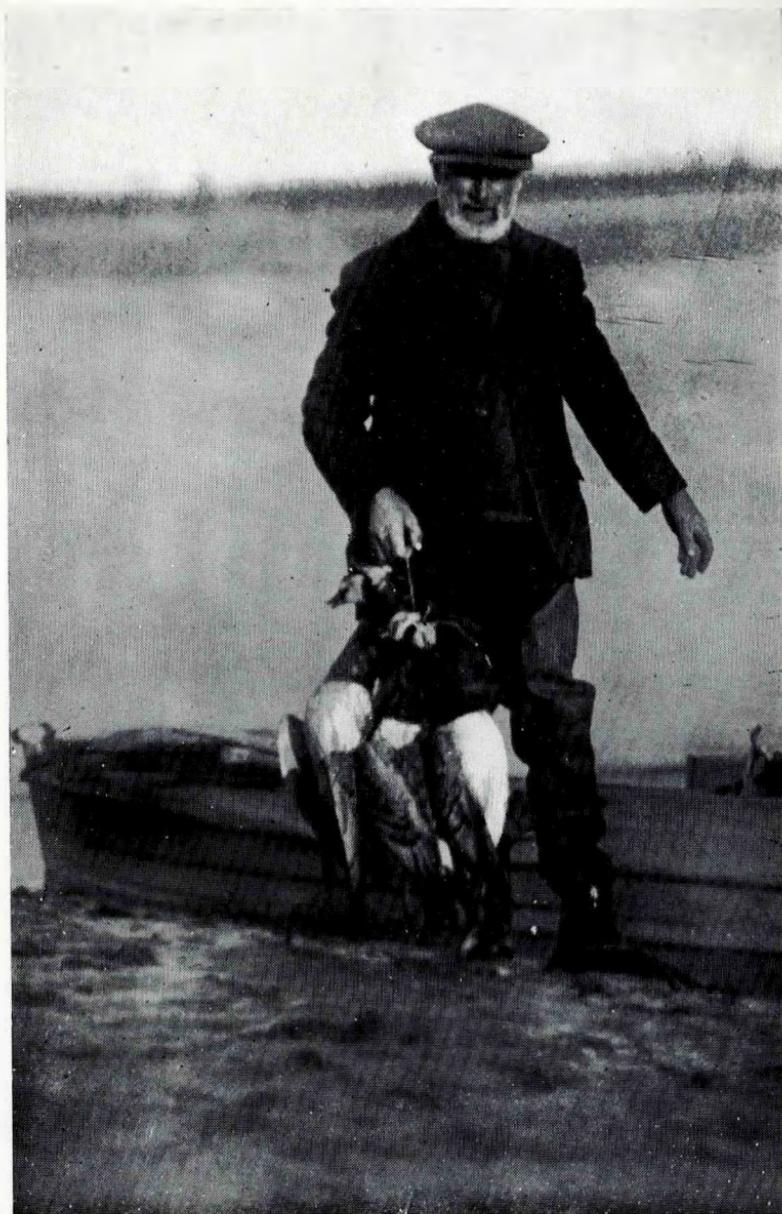
Growing numbers of Sheld-ducks breed away from the shore. In the Solway region they go not only to the mosses but also to the woods and fields further inland. Nests on the mosses are not so often placed in burrows as elsewhere but frequently in dense growths of heather (*Calluna vulgaris* Hull.), Bog-myrtle (*Myrica Gale* L.) or Gorse (*Ulex europæus* L.). One such nest had a covered-in runway no less than eighteen feet in length.

Foulshaw Moss is a favourite Westmorland nesting haunt and the limestone clints standing back from the Kent estuary afford sites of an unusual type.

An increasing number of Sheld-ducks nest round the southern shores of Windermere and another inland haunt in North Lancashire is Finsthwaite Tarn. In the Furness district nests have been found among rocks, in bramble patches and at the foot of trees.

Young Sheld-ducks, soon after they are hatched, are conducted by their parents, or even find their way alone, down runners and ditches to the shore, where often several broods unite, and it is not unusual for any number up to eighty ducklings of varying ages to be in the charge of only two adults.

During the autumn and winter months the Sheld-duck keeps almost entirely to the coast, usually in flocks. Summer flocks of thirty to forty adults are not unusual on the Solway and, in autumn, flocks of juveniles are often distinct from those of adults. Although so rare inland in winter, the Sheld-duck has occurred at this season on Ullswater, Windermere and Skegges Water. Pairs begin to break away from the winter flocks and revisit their nesting haunts at the end of February and sometimes appear for a day or two in spring at lakes, tarns or other places where they do not stay to nest.



**JAMES STOREY.**

**SARAH J. SHARP.**

A Sheld-duck recovered on Walney Island in January 1930 had been ringed as a young bird at Ainsdale, Lancashire, in June 1920.

THE RUDDY SHELD-DUCK—*Casarca ferruginea* (Pall.)

Just in time to be mentioned in a postscript to his *Fauna*, Macpherson disinterred the remains of a Ruddy Sheld-duck which had been shot on the River Wampool, Cumberland, on 18 July 1892, and thrown away as useless. He adds that the bird was one of two, and undoubtedly of wild origin.

The next appearance of this irregular wanderer from southern Europe and further east, was in October 1914, when a female was shot on Todhills Moss, Cumberland. It was subsequently secured for the Carlisle Museum by D. Losh Thorpe.

THE MALLARD—*Anas platyrhynchos platyrhynchos* (L.)

A resident, winter-visitor and passage-migrant.

Except that there may be times during the winter months when it is outnumbered by the Wigeon, the Mallard is the commonest and most widely distributed of the ducks. It nests from the salt marshes inland through rushy ground and damp woodlands to the lakes and less barren fell tarns up to at least 1000 feet. While the females are busy rearing their young the drakes commonly gather together and continue in parties until July, when young and old begin to flock to the coast and various attractive inland waters.

Migrants crowd in during September and October and it is then that the Mallard population, natives and incomers together, is highest. A thousand Mallard have been flushed from a Pennine tarn in September. A good many may pass on but the winter stock remains high in localised large flocks and generally distributed small parties. The largest winter gathering seen on the Solway by W. Nichol was in January 1904 and numbered about fifteen hundred. There now appears a tendency for Mallard in autumn and winter to desert the Solway and congregate on inland waters such as the middle reaches of the rivers Eden and Irthing.

It is in winter that the largest gatherings are present on the lakes, particularly Ullswater, Bassenthwaite, Derwentwater and Windermere, and flocks of up to five hundred birds are seen on the first named. Coniston Water is more of a hard weather resort.

Numbers increase locally during the time of northward passage in February and March.

From 1934 to 1936 numbers were greatly reduced both in Morecambe Bay and inland in south Westmorland but showed a recovery in 1937.

From their inland and salt water daytime haunts the birds regularly flight at dusk to feed in swamps, damp meadows, stubble and potato fields, pools and ditches.

Small parties of Mallard travelling in daytime have been logged at heights from 2300 to 4000 feet by R. A. Carr-Lewty while he was flying over Carlisle and the Solway in the months February, October and November 1941.

A Mallard drake shot by W. Storey at Anthorn, Cumberland, on 27 December 1929, had been ringed at Lake Ilmen, Novgorod, Russia, on 7 July 1929. Another Mallard, ringed as young in South-west Finland in July 1938 was recovered in Cumberland in January 1939.

#### THE GADWALL—*Anas strepera* L.

Formerly among the rarest of wildfowl visitors, the Gadwall is now of frequent occurrence in the Cumberland Solway region. Single birds or small parties appear at any time between August and the end of winter, following both the tideway and the adjacent sheets of fresh water. Some of these birds may have originated from Netherby, as it is since 1922, when appreciable numbers first bred at large there, that the species has so noticeably increased.

In West Cumberland, Dr M. McKerrow observed a Gadwall on Siddick Ponds at various times in October 1923; Dr H. J. Moon remarks that the bird is an occasional visitor to Ullswater, and E. Blezard found a party of three on Whins Tarn in the east of the county on 22 March 1931.

Twice during April 1930, Ritson Graham noticed a Gadwall drake on one of the loughs of the Solway region, and there on 7 June he came upon a duck with a brood of five ducklings. One to two pairs of Gadwall have since frequented this lough in different years.

Although it does at times occur in Morecambe Bay, the Gadwall is still decidedly rare in Westmorland and North Lancashire. The first example to be obtained in the former county was shot on the River Lune at Tebay, on 2 January 1922, and recorded by H. W. Robinson, who secured it for the Kendal Museum (*British Birds*, Vol. 15, p. 241). There is a previously unrecorded occurrence of a bird seen on the Kent above Levens Bridge in January 1895 by Henry Walker, and in June 1939 Miss M. Garnett saw a female, apparently not a breeding bird, on a Westmorland tarn.

A pair of hybrids, male and female, between Gadwall and Mallard, now in the Carlisle Museum, were shot by W. Nichol on the Cumberland Solway, on 5 February 1907.

#### THE TEAL—*Anas crecca crecca* L.

A resident, winter-visitor and passage-migrant.

Breeding birds are widely scattered over Cumberland, Westmorland and North Lancashire, but nowhere in any numbers. Most seek the vicinity of the smaller pieces of water, from woodland pools to moorland tarns; others nest on the salt marshes,

coastal and inland mosses, and a few around the lakes. A pair have been seen on a Pennine moorland pool at 1500 feet.

Local birds begin to gather on the more favoured tarns and lakes and on the coast before August. Many migrants arrive in September, and it is usually in this month and in October that the largest numbers of Teal are present. The great autumn influx is very striking in the Solway region, where flocks may number up to three hundred birds. It is noticed to a less extent on the waters in the east of the area.

In the southern estuaries the autumn strength may be kept up into November, but in general, as local birds emigrate and visitors continue on their way, there is by then a decline to the lower numbers of winter.

With the return of passage-birds in March and April an increase is evident on some of the lakes and in the Solway region, but nothing comparable with that of autumn.

Many Teal, hand reared or caught up, have been ringed at Netherby, Cumberland. A number have been recovered in Ireland in winter. Other recoveries show something of the general range of this duck. Birds ringed in the early part of the year have come to hand in May in North Russia; in June in Norway; and in April and May in Sweden. Of those ringed in March there have been autumn recoveries in Latvia, Sweden, Denmark, France and Germany. Some ringed in autumn have been recovered in later autumns in Norway, Sweden and Denmark, and one the same season in Holland. One ringed in February 1932 was recovered in Spain in December 1933, and another ringed in April 1932 was recovered in Holland the following August.

Two Teal ringed in Denmark in June 1931 and September 1931 were obtained in Cumberland in March 1932 and February 1932 respectively.

#### THE GREEN-WINGED TEAL—*Anas crecca carolinensis* Gm.

An adult drake of this rare vagrant was slightly injured by shot and taken alive near Levens, Westmorland, on 26 December 1936. During the time it was kept on a pond near Kendal its behaviour appeared to be that of a truly wild bird. H. W. Robinson, who saw the bird there, has recorded this first known occurrence of the Green-winged Teal in Lakeland (*British Birds*, Vol. 30, p. 378).

#### THE GARGANEY—*Anas querquedula* L.

In a truly wild state the Garganey is no more than a rare visitor, usually on spring or autumn passage, and all definite records refer to Cumberland.

A winter straggler was seen by W. Nichol near Silloth, Solway, on 22 December 1906.

Garganey were first reared at the Netherby duck-ponds in 1908, and a drake shot at Burgh-by-Sands, on the Solway, on 14

August 1909, has therefore been suspect. It should be remembered, however, that Macpherson traced several passage occurrences between 1848 and 1895.

In February 1929 an adult drake was shot out of a party of seven Garganey on the River Lyne, and on 23 April in the same year, Dr M. McKerrow observed two drakes and a duck on Sid-dick Ponds, Workington.

#### THE WIGEON—*Anas penelope* L.

A common winter-visitor and passage-migrant and occasional nesting species.

The few Wigeon that now regularly appear on the Solway in August are probably British bred. The companies from overseas arrive at the end of September and during October and gather on the Solway, in the Duddon and other west-coast estuaries and in Morecambe Bay. The flocks commonly number from three to four hundred birds.

Right through from winter to spring many Wigeon spend the day on tarns within easy flight of the coast and stormy weather may drive in increased numbers as, on one boisterous October day, there were fully a thousand birds on Monkhill Lough in the Solway region.

Rarely a few Wigeon stray well beyond tidal reaches up the rivers Eden and Esk, and further inland they formerly occurred only sparingly. From 1924 small parties were noted in autumn and winter on East Cumberland waters until now, on one of them, Whins Tarn, the Wigeon is usually the most numerous duck in winter. There were eighty there in December 1941 and sixty in January 1942. In 1942-43, from the first two arrivals on 31 August, numbers rose through a hundred in December to about a hundred and fifty in February. In Westmorland at least one eastern moorland tarn is frequented during winter, and on Whin-fell Tarn, a long flight from the Kent estuary and another regular winter haunt, up to a hundred birds have been seen.

The lakes of the central region do not on the whole attract many Wigeon. Some visit Bassenthwaite Lake and Derwent-water in winter, and a few occasionally appear on Ullswater, Windermere and Esthwaite Water.

The gatherings on the loughs adjacent to the Solway are often large after the turn of the year, and it is usually some time in May before all the migrants have gone.

Captain W. J. Farrer found a Wigeon's nest containing ten eggs at Bassenthwaite Lake, Cumberland, on 22 April 1903. He found a second nest there in 1906, and a third in 1908, both of which were destroyed by floods (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 18). In 1922, T. L. Johnston watched a pair of Wigeon at one of the Cumberland loughs, and eventually saw the duck followed by a brood of young. Wigeon now breed on one of the Cumberland coastal mosses and have been seen on more than one

Westmorland tarn in summer, but there is so far no definite proof of nesting in the latter county.

A Wigeon reared at Netherby, Cumberland, and ringed in September 1920, was recovered in North-east Russia in May 1926.

#### THE PINTAIL—*Anas acuta acuta* L.

A winter-visitor, passage-migrant and occasional nesting species.

The Pintail is a much commoner winter-visitor now than thirty years ago, when it was rather rare, even on the Solway. Although the increase has been much greater on the Scottish side of the firth, parties regularly arrive on the English side from July onward. These parties favour the tideway, but as many as twelve birds together have been seen on one of the nearby loughs in October. Winter numbers on the Cumberland coast are as a rule smaller than in autumn, but in Morecambe Bay they are considerable, and during stormy weather many birds flight in to the fresh marshes at night. A few birds have been noted on Westmorland inland waters in winter.

Spring passage-birds, single adults, pairs or small parties, are present on the Solway until late April, and occasionally on inland waters during this month. A flock numbering ninety-seven was seen by J. F. Peters in the Duddon estuary, between Cumberland and North Lancashire on 2 April 1922.

Three pairs of Pintail nested on a Cumberland coastal moss in 1917, and in June, James Storey came upon one of the ducks with her brood in a drainage cut (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 33). He observed a pair of Pintail frequenting the same neighbourhood in May 1925.

On 3 May 1932, the Rev. C. F. Tomlinson found a Pintail duck brooding her clutch of six eggs on an island in a Westmorland lake (*Naturalist*, 1932, p. 227).

Between 1927 and 1931, Pintail have been noted during the breeding season in other localities in Cumberland and Westmorland.

Two adult Pintail ringed at Netherby, Cumberland, in March 1933 were recovered the same year, one in Schleswig Holstein in September, the other in Orkney in October.

#### THE SHOVELER—*Spatula clypeata* (L.)

A resident, winter-visitor and passage-migrant. The first known Cumberland nest of the Shoveler was found on Burgh Marsh by James Smith in 1886. In later years this duck has increased until a good many pairs now nest on the marshes of the upper Solway and about the nearby loughs. It has long nested on a coastal moss in the west and has spread inland to Bassenthwaite Lake and the Cumberland plain and has been seen in the nesting season so far east as Whins Tarn.

Its establishment as a breeding species in Westmorland is more recent. Marshes near Arnside were colonised from Leighton Moss, a Lancashire post-war stronghold just outside the area, and the neighbourhood of the Kent estuary is still the chief nesting haunt. Shovelers now breed at one tarn at over 800 feet, and possibly others, in the east of the county, and have nested at one lake, Haweswater.

Paired birds have appeared on North Lancashire tarns in spring, but there is so far no proof of nesting.

From July onwards until the arrival of passage-migrants or winter-visitors, the home-bred Shovelers are to be seen in family parties on or near the coast. Throughout the winter and in early spring, flocks of from twenty to forty birds are usual in the Solway region, and a winter flock in Morecambe Bay numbered twenty-six.

While the Shoveler in winter regularly frequents fresh water close to the coast, such as the loughs of the Solway region and Siddick Ponds in West Cumberland—the latter also a spring place of call—it is not then often found far inland, although single birds have occurred rarely on Windermere.

#### THE RED-CRESTED POCHARD—*Netta rufina* (Pall.)

Two of these rare visitors have occurred in Westmorland.

The first, a young drake in changing plumage, was shot on 9 October 1897 by J. Noble, on Little Water, a very small reedy tarn on the high ground between Haweswater and Bampton. It was erroneously recorded in Vol. 111 of the *Transactions of the Carlisle Natural History Society* as having been shot in October 1896 on Small Water. Macpherson's note in the *Ibis*, Seventh Series, Vol. iv, No. 13, and a manuscript note in his copy of *Yarrell* leave no doubt of the correct date and locality.

The second Red-crested Pochard to visit Lakeland was an adult drake which remained for some days on another small reedy tarn, this time in South Westmorland. It was first seen on 8 April 1937 by C. Hulme Wilson, and later by several other observers. On 14 April it was also seen on a larger tarn in the neighbourhood.

Now that so many kinds of rare ducks, including the Red-crested Pochard, are introduced and allowed full liberty on ornamental waters, there is always some doubt whether birds of these species appearing in different parts of the country are truly wild.

#### THE COMMON POCHARD—*Aythya ferina* (L.)

In common with the Tufted Duck the Pochard has increased considerably in the last thirty years and is a regular winter-visitor to most of the tarns and lakes, but does not frequent the higher mountain tarns and only appears on the estuaries during very hard weather. It has nested in Cumberland.

The winter birds, most of which are drakes, begin to arrive as a rule about the end of September. They appear first in North-east Cumberland, where early dates, which are for flocks of twenty to thirty on Tindale Tarn, are 24 July 1928 and 8 August 1925. In the Solway region they arrive later, and are not often seen before October on the southern lakes. Small parties are usual but flocks of thirty to forty are not uncommon, and on the tarns of East Cumberland where the birds are most numerous, flocks of a hundred and fifty to two hundred have been seen. In North Cumberland the big packs disperse before the end of March and most Pochards have left by the end of April. Paired birds linger sometimes at certain tarns as if inclined to nest, and non-breeding birds are present in summer on most East Cumberland waters.

Nesting in the Solway region was suspected by Macpherson but it was not until 1927 that the first Cumberland nests, one on 19 May and another on 24 May, were found by Ritson Graham. On 24 May 1928, he found a nest with eight eggs at the same place, and on 17 July he saw a duck with downy young in a new locality (*North Western Naturalist*, Vol. 4, p. 114, and Vol 5, p. 172).

In Westmorland no nest has yet been found, though in recent years paired birds have been seen in summer in more than one suitable place.

H. W. Robinson records that numbers of Pochard frequent a large dock at Barrow-in-Furness all the summer and have done so every summer for at least twenty-five years (*Report of Lancs. and Chesh. Fauna Comm.*, 1934).

#### THE TUFTED DUCK—*Aythya fuligula* (L.)

A resident and common winter-visitor, generally arriving about October, and widely distributed on all fresh water except the highest mountain tarns, but appearing on the rivers and estuaries as a rule only in hard weather. Numbers vary from year to year, but small parties are usually present throughout the winter on the lakes and tarns, and flocks of forty to fifty are not uncommon, especially when frost drives the birds on to the larger lakes. The numbers of ducks and drakes are roughly equal. The migrants leave in March and, except for occasional visits from non-breeding birds, the lakes are then deserted. In late years there has been a tendency for parties of these non-breeders, apparently in adult plumage, to spend the summer on East Cumberland tarns where up to thirty have been counted at one time. Flocks comprising adults and young come to these same tarns in late summer and there are two records of nestlings ringed in Northumberland in August and recovered in North-east Cumberland in the following September.

The Tufted Duck now nests regularly at several places in East Cumberland and one in the Solway region, and has nested

in the Cumberland plain. The first Cumberland nest was found on 14 June 1922, by E. Blezard, at a pond where the birds had been established in the breeding season since 1919, and on 19 June a second nest was found in another locality, as recorded by F. H. Day and E. Blezard (*British Birds*, Vol. 16, p. 109, and Vol. 19, p. 312). Earlier than this, Macpherson had little doubt that Tufted Ducks had nested near Burgh-by-Sands in 1888, and in the same district T. L. Johnston had some evidence of their nesting in 1911 and 1912. Sir Richard Graham stated in 1922 that a few pairs had nested each year on the Netherby estate since some hand-reared birds were released there about fifteen years earlier.

In Westmorland the first nest was found by a moorland tarn, at about 1000 feet, near Windermere, on 3 June 1914, by J. F. Peters (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 33). Tufted Duck have failed to establish themselves here owing, it is thought, to the presence of pike, but have nested regularly at a tarn in East Westmorland at about the same altitude, since two nests were found there in 1920, as recorded by the Rev. E. U. Savage. They have now colonised at least one other tarn in that region.

In North Lancashire nesting was suspected by E. B. Dunlop at Priest Pot, Esthwaite, in 1911 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 18), and again at the same place in 1935, by R. H. Brown.

A Tufted Duck ringed in Sweden in June 1933 was recovered in Cumberland in October 1937.

#### THE SCAUP-DUCK—*Aythya marila marila* (L.)

A regular winter-visitor to the coast and estuaries, arriving usually in October, exceptionally in September or even August, and leaving as a rule in February.

Though more erratic in its visits, the Scaup is better known on the Solway than the Tufted Duck. In 1914 W. Nichol wrote: "Between twenty and thirty years ago they were fairly plentiful in Silloth Bay, it being no unusual sight to see from three hundred to five hundred in one flock all through the winter. Unlike all the other wild ducks all the Scaups in the neighbourhood could be found at low water in one particular place where there was not much current in the water and a plentiful supply of cockles. Of late years they have decreased, one reason being the strength of the current and also the scarcity of cockles."

Scaup are regular winter-visitors in small numbers to the Morecambe Bay estuaries, and they are seen most years off the west coast. Fifty or more were seen on the sea near Bootle on 9 October 1922 by Dr M. McKerrow, and a flock near Maryport on 26 February 1939 by R. Stokoe.

Inland, Scaup appear irregularly, usually single birds or twos and threes, in hard weather, the majority being females or immatures. They have occurred on most of the lakes and tarns

and in the Eden and Lune valleys. In January 1915 considerable numbers, in parties of four to seven, were noted on Windermere, Rydal and Grasmere by J. F. Peters, and there was a similar visitation to Windermere before and during the hard weather of February and March 1929. On each occasion a few birds stayed until late in March.

Macpherson mentions rare instances of single birds and even small parties passing the summer months in Cumberland, and there are a few recent summer records. W. Nichol saw about two thousand Scaup off Skinburness on 26 June 1917, and J. Storey observed three adult drakes near Bowness-on-Solway for some days in July 1935. Six rather late birds, four adult drakes and two ducks, were seen by E. Blezard in the old dock at Port Carlisle on 3 April 1939. Inland, the remains of a drake were found on the shore of Ullswater on 16 May 1909 by E. B. Dunlop, and a pair were seen on Windermere on 1 May 1927 by Miss M. Garnett.

#### THE GOLDENEYE—*Bucephala clangula clangula* (L.)

A winter-visitor, usually arriving in October and as widely distributed and common inland as the Tufted Duck, but more given to frequenting rivers and estuaries than that species. It is occasionally seen off the Allonby shore.

The numbers that visit Lakeland vary from year to year, and Goldeneyes were notably abundant in Morecambe Bay and the southern estuaries in 1933. Their favourite haunts are the estuaries of the Eden and Esk where flocks of twenty or thirty are usual and up to a hundred birds are sometimes seen together. Elsewhere they are generally found in twos and threes and small flocks, keeping apart from other diving ducks. On Windermere the single birds and small parties tend to join up in March and April when flocks of up to thirty birds are not infrequent. The majority everywhere are immature but there is a fair sprinkling of old drakes, and *pairs* of adults are sometimes seen in winter.

Most Goldeneyes leave the Solway region before April, but on the lakes they usually stay till the middle of that month, and small flocks are occasionally seen in May. Single birds that sometimes remain through the summer are usually cripples.

The very attractive courtship display is occasionally seen on Windermere from January onwards.

#### THE LONG-TAILED DUCK—*Clangula hyemalis* (L.)

A rather uncommon winter-visitor mostly to the Solway but appearing occasionally off the Allonby shore and rarely in Morecambe Bay.

Macpherson records a visitation in the autumn of 1887, when more than a score were killed on the two sides of the Solway. Smaller visitations have since occurred, notably in 1895, when several females were shot on the Wampool and Waver in October

and November, and a drake on Rockcliffe Marsh in January (*Vict. Hist. Cumb.*, Vol. 1, p. 202). Again, in 1903, three Long-tailed Ducks were shot and others seen at Rockcliffe and Skinburness in October and November. Apart from these there are only scattered records, mostly in October and November, a few in December and January. The latest record is of an immature male shot at Cargo-on-Eden on 10 November 1939 by R. Hind. The earliest autumn date is September 1902 when an immature female was bought by J. Ostell from a Carlisle game shop. The only February bird, and the only adult drake in full winter plumage from the Solway in recent years, was shot at Rockcliffe in 1906.

Long-tailed Ducks very seldom visit the fresh water loughs of the Solway region, but Macpherson recorded two which frequented Monkhill Lough in November 1898, and an immature drake shot on a dub on Salta Moss, Allonby, in October 1893.

The only recent record from the Lakeland shores of Morecambe Bay is of a young bird seen by M. Bratby in December 1934.

There are only five inland records besides that at Renwick in April 1889, mentioned by Macpherson. On 13 January 1908 E. B. Dunlop saw two, an adult drake in almost full winter dress, and a female or immature male, which had been shot in Waterhead Bay, Ambleside, by W. Hardy. On 10 November 1922 a single female was seen in the same locality by Arthur Astley (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, pp. 18 and 34). C. Hulme Wilson records a female shot on the Lune about thirty years ago, and Dr H. J. Moon a bird found dead at Ullswater in 1930.

#### THE COMMON EIDER—*Somateria mollissima mollissima* (L.)

A rare visitor to the lower Solway and the west coast. The only Eider recorded from the northern shores of Morecambe Bay is a female shot near Barrow-in-Furness, North Lancashire, about 1860. This is mentioned by Macpherson, who also gives three records from the west coast, including one of a flock of thirteen, seven of them adult drakes, seen near Maryport in March 1886.

At Silloth, on 2 June 1904, two Eiders were seen by D. Losh Thorpe to fly over the golf links and away towards the east (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 19).

Near Skinburness, William Nichol saw two females or young males, diving in very rough water, in company with five Long-tailed Ducks, on 25 December 1915. He also saw a single drake on 1 March 1916, and the same or another adult drake frequented the locality all summer until 26 September. His last record was of a single bird on 15 May 1920.

#### THE COMMON SCOTER—*Melanitta nigra nigra* (L.)

A common winter-visitor and passage-migrant on the Solway, west coast, and in Morecambe Bay. Immense flocks are some-

times seen, especially off Skinburness and in Silloth Bay. On the Allonby coast they occur regularly from November to March, but large flocks remain on the Solway until mid-June. Very large numbers were seen off Seascale on 17 August 1932 by J. Gregson Roper.

Inland, Scoters are irregular but not uncommon visitors to Windermere, where single birds, pairs, or sometimes three or four together, have been seen in every month of the year. In May 1929 nine were seen playing together on several occasions by Dr M. S. Wood. They appear occasionally on Ullswater, and L. E. Hope, who once saw a flock of fifty in July, had birds which had moulted their flight feathers sent to him from there in August. R. H. Brown has seen Common Scoters in winter on Bassenthwaite, Haweswater and Wastwater. The habit of migrating overland doubtless accounts for most of these occurrences as well as for the single birds that have appeared from time to time, chiefly in the valleys leading north from Morecambe Bay, but twice within the boundaries of Carlisle.

Many oil-clogged Scoters were washed up on the Allonby shore in 1916 and 1917, and round Morecambe Bay in 1920, their numbers in the last locality being much reduced.

An albinistic bird was shot at Silloth on 20 December 1907.

#### THE VELVET SCOTER—*Melanitta fusca fusca* (L.)

A winter-visitor and passage-migrant occurring in small numbers, not very regularly, in the Solway and Morecambe Bay, where single birds and small parties may sometimes pass unnoticed among the flocks of Common Scoters.

The Velvet Scoter occasionally appears off the west coast, where four were seen near Bootle on 22 September 1922, by Dr M. McKerrow. A single bird was shot on Burgh Marsh on 27 December 1921, and R. H. Brown saw two there on 2 February 1930.

The number of records from Windermere, where about a dozen Velvet Scoters have occurred on the northern half since 1918, suggests overland migration by way of this lake. Most have been single immature birds, in winter, and some of them have remained for a few days. An adult drake and either a duck or immature drake were seen on 25 November 1921 by Miss M. Garnett, and two drakes were shot in February 1923 by A. Dixon of Ambleside. The overland migration theory is also supported by the fact that the Rev. E. U. Savage has met with Velvet Scoters on four occasions well up the Kent estuary, between Foulshaw and Levens. He saw four on 31 January 1917, two on 1 January 1918, and one on 31 October and two on 2 November 1919.

There are three summer records. Six birds were seen by W. Nichol near Silloth on 10 June 1908; four on Windermere on 22

May 1920 by J. F. Peters, and a duck or immature drake on the same lake on 7 July 1928 by Miss M. Garnett.

THE SURF-SCOTER—*Melanitta perspicillata* (L.)

The Surf-Scoter has occurred once in Cumberland. An adult drake was shot on a pond at Crofton near Carlisle on 2 November 1856, as recorded by Macpherson. This bird is in the Carlisle Museum.

THE GOOSANDER—*Mergus merganser merganser* L.

A regular and increasing winter-visitor to the larger rivers and to most lakes and tarns up to about 1800 feet. It is less common on salt water than on fresh.

Goosanders arrive usually in October, although, in recent years there have been parties of grey-plumaged birds on the lower Eden from the first day of August onward. Most birds leave in April, but pairs sometimes linger and it seems probable that they will be found nesting in the area sooner or later, though the only actual summer record so far is of an uninjured adult female seen at Rockcliffe on 28 June 1923. A pair of birds, perhaps early autumn migrants, were seen on the bank of the Eden at Castletown on 21 July 1928 by R. H. Brown.

In their favourite haunts Goosanders are usually found in parties of from two or three up to a dozen, and occasionally in larger flocks, but not often so large as one of sixty birds seen by M. G. Robinson on Bassenthwaite Lake on 16 February 1942. The majority are in grey plumage but adult drakes are by no means uncommon. In the southern estuaries M. Bratby notes that there is not usually more than one old drake with a flock of grey birds, but inland, a flock of from seven to twelve often contains two or more, and in a flock of nineteen Goosanders on an East Westmorland reservoir in March 1940, there were no less than ten adult drakes. Adults are sometimes seen in pairs in winter.

On the lakes and tarns Goosanders are more restless and given to wandering by day than the other diving ducks.

THE RED-BREASTED MERGANSER—*Mergus serrator* L.

Far less common than the Goosander, but more frequently seen on salt water, the Red-breasted Merganser is a regular winter-visitor in small numbers to the Solway and Morecambe Bay. It appears occasionally on the Esk, Eden and Lune and on some East Cumberland tarns, but it is seldom met with in the central region.

Mergansers usually occur singly or in small parties and adult drakes are not common among them. They arrive on the Solway as a rule in October and sometimes stay until May. An early arrival was shot on 1 August 1938.

Macpherson mentions a half-grown brood seen in the Waver estuary in July 1890 by W. Nichol, but considered that they had

probably been bred on the Scottish side of the Solway. So far there is no satisfactory evidence of nesting in Lakeland though it was suspected in both Cumberland and Westmorland in 1934. The possibility of this event has approached since Mergansers became established in Dumfriesshire where the first nest recorded for that county was found in 1928 by E. Blezard only some ten miles over the Border from Cumberland (*British Birds*, Vol. 23, p. 132).

#### THE SMEW—*Mergus albellus* L.

A rather scarce and irregular winter-visitor, in small numbers, chiefly to the Solway and the tarns in that region and in North Cumberland. Smews appear occasionally on the River Eden as far up as Warcop, and single birds have been seen in two different winters on Whins Tarn, Edenhall.

Four, two adult drakes and two ducks, were seen on the River Eden at Cargo on 27 January 1940 by T. P. Davidson.

In East Westmorland a bird was shot on the River Lyvenet at Morland on 26 January 1929, and T. W. I. Cleasby saw an adult drake on a small tarn near the Lune valley in February 1938.

In the central region Smews are rare visitors to Bassenthwaite Lake, Ullswater and Windermere, and E. B. Dunlop records two shot on Elterwater where, more recently, two drakes were seen on 21 January 1939.

Macpherson mentions a female shot on Rusland Pool, North Lancashire, in January 1891, and about the same time two drakes were shot on the Kent estuary. There are occasional visitors to the coast near Barrow-in-Furness.

Smews are generally found singly; rarely more than two or three together. Adult drakes and ducks are not unusual, especially in Cumberland. All records are for the four winter months except a bird shot by W. Nichol in October 1889, and one shot at Edenhall in March 1895.

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### Order PELECANIFORMES.

#### Sub-Order PELEGANI.

#### THE CORMORANT—*Phalacrocorax carbo carbo* (L.)

A common winter-visitor to the whole of the Lakeland sea-board, to the lakes and other inland waters.

The Cormorant is also present all the year round on the Solway, but although there are several breeding haunts along the Scottish side, there would seem to be no satisfactory evidence of nesting on the cliffs of St. Bees Head which afford roosting quarters for many of the birds that frequent the western coast.

Not unusually there are winter gatherings of sixty to eighty Cormorants on the sands of the Solway from where the birds flight in to the nearby tarns and travel up the River Esk, and up

the River Eden as far as Temple Sowerby in Westmorland. A number used to roost on sandstone crags in the middle reaches of the Eden at Barron Wood.

A solitary Cormorant was seen flying southward high over Alston in the Pennines on 2 September 1934.

Practically all the lakes in Cumberland are visited in winter by parties of Cormorants and fifty at one time have been counted on Bassenthwaite Lake. The Westmorland lakes of Windermere and Grasmere are now regular haunts. Before 1917-18 Cormorants were only occasional visitors to Windermere, but they have increased greatly since then, twenty-seven having been seen in October 1932, and a few are sometimes present in summer.

In North Lancashire, Cormorants are to be found on Coniston Water during the greater part of the year, and on Esthwaite Water occasionally. Various tarns in the central region are more often visited than formerly.

A Cormorant marked as a young bird in Anglesey in 1929 was recovered on Windermere in January 1930. Two of three young ones ringed at Mochrum, Wigtownshire, were recovered later in the same year, one at Ulverston, North Lancashire, the other at Rockcliffe, Cumberland, and the third was reported the following January at Silloth, Cumberland.

#### THE SHAG—*Phalacrocorax aristotelis aristotelis* (L.)

A scarce visitor to the coast of Lakeland, appearing inland only when storm-driven.

Two out of five immature Shags found inland occurred in North Cumberland, one at Crosby-on-Eden on 1 January 1908 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 15), the other in the Bewcastle district on 28 October 1935. One was captured on Ullswater on 27 July 1928, and another in June 1933.

On the evening of 19 December 1942, and during a spell of rough weather, F. Lambert shot an immature Shag as it was fighting down the River Sark to the open Solway. This bird, as evidenced by the prey it contained, had spent the day fishing up the river, an unusual departure.

A bird shot on Windermere, Westmorland, on 1 December 1927, had been ringed as a nestling in Sutherland on 6 July that year (*British Birds*, Vol. 21, p. 296).

#### THE GANNET—*Sula bassana* (L.)

A casual visitor, not infrequent in autumn on the open coast, but seldom appearing within the narrower limits of the Solway or in Morecambe Bay. A winter bird was seen at Silloth in January 1894 (*Vict. Hist. Cumb.*, Vol. 1, p. 196).

Gannet remains are at times found along the high tide line on the west coast after westerly storms which are also responsible for some of the inland occurrences. Among the few Gannets noted in spring there have been single birds on the Cumberland

coast at Silloth in May 1906, and Seascale in May 1928, and two, an adult and an immature, at Silecroft on 31 May 1935.

Inland, a party of seven Gannets, apparently on east to west migration, were seen flying over the Brampton district, Cumberland, on 13 October 1914 by J. M. Charlton (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 15). Storm-driven wanderers have been picked up as far inland as along the Pennine fell bounds of the area. There was one at Tindale, Cumberland, in March 1927, another at Kirkby Lonsdale, Westmorland, in September 1928, and another at Culgaith, Cumberland, in November 1929. Within the last eight years at least three other autumn strays have been found in Cumberland; three in Westmorland, including one near Kendal in September 1935, which had been ringed as a nestling at Grassholm in July 1934; and one in North Lancashire. In the last two counties the birds have occurred in or near valleys leading north from Morecambe Bay. There are two inland spring records, both from Westmorland. J. F. Peters saw a Gannet fishing in deep water on Windermere on 7 June 1914 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 31), and an exhausted bird was found on Whitbarrow Scar in April 1936.

Nearly all the Gannets that occur in Lakeland are adults, immature birds being very exceptional.

#### Order PROCELLARIIFORMES.

##### THE STORM-PETREL—*Hydrobates pelagicus* (L.)

An irregular winter-visitor, often appearing in company with the Fork-tailed Petrel, but in smaller numbers.

Macpherson says that in bygone years the Storm-Petrel was the commoner of the two, both on the coast and as a straggler inland, but by 1892 the Fork-tailed had become the predominating species and has remained so ever since.

Generally single birds are observed and they occur most frequently in October and November, though William Nichol saw one at Skinburness as early as 13 September in 1905.

During the last week in October 1917 large numbers of Storm- and Fork-tailed Petrels were wrecked on the coasts of Westmorland and North Lancashire, many being storm-driven far inland (*British Birds*, Vol. 11, p. 162). One Storm-Petrel was found dead at Silloth on 5 November.

In 1918 an adult was found exhausted in Carlisle on 18 October and one washed up at Allonby on 8 October. About a dozen have been found at the latter place from time to time by Moore Kitchen.

There are two inland records from the southern fringe of the central region where a bird was picked up at Finsthwaite, North Lancashire, in November 1908, and one seen on Windermere, Westmorland, on 8 November 1913 by J. F. Peters.

LEACH'S FORK-TAILED PETREL—*Oceanodroma leucorhoa leucorhoa* (Vieill.)

An irregular winter-visitor, often occurring in small parties along the coast.

Fork-tailed Petrels appear chiefly in the last three months of the year, but sometimes as early as July, and they occur more frequently than Storm-Petrels.

Macpherson mentions the arrival in the last days of September 1891 of large flocks of these petrels all round the coast-line from the southern estuaries to the Solway. In the winter of 1906-07 L. E. Hope recorded several Fork-tailed Petrels from the Solway region, and there was a considerable visitation to the southern estuaries and North Lancashire in late November 1908 when, from the dates of their appearance, H. W. Robinson thought the birds were travelling down the coast from north to south (*British Birds*, Vol. 2, p. 282). One bird was reported from as far inland as Newby Bridge, and in Cumberland one was picked up exhausted near Carlisle on 17 November.

Single birds were seen or obtained almost yearly until October 1917, when a great wreck occurred on the southern estuaries and many birds wandered far inland, several being picked up alive. On this occasion some Storm-Petrels accompanied the Fork-tailed (*British Birds*, Vol. 11, p. 162).

Besides the Newby Bridge bird mentioned above, there are two records for the central region: one was shot on Windermere on 13 November 1909 and sent to E. B. Dunlop, and one picked up dead near Kendal on 15 October 1918 by T. H. Fothergill.

WILSON'S PETREL—*Oceanites oceanicus* (Kuhl)

Macpherson mentions two Cumberland specimens of Wilson's Petrel, the later of which was found dead at Castlesteads in 1881. A third example was washed up on Walney Island, North Lancashire, in November 1890, at the same time as the Frigate-Petrel.

The only recent record is of a bird picked up on the shore at Allonby in the winter of 1932 by Moore Kitchen, and now in his collection.

THE FRIGATE-PETREL—*Pelagodroma marina hypoleuca*  
(Webb, Berth. and Moq.-Tandon)

The first British specimen, picked up dead on Walney Island, North Lancashire, after a severe gale in November 1890, is now known to be of the northern form of the Frigate-Petrel nesting on the Salvages and Cape Verde Islands. It was recorded by Macpherson (*Ibis*, 1891, p. 602, and *Fauna*, p. 457) and given by him to the Carlisle Museum. The only other British example, a young female caught alive in the Hebrides in January 1897, is also of this race.



AUSTIN BARTON.

FULMAR PETRELS AT ST. BEES HEAD, 1940.

THE MANX SHEARWATER—*Puffinus puffinus puffinus*  
(Brünn.)

An occasional spring- and summer-visitor, chiefly to the west coast and lower Solway and more frequently recorded in recent years.

Macpherson deplored the fact that it was almost entirely absent from the area; he knew of only five derelict specimens which had been washed up on the west coast, prior to 1897.

William Nichol noted a Manx Shearwater near Silloth on 4 May 1906, and afterwards met with the species frequently during September when he was fishing near the outer limits of the Solway. J. W. Armstrong saw a party of twelve on the Solway on 22 July 1910 and two more birds there on an unusually late date, 2 November of the same year.

Most of the birds obtained are found on the tide mark and, at Allonby, there have been as many as twenty in a year. A number have also been washed up at St. Bees, Seascale and Ravenglass in all months from May to October.

THE FULMAR PETREL—*Fulmarus glacialis glacialis* (L.)

Formerly only an occasional winter-visitor but now established in the breeding season at St. Bees Head, Cumberland. The colonists there in 1939 were not proved to be nesting (*Handbook*, Vol. 4, p. 73), but, in 1940, R. Stokoe concluded that one of the five pairs under observation from the time of their arrival at the end of April until late July had at least produced an egg. In May 1941 he observed three pairs occupying exactly the same sites as those favoured in the previous year. These birds were easily disturbed and had not settled down to nesting.

Macpherson recorded four Fulmars obtained up to 1896 at different places on the coast between Eskmeals and Rockcliffe Marsh, but during the present century they have visited the western coast more frequently, and from 1914 to 1934 seven were found dead near Allonby by Moore Kitchen, three of them in 1917. One was found dead on Rockcliffe Marsh on 30 October 1929 by Ritson Graham.

There are two summer records previous to 1939: a Fulmar was washed ashore at Drigg on 15 June 1914, and two were observed by J. Storey to frequent Cardarnock Point for several days about 8 June 1931.

## Order PODICIPITIFORMES.

THE GREAT CRESTED GREBE—*Podiceps cristatus*  
*cristatus* (L.)

A local resident and winter-visitor, appearing in small numbers in winter on the Solway and Morecambe Bay, on some Cumberland tarns and larger rivers, and on the lakes of the central

region. Dead birds are occasionally washed up on the Allonby shore.

The Great Crested Grebe first nested in Lakeland thirty-five years ago, and is at present attempting to extend its range. (Cf. Great Crested Grebe Enquiry, *British Birds*, Vols. 26 and 30.)

Birds in full breeding dress began to be noticed in Cumberland nearly thirty years ago and, by 1931, when R. H. Brown saw a pair on Overwater, a very suitable nesting haunt, they figured as advance colonists. Three years later, August 1934, J. Wilson and H. Valentine noted an adult on Derwentwater and, in October, the latter observer saw three young, still in striped nestling dress, on that lake. In 1940 R. Stokoe discovered two breeding pairs of Great Crested Grebes on Loweswater, one pair having five eggs at the time that the other had four chicks. In 1941 he found three pairs present.

The first Westmorland nest was discovered on Grasmere in 1933 by C. W. Coward and G. Fleming; young were hatched but apparently not reared. Single birds continued to visit the lake in summer, but owing perhaps to the shrinkage of reed beds, none nested again until 1940, when Miss M. L. Harrison saw a pair feeding two young at the end of July. Miss M. Garnett found a pair present at the beginning of April 1943. Nesting has been suspected or unsuccessfully attempted on another small lake and on two or three tarns in the central region. A nest was found on a tarn at a height of 340 feet in 1935, by R. J. Birkett.

In North Lancashire Great Crested Grebes have nested on Esthwaite Water, at 217 feet, since J. F. Peters found them there in 1908. He saw four nests with eggs in 1922 and there are usually three or four pairs on this lake (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 39). One or two pairs nest less regularly on Blelham Tarn which was colonised in 1916.

#### THE RED-NECKED GREBE—*Podiceps griseigena griseigena* (Bodd.)

An irregular and scarce winter-visitor, appearing chiefly in the Solway region in hard weather and during the month of February. There are about half-a-dozen records from the Solway itself since 1895.

A Red-necked Grebe was shot on Moorhouse Tarn, Wigton, in the winter of 1913, and one was seen by E. Blezard on the River Esk at Metal Bridge on 16 February 1924. During very hard frost one remained on the River Eden at Carlisle from 11 to 23 February 1929, and an immature was shot at Armathwaite in the same month. One was obtained at Longtown on 17 February 1937 and a female on Southerfield Moss, Abbeytown, on 7 February 1942. There is one record for the west coast, a female picked up at Allonby on 14 February 1922 by Moore Kitchen who found a Black-necked Grebe the same day (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 39).

In the central region a female was shot on Windermere on 4 January 1907, and another bird on 5 February 1912, by E. B. Dunlop (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 25), and one was seen on this lake on 22 November 1914 by J. F. Peters. The Red-necked Grebe is known to Dr Moon as an occasional visitor to Ullswater, and one was seen on Grasmere in December 1930 by C. W. Coward.

W. Duckworth saw two on the marsh at Grange-over-Sands, North Lancashire, on 20 October 1907, and a single bird at the same place on 17 November in that year.

The only summer record is of an immature obtained at Anthorn, Cumberland, on 31 July 1908. Another bird in juvenile plumage was shot at Skinburness on 22 September 1894 by W. Nichol (*Vict. Hist. Cumb.*, Vol. 1, p. 216).

#### THE SLAVONIAN GREBE—*Podiceps auritus* (L.)

A rather scarce winter-visitor.

Only four Slavonian Grebes have been definitely recorded from the Solway in nearly fifty years. Two have been seen on Cumberland tarns, one at Overwater on 25 November 1925 by R. H. Brown and one at Tindale Tarn on 3 February 1929 by Ritson Graham.

In the central region Slavonian Grebes have been seen on Ullswater at irregular intervals, and several have been shot on Windermere, where small "black and white" grebes, usually singly, but sometimes in couples, occur nearly every winter and are with little doubt generally of this species. In South Westmorland one was shot on a small drainage cut near Arnside on 1 March 1937 by Roger Robinson.

#### THE BLACK-NECKED GREBE—*Podiceps nigricollis* *nigricollis* Brehm

A scarce winter- and summer-visitor, which is known to have nested once in Westmorland.

Though still rare, the Black-necked Grebe has been more frequently observed in recent years than it was in Macpherson's time. He could only record a female shot on Ullswater in January 1895 and a bird shot on the River Wampool in December 1896 (*Vict. Hist. Cumb.*, Vol. 1, p. 216). Since then there have been three winter records from the Solway. A female in winter dress showing traces of breeding plumage from Bowness on 3 December 1908 was described by L. E. Hope; a bird was seen off Skinburness Marsh on 10 November 1923 by R. H. Brown, and a female shot at Skinburness on 8 November 1935 by J. Stockdale. A dead bird was picked up on the Allonby shore on 14 February 1922 by Moore Kitchen (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 39).

In the central region Dr Moon reports that the Black-necked Grebe is seen at times on Ullswater. The first Westmorland bird,

a female, was shot on a reservoir near Windermere on 27 August 1910, by E. B. Dunlop (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 25). Two have been shot on Windermere; an adult female on 18 January 1918, by D. G. Garnett (*Brit. Birds*, Vol. 12, p. 22), and an adult male on 18 December 1920, by J. F. Peters. It is possible that some of the "black and white" grebes seen on the lake in winter are of this species.

Black-necked Grebes have been seen in both Cumberland and Westmorland in summer. In Cumberland a bird of the year, possibly bred in the neighbourhood, was obtained near Skinburness on 29 July 1912, as recorded by H. Mackay (*Scot. Nat.*, 1912, p. 213), and a bird in full breeding dress was seen on a small reservoir near Southwaite in May 1922, by E. Blezard.

In Westmorland a pair in breeding plumage were seen on a moorland tarn at about 1000 feet, on 26 and 27 May 1931, by Miss M. Garnett, and on 18 July 1935 on another Westmorland tarn, Miss Garnett and two other observers watched a parent Black-necked Grebe feeding a small chick (*British Birds*, Vol. 33, p. 256).

#### THE LITTLE GREBE—*Podiceps ruficollis ruficollis* (Pall.)

A rather local but not uncommon resident, nesting on suitable ponds and tarns up to 1000 feet, and occasionally on the larger lakes.

In winter some of the nesting haunts are deserted and the birds become much more widely distributed, moving on to the lakes, where they are then common, and also appearing on the larger rivers and even on the salt and brackish waters of the estuaries. There is probably some increase in numbers at this season when small flocks, some of them perhaps family parties, are sometimes seen.

#### Order COLYMBIFORMES.

#### THE GREAT NORTHERN DIVER—*Colymbus immer* Brünn.

Though rare on the Solway and in Morecambe Bay, the Great Northern Diver is a not infrequent visitor to Windermere, and it appears occasionally on Ullswater and other lakes. It has also been seen several times in Allonby Bay and has occurred on the lower Eden and in the Waver estuary.

Single birds or couples appear in the central region chiefly in hard winters, and occasionally stay for some time. There were three on Windermere in December 1916, and after one of them, a young male, had been shot on 5 January, the other two remained until the lake froze in February 1917 (*British Birds*, Vol. 11, p. 38).

C. Hulme Wilson records that about thirty years ago a Great Northern Diver spent three weeks at a tarn that was being dammed up, near the Lune valley. It used to fly off when the men came to work and return after they left.

Macpherson mentions two birds in summer plumage; one shot on Windermere in August 1889 and one seen near Port Carlisle on 3 September 1890. In recent years nearly all have occurred from December to February, though an early autumn arrival was reported from Bowness-on-Solway in September 1938. The latest spring record is of a bird seen in Waterhead Bay, Ambleside, on 30 March 1916, by Arthur Astley.

#### THE BLACK-THROATED DIVER—*Colymbus arcticus arcticus* L.

Macpherson recorded only two Black-throated Divers from Lakeland; an adult killed on the Eden near Rickerby on 20 March 1888, and a young female shot on Ullswater on 1 January 1891. He remarked that this diver occasionally visited Ullswater, and it still appears there at irregular intervals, though most of the recent records are from Windermere, where half a dozen birds have been shot since 1915, and others seen.

The Black-throated Diver is probably a not infrequent visitor to this lake, as few winters pass without divers of some sort being seen, and, of those satisfactorily identified in recent years, most have been of this species. During the severe frost of February-March 1929, when only the upper half of the lake remained unfrozen, there were at least two present from 15 February to 13 March, and on 8 March there were four.

One was shot on the River Gilpin in South Westmorland on 17 January 1919, as recorded by the Rev. E. U. Savage, and a late bird which was beginning to show summer plumage was seen on Grayrigg Tarn on 26 April 1940 by M. and D. G. Garnett.

The Black-throated Diver rarely appears on salt water, but has been identified on the southern estuaries by M. Bratby.

#### THE RED-THROATED DIVER—*Colymbus stellatus* Pontopp.

A regular visitor on spring migration to the Solway and Morecambe Bay. The Red-throated Diver also appears in winter on the estuaries, and occasionally visits Ullswater, Windermere, and some of the smaller lakes and tarns, most often in severe winters.

Although one has been seen as early as 3 September, Red-throated Divers do not often arrive before November, and then usually singly, but on the spring passage in April and May, W. Nichol has counted as many as twenty-one in a day on the open Solway, some of them being in summer dress.

The main spring passage seems not to follow the inland routes, though exceptions no doubt occur, and a bird of this species was seen at the Pooley Bridge end of Ullswater on 7 May 1919 by the Rev. E. U. Savage. There are several records of birds found dead along the west coast in spring.

Red-throated Divers have at times occurred within the city boundaries of Carlisle. An adult, still in full breeding plumage, was picked up in a back street on 3 October 1926. There was a

winter-plumaged bird on the River Eden on 8 February 1939 and another crashed on to the flooded ice of a park pond on 11 February 1942.

Order COLUMBIFORMES.

Sub-Order COLUMBÆ.

THE WOOD-PIGEON—*Columba palumbus palumbus* L.

A very common resident, winter-visitor and passage-migrant.

Breeding birds resort to woods and copses of all kinds, and in young conifer plantations they are sometimes quite closely crowded. Many build in hedgerows, especially of thorn. Even so far north as Cumberland laying may be general in March and young have been found still in the nest on the last day of October.

Considerable flocks of migrants appear in September, but generally it is later before the large wintering flocks from the Continent are present. Their numbers and duration of stay may depend on the supply of acorns and beech mast, or, in a bad harvest season like 1938, on the amount of grain ungathered.

During the autumn and winter of 1921 when acorns were very plentiful there were immense flocks in Westmorland. Very large flocks were again present in 1933-34, but in 1934-35 and 1939-40, in spite of abundant acorn crops, very few Wood-Pigeons appeared. Despite the occasional large numbers there have, on the whole, been fewer Wood-Pigeons in the Windermere district in winter than used to come before so many oak trees were felled during the war period 1914-18.

The winter-visitors often include many birds smaller and darker coloured than the others. To whatever extent the home-bred birds are migratory they do in some cases remain during the winter, keeping apart from the visiting flocks.

After the bulk of the winter visitors have departed large flocks arrive from a south-westerly direction during the second and third weeks of May, and, in parts of Cumberland, stay a few days before travelling on.

An all white Wood-Pigeon shot near Carlisle in February 1895 is now in the Carlisle Museum. An albinistic juvenile observed during July 1937 near Grinsdale, Carlisle, was eventually killed by a Sparrow-Hawk.

THE STOCK-DOVE—*Columba œnas* L.

The Stock-Dove, whose increase was remarked by E. B. Dunlop in 1913 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 19), has become a fairly common resident, breeding from such coastal haunts as St. Bees Head, Ravenglass and Walney Island, inland to all the fell groups. The numbers in a locality may vary from year to year as do the small nesting colonies. Six pairs have been found nesting together in one sandstone quarry hole among the workings to the west of the Eden valley.

Nesting sites are very varied and include hollow trees, matted growths in trees, crevices in fell crags and riverside rocks, rabbit burrows and holes and ledges in old buildings. The same site is often occupied year after year. Laying begins at the end of March and eggs have been found in August.

Most of the fell breeding birds leave their exposed haunts in autumn for lower ground, where with others of their kind they may join up into small flocks. They return to the fells in February and March.

The small flocks which feed in stubble and other fields and the parties so often seen on the saltings during autumn and winter, no doubt include winter-visitors. A flock of forty birds has been seen in September in Cumberland and one of between sixty and a hundred in October in Westmorland. Stock-Doves are often in company with Wood-Pigeons in winter and may roost in the same woods and plantations.

#### THE ROCK-DOVE—*Columba livia livia* Gm.

Macpherson considered this dove an irregular and infrequent visitor to the northern portion of Lakeland. In his *Fauna* he records a small flock which visited Allonby, Cumberland, in January 1891, and from which a bird was taken alive.

No records of Rock-Doves have since been substantiated, most being found to refer to Stock-Doves. The local names of "Rock-Dove" and "Blue Rock" for the Stock-Dove have caused much confusion.

The so-called Rock-Doves breeding at St. Bees Head, Humphrey Head and Barton Fell are stated by H. W. Robinson to be either feral domestic pigeons or Stock-Doves.

#### THE TURTLE-DOVE—*Streptopelia turtur turtur* (L.)

An occasional summer-visitor, of more frequent occurrence than formerly, especially in the Eden valley.

Macpherson knew the Turtle-Dove as an irregular visitor, chiefly in September, to the Solway region and Cumberland plain, and records its nesting at Scotby in 1885 and Orton in 1889. J. B. Cairns found it nesting at Floriston in 1912, and it has bred near Carlisle several times since 1919 when a nest was found at Scotby by A. Sutton (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 39). There are also records of pairs or single birds seen in summer in the Eden valley at Great Salkeld, Langwathby and Kirkoswald, and near Carlisle and to the west of it, at Moorhouse, Grinsdale, Drumburgh and Anthorn.

In the central valleys the Turtle-Dove is unknown and it is still rare in North Lancashire. Several have been noted in South Westmorland in May and June, including a pair at Windermere in 1914 or 1915 by Dr H. L. Brooksbank, and a single bird in the Kent valley on 12 June 1919, by the Rev. E. U. Savage. Three

birds were seen together at Cartmel Fell, North Lancashire, on 31 May 1934 by Mrs E. W. Brunskill.

An adult killed at Penrith on 21 December 1894, an extraordinarily late date, was examined by Macpherson (*Vict. Hist. Cumb.*, Vol. 1, p. 203).

#### Sub-Order PTEROCLETES.

PALLAS'S SAND-GROUSE—*Syrrhaptes paradoxus* (Pall.)

A rare and irregular visitor. This central Asian bird, migrating westwards in vast numbers across Europe at irregular intervals, has not appeared in Lakeland since the great irruptions of 1863 and 1888-9. Its visits then were described in detail by Macpherson in his *Fauna of Lakeland*, and need only be summarised here.

In 1863 a small flock was seen on Walney Island in May, and single birds were shot later at St. Bees, Silloth and Penrith. No more were reported until the next visitation in 1888, when Sand-Grouse were seen, probably as early as April, near Stapleton and Wintershields in North-east Cumberland, and small flocks appeared in the Solway region and Cumberland plain in May, and later spread to West Cumberland. Another contingent seems to have travelled through North-west Lancashire to Walney Island and Ravenglass but no Sand-Grouse are known to have occurred in Westmorland. Most of the birds left in the autumn of 1888 but some lingered in the Solway region and East Cumberland till the following year, when a few were seen at Allonby in May and near Silloth in September.

There is no record of breeding in Lakeland, but two females shot near Silloth in May 1888 were carefully examined and would no doubt have nested had they been allowed to do so.

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#### Order CHARADRIIFORMES.

##### Sub-Order LIMICOLÆ.

THE BAR-TAILED GODWIT—*Limosa lapponica lapponica* (L.)

A passage-migrant and winter-visitor, most abundant on the more open part of the Solway from Bowness to Allonby Bay, the numbers on the west coast and the northern shores of Morecambe Bay being comparatively small.

The autumn passage, most marked in August and September, begins in the latter half of July. The early arrivals include many adults still in breeding dress, as were most of the birds in each of the gatherings of more than three hundred seen by W. Nichol on the Solway on 30 July 1910 and 22 July 1911. A considerable passage from an easterly direction has been detected over Carlisle during the dark hours in the months from August to October.

Winter flocks not uncommonly number five hundred or more birds, until March, when they begin to leave. In February 1933, fully one thousand Godwits were moved up on to Grune Point by a high tide. On their arrival and during the winter season they often consort with Oyster-catchers and Knots.

The through spring passage takes place in April and May, and a flock of more than three hundred, in May 1934, was the largest seen at Skinburness on this northward movement. A fair number of summering birds, in immature plumage, have been observed in the Wampool estuary in recent years.

#### THE BLACK-TAILED GODWIT—*Limosa limosa limosa* (L.)

The Black-tailed Godwit is almost exclusively a coastal visitor on migration and has been mainly recorded from the Solway in autumn. Macpherson considered it rare and recorded less than twenty altogether between 1884 and 1898. In recent years, coincident with its increase elsewhere in the British Isles, it has become more familiar on the Solway and, on the statement of William Nichol that one or two Black-tailed Godwits were to be observed every autumn near Skinburness, a regular visitor. Small parties are as frequent as single birds, and two, each numbering five, were seen—one on 14 October 1927, the other on 9 October 1932—by R. H. Brown (*British Birds*, Vol. 33, p. 260). The general arrival is in August and most of the birds are immature, but, at Anthorn, an adult was shot by J. Hodgson on 19 August 1933, and another, which had been present with a companion from the end of July, by E. Blezard on 5 August 1935. Macpherson records a wintering bird shot on 1 January 1889.

Spring-visitors are very infrequent. There were two on Salta Moss, Allonby, on 3 May 1905; four were seen by W. Nichol at Skinburness on 30 April 1913 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 22), and single birds by Ritson Graham on Burgh Marsh in April 1920 and May 1923.

Inland, a Black-tailed Godwit was flushed by Abel Chapman near Brampton, Cumberland, on 19 September 1919 (*Borders and Beyond*, p. 113), and in the west one was seen by Dr M. McKerrow at Workington on 20 August 1925 (*British Birds*, Vol. 19, p. 134).

On the southern estuaries, where Macpherson could find no trace of its occurrence, the Black-tailed Godwit has remained rare or unnoticed until the last few years. A. P. North reported it from the Kent estuary, where also Miss C. M. Clarke saw a party of three in breeding dress in April and May 1937 and a party of sixteen in September 1941. A winter bird, one of three, was shot there in the following December. Again, in the Kent estuary, J. A. G. Barnes saw a party of thirteen in May 1942, and he and Mrs J. B. Priestley a bird in summer plumage feeding near three Bar-tailed Godwits in April 1943.

On Walney Island, North Lancashire, a Black-tailed Godwit was seen on 18 August 1935 and two winter birds shot in December 1937 (H. W. Robinson, *Reports Lancs. and Chesh. Fauna Committee, 1935, 1937*).

#### THE COMMON CURLEW—*Numenius arquata arquata* (L.)

Widely distributed and common, the Curlew has increased as a breeding bird since the beginning of the century, and may now be found nesting on cultivated land as well as moors and mosses from sea-level to 1500 feet. Numbers and local distribution sometimes vary from one year to another. It is very numerous on the coast, particularly the Solway and the southern estuaries, at all times except during the breeding season.

Curlews appear on the inland nesting grounds in late February and early March, and flocks of passage-migrants travel north through the area after the local birds have settled down. An interesting weather movement on a large scale was noted in March 1928 by T. L. Johnston. During the early part of the month Curlews were heard nightly, migrating north over the Solway; on 10 March large flocks were heard going south, this return movement being followed next day by snow and hard frost which had set in earlier in Scotland. Single Curlews, presumably breeding birds, have been observed from aircraft by R. A. Carr-Lewty over Cumberland haunts at heights up to 4200 feet above ground level.

In late summer there is an influx of Curlews from the north-east into Cumberland. Most of the local birds leave the breeding grounds and move back to the coast in July and August, though in some years a few remain until September or even October, and there is a growing tendency for them to visit their inland haunts in the winter months.

The routes followed by local migrants in the southern part of Lakeland are north-east and south-west, rather than due north and south, and are continued beyond our boundaries. Ringing records show that birds bred in all three counties appear regularly in autumn and winter in the west of Ireland. A Curlew ringed in Sweden in June 1929 was recovered in Cumberland in the following September.

A nest containing six young was found on 21 May 1924 in West Cumberland by J. G. Roper. Two nests with five eggs have been found in recent years in different localities in the Windermere district, and in 1936 another was found near Carlisle.

A white Curlew was observed by J. Storey frequenting the sands of the Wampool estuary during the second week in February 1903, and a cream-coloured one, reported by R. Robson, bred at Hosket Hill, near Carlisle, in 1942.

THE WHIMBREL—*Numenius phaeopus phaeopus* (L.)

A regular spring and autumn passage-migrant on the Solway, southern estuaries and western coast.

The spring passage starts in April in the south of the area. Most birds pass through in May, and a few in early June, the latest date being 10 June 1934, when a single bird was seen at Rockcliffe by Mr and Mrs Gubbins and T. L. Johnston. Whimbrel usually appear singly or in small parties of about a dozen. William Nichol wrote of having seen flocks of forty to fifty when a boy, and he thought they had since decreased.

The return passage, when more birds are seen on the upper Solway and fewer on the west coast, takes place from July to October, but chiefly in August and September.

A few birds probably winter occasionally on the southern estuaries, as the Rev. E. U. Savage records one on the Kent estuary on 10 December 1914 and three at the same place on 1 January 1918. Seven were seen flying south-east at Cumdivock, Cumberland, on 4 March 1930 by R. H. Brown.

Whimbrel are very rarely seen inland, though use of overland migration routes is indicated by three records in spring and one in autumn. At Windermere, E. B. Dunlop saw four birds on 17 May 1908, D. G. Garnett one on 28 April 1915, and J. F. Peters four on 12 May 1915. M. G. Robinson recognised a Whimbrel flying southward along the Eden valley, at Temple Sowerby, on 10 August 1941.

THE WOODCOCK—*Scolopax rusticola rusticola* L.

A resident, passage-migrant and winter-visitor, especially common in the wooded southern regions, more local in the open country and rarely seen on the salt marshes at any season.

Woodcock have nested in Lakeland for the last hundred years, and during the present century have increased considerably, nesting throughout the area in woods of almost every description as well as on rough hillsides among bracken or scattered junipers. They have penetrated into some of the bleaker fell valleys, such as Martindale, and nests have been found above the tree limit on the Pennines and up to 1000 feet in the central region. The woods of the limestone scars in South Westmorland are favourite nesting haunts and in 1935 Dr M. S. Wood found an early nest in one of these localities on an open scree, quite bare except for a few seedling sycamores.

Eggs have been found as early as February, and March nests are common in South Westmorland, though in the central region April is a more usual date. The number of nests with fresh eggs in late summer points to many birds being double-brooded, though some late nests are no doubt due to earlier clutches having been destroyed. The Rev. E. U. Savage found a Woodcock incubating a very late clutch near Barbon, Westmorland, on 6 September 1929. Clutches of five eggs have been found in both

Cumberland and Westmorland, and an adult bird with six young was seen in Cumberland by R. H. Brown. A Woodcock flushed from four young by E. Blezard in that county was later the same evening found brooding eight. These chicks were all of one size, but may have been two broods, as two nests are occasionally found close together.

Frequently in summer and occasionally at the end of winter and in early spring, Woodcock are found out on the fell slopes up to 1500 feet. In autumn and winter some home-bred birds disperse or leave their native districts, while birds from other places come into the area. Numbers vary according to weather conditions, but in Cumberland larger influxes of Woodcock have been noted in November, usually at the time of full moon, and in South Westmorland and North Lancashire the autumn migration is very marked. In the southern districts and Westmorland as a whole, Woodcock are more numerous in winter than in summer and considerable bags have been made at Holker, North Lancashire. The return passage has been observed in March and early April in the central region.

Two phases of plumage are apparent in birds shot during the winter, one comparatively greyer than the other. The greyer birds also appear slightly smaller, and were thought by H. A. Brocklebank of Grizedale Hall to be migrants, and the redder birds home-bred (*Woodcock and Snipe*, p. 100).

Most of the Woodcock ringed as young birds in Lakeland and recovered in autumn and winter have been found still within the area, but there have been several winter recoveries from Ireland and a few from other parts of England and South Scotland.

#### THE GREAT SNIPE—*Capella media* (Lath.)

Macpherson personally vouches for five Great Snipe obtained in Cumberland in the decade 1881-1891, and five others have since been recorded for this county. In March or April, about 1900, William Nichol saw one alight in a garden at Skinburness. E. Blezard flushed one at Carlisle on 7 November 1920, and R. H. Brown one at Hawksdale on 19 November 1923. G. G. Ley records one shot on Haresceugh Fell in the Pennines in 1926, and Dr E. S. Steward shot a male on Denton Fell, Brampton, on 7 September 1933.

In Westmorland a Great Snipe was shot near Shap on 23 September 1911 as recorded by W. H. M. Peterkin (*Field*, 30.9.1911), and another was seen at a moorland tarn near Kirkby Lonsdale, some years ago, by C. Hulme Wilson.

#### THE COMMON SNIPE—*Capella gallinago gallinago* (L.)

A resident which, while increasing locally in the north of the area, has decreased in some southern districts in the last few years. Also a passage-migrant and winter-visitor.

Snipe nest commonly from the salt marshes, through various types of damp rough ground, inland to the fells. Nesting up to 1600 feet is not unusual, and in the Westmorland Pennines E. Blezard has found nests at about 2000 feet, one of them on a fell top, while birds are to be heard "drumming" over summits much higher.

In many fell and other districts, Snipe are most numerous during August and early September before the home-bred birds leave. Autumn and winter movements are as irregular as the weather and not entirely influenced by that factor, except for prolonged frost, which drives the birds out of the area. One haunt under similar weather conditions may produce from a score to a hundred birds, or perhaps none. Favoured haunts may harbour packs of two to three hundred Snipe as at times do the Netherby duck ponds from late July onward, and Monkhill Lough, especially in winter. Over much of the area, however, they are more widely and thinly distributed, in small bogs and marshy fields and on wet ground by the lakes.

In Cumberland, an albinistic Snipe was shot near Alston on 5 October 1918, and a white one was reported at Bowness-on-Solway in October 1932. A pure white one was shot in Westmorland in September 1926.

Three Snipe ringed in Lakeland, two as nestlings and one adult in March, have been recovered in Ireland in winter. A Snipe ringed as a young bird at Rusland, North Lancashire, in May 1930, was found at the same place seven years later.

#### THE JACK SNIPE—*Lymnocyptes minimus* (Brünn.)

A regular winter-visitor and passage-migrant, the Jack Snipe is widely though sparingly distributed, in such varied haunts as are provided by salt marshes, peat mosses, the vicinity of lakes and tarns, and wet moorlands. Some disused clay-pits at Carlisle were a favourite winter haunt until they were made into a boating pond.

Jack Snipe begin to appear in Cumberland in mid-September and on the return passage may often be found late in April. A dozen, a number rarely seen together in winter, were flushed at Monkhill Lough on 19 April 1936. James Smith, who states that the species frequents Drumburgh Moss in early May, saw four birds, which he considered to be two pairs, there on 8 May 1911. A single bird was flushed by E. Blezard in Geltsdale, in the Pennines, on 17 May 1925.

In districts south of the central region Jack Snipe are more thinly distributed in the scattered localities which suit their needs, and their presence or absence is greatly affected by weather conditions. Floods from heavy rain are as effective as frost in driving them away. In the Windermere district they arrive usually in the last week in September and leave in March; very exceptionally stragglers are met with in early April, though in a

The Solway and Morecambe Bay in particular attract the large migratory flocks that halt on the coast in spring and autumn, and it is on the Solway and in the Walney Channel that the largest wintering flocks are to be found.

Winter stragglers occasionally visit the lakes and have been seen at East Cumberland tarns and inland in West Cumberland.

Birds from Windermere in winter have been identified as Northern Dunlins, as have others obtained on the Solway both from autumn passage flocks and from the non-breeding parties that regularly summer there.

#### THE CURLEW-SANDPIPER—*Calidris testacea* (Pall.)

A passage-migrant, appearing regularly in August and September, and principally on the Solway. Late birds have been noted in November.

For several seasons from 1902 onward, one particular stretch of Solway marsh, in process of formation, attracted unusually large numbers, the largest flock seen being about sixty strong. Generally the visitors, almost all immature, are seen either in small parties or singly, and they often associate with other waders. William Nichol, in his sixty years of wildfowling, only once obtained an adult. Another was shot by Thomas Peal on Burgh Marsh, on 2 August 1906.

On spring passage the Curlew-Sandpiper is very rare. Spencer Ferguson reported two in summer dress at Drumburgh on the Solway on 3 June 1909.

Macpherson's first note of the Curlew-Sandpiper in Morecambe Bay is of a bird shot at Arnside, Westmorland, in August 1868, and he mentions that the species was later obtained again in the same locality. It is possible that the birds are not so rare in the southern estuaries as the lack of recent records might suggest. Unlike the Solway, these shores have never been regularly watched day by day, and many rare waders and other birds no doubt pass unnoticed.

#### THE LITTLE STINT—*Calidris minuta* (Leisl.)

A rather scarce passage-migrant, though with little doubt a regular visitor to the Solway, where it appears singly or in small parties, from September to October. Evidence of its regularity has been gathered when its haunts have been under constant observation. In twelve out of the fifteen years from 1895 to 1910, William Nichol met with the Little Stint at Skinburness. One was obtained in the autumn of 1921 on Burgh Marsh where T. Peal shot four on 12 September 1902. More recently, in the Esk estuary, R. A. H. Coombes has seen adults and juveniles in each of the years 1933 to 1937. Generally he found one or two Stints in company with a similar number of Dunlins, but on 15 November 1936 there were three or four Stints with one Dunlin.

In addition to a number of recent autumn observations, R. H. Brown records a party of six Little Stints on the sands off Rockcliffe Marsh in mid-April 1930.

August and February were exceptional months of occurrence noted by William Nichol, who saw a single bird in each month.

On the northern shores of Morecambe Bay the Little Stint, now as in Macpherson's day, appears to be scarcer than on the Solway and this enhances the record of three seen by J. A. G. Barnes at Arnside, in the Kent estuary, on 13 October 1942 (*British Birds*, Vol. 36, p. 144).

#### TEMMINCK'S STINT—*Calidris temminckii* (Leisl.)

A rare passage-migrant, of which only four Lakeland specimens were known to Macpherson, all immature, and shot on Rockcliffe Marsh, Cumberland, three in September 1832, and one in September 1839.

Abel Chapman mentions that his brother obtained two Temminck's Stints on the Cumberland Solway in September 1889, and a third two years later (*The Borders and Beyond*, p. 113).

#### THE AMERICAN PECTORAL SANDPIPER—*Calidris melanotos* (Vieill.)

Macpherson pointed out that a Pectoral Sandpiper shot by Robert Raine at Edenhall, Cumberland, on 18 October 1888, and now in the Carlisle Museum, was the first authenticated example of the species obtained in the north-west of England. It was one of a party of three seen in a grass meadow. Two were shot but one of them fell into a pool, and its recovery being delayed until next day, it was destroyed by rats. The survivor lingered in the neighbourhood until 22 October.

[On 4 May 1927 William Nichol came upon a strange sandpiper on the Solway shore at Silloth, Cumberland. Its characteristics, including a white rump and a dark, pointed tail, led him to regard it as a Bonaparte's Sandpiper, *Calidris fuscicollis* (Vieill.). This stranger gave ample opportunity for observation, as, after taking wing, it shortly returned in company with some Swallows which it left to alight again near the same place.]

#### THE PURPLE SANDPIPER—*Calidris maritima maritima* (Brünn.)

With the exception of St. Bees Head, the shores of the Lakeland coast are for the most part sandy, and not attractive to this winter-visitor and passage-migrant.

William Nichol, who considered it a scarce bird on the Solway, recorded it nine times, usually singly, in the months from September to December, between 1892 and 1909. R. H. Brown has noted single birds, during recent years, on the Solway and at St. Bees Head and Ravenglass.

The Purple Sandpiper is a regular but not numerous winter-visitor to the west shore of Walney Island.

#### THE SANDERLING—*Crocethia alba* (Pall.)

A regular passage-migrant and winter-visitor to the coast, occurring mainly on the Solway and in Morecambe Bay.

On southward passage the Sanderling arrives in small flocks, in which adults may predominate, from late July onward. Birds of the year have been seen on the Solway as early as 28 July by Miss M. Garnett. Varying numbers are present throughout the winter when, as in autumn, the birds commonly associate with Dunlin and Ringed Plover, but the spring passage which lasts until early June brings a great increase. During May the flocks on the Solway are sometimes two thousand strong. A flock seen by R. Stokoe at Allonby on 26 May 1940 was mostly composed of birds in summer plumage. James Storey observed a few Sanderlings remaining in the Wampool estuary on the Solway through the summer of 1933.

The Sanderling has seldom been recognised away from the coast and never in numbers except for a remarkable occurrence, recorded by the Rev. E. U. Savage (*British Birds*, Vol. 32, p. 85). Far inland, at Staveley, Westmorland, on a clear night, 8 June 1938, a flock of about seventy was seen to crash into some telegraph wires, and, strange as it may be, the birds were travelling almost due south-east at the time. Of the eleven birds picked up, ten were in incomplete summer plumage, and three dissected were males almost in breeding condition. The remaining bird was in grey plumage.

A juvenile was found dead under telephone wires inland at Burthwaite, near Carlisle, on 2 September 1925.

#### THE RUFF—*Philomachus pugnax* (L.)

A passage-migrant whose regular autumn visitations to the Solway begin in August, are at their height in September and continue into October. Most if not all the visitors are young birds. William Nichol said that whereas some seventy years ago he had known flocks numbering thirty to forty, a party of eleven on 11 September 1922 was the largest he had seen since that distant time. The Rev. G. F. Courtenay saw a party of eight near Silloth on 25 September 1934. Most usually Ruffs occur singly or in couples, and sometimes associate with Redshanks and Lapwings.

There was a large autumn visitation in 1933, birds being reported from all the Solway marshes, and in October two pairs of juveniles, each comprising a Ruff and a Reeve, were found at different ponds on the outskirts of Carlisle.

W. Dodd reports that the autumn passage is evident on the North Lancashire coast.

Two winter birds, both males, were shot on the Solway in January 1895 (*Vict. Hist. Cumb.*, Vol. 1, p. 210) and February 1925 respectively. During February and March 1924 a Ruff or a Reeve was observed at Siddick Ponds, Workington, by Dr M. McKerrow, who also noted an autumn visitor there in September 1930.

A Ruff in breeding plumage, previously unrecorded, was shot at Sunbiggin Tarn, Westmorland, about fifty years ago, by William Watters.

THE BUFF-BREASTED SANDPIPER—*Tryngites subruficollis* (Vieill.)

A juvenile of this Arctic American breeding species, which rarely wanders to the British Isles, was shot by John Dawson on Burgh Marsh, Cumberland, in September 1876. It was eventually given by his brother to the Carlisle Museum.

A possible second occurrence on the Cumberland Solway is entered in the notes of William Nichol. He describes the bird as resembling a small Reeve, and he saw it in company with two Curlew-Sandpipers, at Skinburness, on 17 September 1892.

[The North European nesting Broad-billed Sandpiper, *Limicola falcinellus falcinellus* (Pont.), was sought for many years on the Cumberland Solway by William Nichol, and eventually he believed that he had encountered it after observing an unfamiliar sandpiper in the winter of 1926 and later discussing it with George Bolam.

Nichol further records that during wild weather on 10 October 1930 he walked to within twenty feet of a Broad-billed Sandpiper, and that on 17 September 1932 he observed another. All three were on Skinburness Marsh, the last two at the same fresh-water pool.]

THE COMMON SANDPIPER—*Actitis hypoleucos* (L.)

This familiar summer-visitor may arrive in the south of Lakeland by 7 April, at least three or four days earlier than in the north, and often does not reach its higher haunts until the third or fourth week of the month. The Rev. E. U. Savage gives an early date for Westmorland, 21 March 1933. The birds disperse along the rivers and far up the fell beckes and they are plentiful around the lakes. Many of the smaller tarns up to 1800 feet claim a pair or two and R. H. Brown found a pair nesting by Red Tarn at 2350 feet on Helvellyn. Some Sandpipers breed on the shores of Morecambe Bay, from Bardsey to the Kent estuary, others along the tidal reaches of the River Eden.

A movement towards the coast begins in late June. On the lower Eden, an exceptional flock of about fifty birds was seen by T. L. Johnston on 30 July 1903. Passage-migrants are heard calling over Carlisle at night on southward flight in autumn as

well as on their way to more northern haunts in spring. They become more numerous on the coast in August and September, and on rare occasions linger there, or inland, into October.

Single birds have been noted four times in winter. J. F. Peters shot one in immature plumage on Windermere on 1 January 1924 (*British Birds*, Vol. 17, p. 248), and P. Robinson saw one on the same lake on 13 February 1929. R. H. Brown saw one on the River Eden at Carlisle on 7 December 1935. Higher up the Eden, at Culgaith, a Common Sandpiper which had frequented the same stretch of the river from the previous autumn was seen by W. Davidson and M. G. Robinson up to February 1943.

#### THE WOOD-SANDPIPER—*Tringa glareola* L.

All records of this rare passage-migrant, including that by Macpherson of a party of five at Edenhall in August 1867, refer to Cumberland.

Four visitors to the Solway, on different occasions during nearly forty years, were all found at the same fresh-water pool on Skinburness Marsh. William Nichol shot the first on 18 August 1893, and J. Backhouse the second on 20 August 1898 (*Vict. Hist. Cumb.*, Vol. 1, p. 211). The third was shot on 13 August 1924 and the fourth observed by W. Nichol on 10 August 1931.

The only spring record is of a single bird seen by Dr M. McKerron at Siddick Ponds, Workington, on 29 April 1930 (*British Birds*, Vol. 24, p. 83).

#### THE GREEN SANDPIPER—*Tringa ochropus* L.

A regular visitor on autumn passage, frequenting the coast and inland tarns, pools and streams from July to October.

The Green Sandpiper rarely associates with other waders, being most often solitary, although on the salt marshes couples may occasionally be found at brackish pools or creeks which are favoured here in preference to salt water. Single birds on passage have occurred at Sunbiggin Tarn, East Westmorland, in late summer and autumn. Several November records include one of two birds seen together on Windermere by A. Dixon of Ambleside, and there are two records each for January and February of single birds on the Solway.

Dr M. S. Wood has met with the Green Sandpiper on spring-passage several times in South Westmorland, on the Bela and on the Kent estuary, but elsewhere it has only been recorded twice in spring. F. W. Smalley informed E. B. Dunlop that one was shot on Windermere in April 1892 or 1893, and a bird obtained near Carlisle in April 1894 was the only local specimen in summer plumage handled by Macpherson (*Vict. Hist. Cumb.*, Vol. 1, p. 210).

The nesting of the Green Sandpiper at Levens, Westmorland, in 1917 was recorded by H. W. Robinson and is now accepted

as the first authentic instance of the breeding of the species in Great Britain. The parent birds were seen on several occasions in Levens Park from June onwards and, on 10 August, the Rev. E. U. Savage and others saw them in attendance on two downy young which were running in the grass at the edge of the river (*British Birds*, Vol. 11, p. 103, and Vol. 33, p. 257).

#### THE BRITISH REDSHANK—*Tringa totanus britannica* Math.

A summer-resident, winter-visitor, and passage-migrant.

Since 1892, when it was chiefly a coastal species, the Redshank has become a common nesting bird throughout Lakeland, having taken to most types of damp ground. In the central region it nests from the margins of the lakes up to 1200 feet, and on the Pennines up to 1500 feet. Besides occupying its breeding haunts from February or March until July, it is now frequent inland between seasons, even in the depths of winter. Coincident with the general increase there has been a decline of nesting birds on the Solway salt-marshes. A falling away after a temporary increase has been reported from one part of West Cumberland.

In Solway nesting haunts in spring, Redshanks have been met flying at heights up to 2300 feet above ground level by R. A. Carr-Lewty.

Redshanks are now also very much more numerous on the coast during autumn and winter and there are large flocks in estuaries where formerly the birds were only sparsely represented after the breeding season. One Solway flock remained about a thousand strong during September and October 1931. Winter flocks of from one hundred to three hundred birds are usual on the Solway, and from one hundred to five hundred on the Westmorland shores of Morecambe Bay.

During the winter Redshanks commonly associate with Knots, Dunlins and Oyster-catchers.

Redshanks marked as young birds in Lakeland have been recovered later in the same year farther south, in Dorset, Cornwall, Cork and Brittany. Adults that had been ringed as nestlings have been recorded from Wales; one marked in June 1928 in Merioneth in January 1930, another marked in May 1927 in Glamorgan in March 1931, and another marked in May 1929 in Pembroke in October 1931. Two Redshanks marked as nestlings by R. H. Brown in different years on the Cumberland Solway were recovered within two months of ringing in Cornwall and Essex. Other recoveries show a tendency for some birds either to linger in or return to their native district.

#### THE ICELAND REDSHANK—*Tringa totanus robusta* (Schiöler)

Two Redshanks obtained in Lakeland have been identified as belonging to the Icelandic form. A male in the Carlisle Museum was submitted to the British Museum (Natural History) and has

been named by Dr G. Carmichael Low. It was shot by William Nichol on the Cumberland Solway, on 16 December 1904. A female was shot on the Megazin Scaur off Barrow-in-Furness, North Lancashire, on 21 October 1933, by R. A. H. Coombes, whose identification has been confirmed by H. F. Witherby (*British Birds*, Vol. 29, p. 86).

#### THE SPOTTED REDSHANK—*Tringa erythropus* (Pall.)

From the frequency with which it is noted, this uncommon passage-migrant may be considered a regular autumn-visitor to the upper Solway. Most of the birds are in immature plumage, and they usually occur singly. At Skinburness, William Nichol saw three together on 11 September 1906, and on 27 September 1908 he met with a party of seven. Here also the Rev. G. F. Courtenay saw an adult on 22 August 1929. Away from the saltings the Spotted Redshank has several times been noted at the Netherby duck-ponds by T. L. Johnston, and once at Monkhill Lough by Ritson Graham. On spring passage and in breeding plumage, one was seen at Skinburness on 6 May 1925 by W. Nichol, and one on Longnewton Marsh on 9 May 1936 by R. H. Brown.

Macpherson knew of only one Westmorland occurrence, a bird shot far inland, near Kirkby Stephen, in the east of the county. Closer watching on the southern estuaries might produce more records. There is a recent one of an adult bird seen at Sandside on the Kent estuary on 15 September 1935 by M. F. Meiklejohn.

#### THE GREENSHANK—*Tringa nebularia* (Gunn.)

A regular visitor on autumn passage, principally to the Solway and to the Ravenglass and southern estuaries. Inland it appears on the River Irthing and at Monkhill Lough, and on rare occasions it has been seen far up the River Eden and on the shores of Windermere. Arrivals of both adults and juveniles, the latter predominating, begin in July and are most marked in August and September. The small parties that are as frequent as single visitors to the Solway have been seen numbering up to thirteen birds in that part formed by the Wampool and Waver estuaries. Some of the migrants continue their journey in a south-westerly direction over Carlisle.

As a winter-visitor, and on spring passage, the Greenshank is rare. On the Solway, one was shot on 2 December 1905, and James Storey saw one on 15 March 1913, and noted single birds wintering in 1931-32 and 1932-33. M. Bratby has known it to winter in the Kent estuary, where also the Rev. E. U. Savage saw one associating with Redshanks on 9 January 1919. J. A. G. Barnes has seen mid-winter Greenshanks in the same estuary two or three times in recent years, the last from 24 to 26 December 1942.

Spring records, all from the Solway, are of a bird seen on 24 April 1907, by William Nichol; and one on 18 May 1935, and two on 9 May 1936, seen by R. H. Brown.

**THE RINGED PLOVER**—*Charadrius hiaticula hiaticula* L.

A common resident, nesting all round the coast, and sparingly on the shingle beds of the rivers Eden, Esk, Irthing, Caldew and Lune.

The inland nesting sites are deserted after the breeding season, the birds returning from February onward. Some of the localities were known to Macpherson, but the inland range seems to be gradually extending. The behaviour of a bird in June 1925 at Tindale Tarn in the Pennines indicated the presence of eggs or young there. In 1941 R. A. Carr-Lewty had under observation a pair which successfully nested on a busy aerodrome. Ringed Plovers are also changing their habits on the coast, for where once most of the nests were on the shingle beaches, now almost as many can be found in the short grass of the salt-marshes and bare sand of the creeks.

Very large flocks can be seen on the coast from August to April or May. Some of these are no doubt made up of birds of passage or winter-visitors from further north.

Ringed Plover occasionally visit the North Cumberland tarns in autumn, and George Bolam saw one on the top of Hartside, 1889 feet, in March 1914, and remarks in his journals that a few are often to be seen there.

**THE SOUTHERN GOLDEN PLOVER**—*Pluvialis apricaria apricaria* (L.)

A winter-visitor and passage-migrant and rather local breeding bird.

Golden Plover nest commonly on some of the Pennine moors and fell tops. Their breeding range seems to some extent to follow the limestone formation; they are, for instance, common on Stainmoor, Wild Boar, Swarth and Baugh Fells, but only nest sparingly on the Howgill and Langdale (Tebay) group and on Barbon High Fell, and are absent from Middleton and Casterton Fells. In the central region a few pairs nest in the Skiddaw group, on the High Street range, in the Eskdale neighbourhood, on the moors near the Duddon valley and possibly on Matteredale Common. Most nests are found above the thousand foot contour, some occasionally as high as 2900 feet in the Pennines, though others are well below 1000 feet. Up to about 1889, Golden Plover nested regularly on the Solway peat-mosses. A nest found on a lowland moss near Carlisle in 1933, by R. H. Brown, is the only recent record from this region, but breeding birds have increased on certain mosses on the low ground in North Cumberland.

Birds return to the nesting grounds in February and March, and laying begins in the latter half of April. They leave the high

ground after the breeding season and small flocks, probably of local birds, appear on the Solway marshes, sometimes as early as the end of June. Certain places inland in the Cumberland plain are regular winter haunts from August onward, and flocks are also seen in East Westmorland at that season. The Solway salt-marshes and mussel-scaurs were formerly the chief resorts in winter, but now except during hard frost, the birds prefer certain large inland fields and visit the same places year after year.

On the southern estuaries Golden Plover are common winter-visitors, though seldom in any great numbers.

Probably most overland migration follows an easterly route by way of the Eden valley and East Westmorland, but odd birds and small flocks are occasionally seen, usually in spring, passing through the central region, and some follow the west coast. Autumn migrants have been noted travelling south-east over the Carlisle district in August and September.

#### THE NORTHERN GOLDEN PLOVER—*Pluvialis apricaria altifrons* (Brehm)

Whether any birds of the northern race winter in Lakeland must remain in doubt as it is impossible to distinguish them from British birds at that season. In March and April, however, after the wintering packs have gone, and when the local birds are back on their breeding grounds, flocks of Golden Plover, in which the black markings on the head and underparts correspond with those of the northern race, regularly appear in certain places, notably near Carlisle and Plumpton in Cumberland, and Kirkby Stephen in Westmorland, and later on the Solway marshes. It seems probable that these birds travel north through the eastern part of the area. They remain until late in April or even May, when the local birds are laying, but usually frequent certain pasture fields at a lower level than the breeding grounds, and not always those fields that are the regular haunts of the wintering birds.

A visitor on southward migration and, as an adult still in full summer plumage, definitely a Northern Golden Plover, was shot by W. Nichol on the Cumberland Solway on 12 August 1904. This bird is in the Carlisle Museum.

#### THE GREY PLOVER—*Squatarola squatarola* (L.)

A regular passage-migrant and winter-visitor in small numbers to the Solway and Morecambe Bay.

Adults in summer plumage are not infrequently seen in the summer months. Young birds arrive on the Solway in September, usually in small flocks up to about a dozen. Those that remain through the winter are never very numerous, and single birds then often consort with Dunlins or other waders.

William Nichol met with some large flocks forty years or more ago; on 3 May 1893 about thirty birds, and on 24 August 1895 about forty. All these were adults in summer dress. Writing in

1911, he said that both young and old were becoming scarcer every year on the Solway but, since 1940, autumn flocks of forty or more juveniles have been seen.

Macpherson wrote: "When met with inland these birds are usually on passage." There seems, however, little evidence of overland migration, though J. M. Charlton saw a Grey Plover flying east over Sandisyke, near Brampton, on 7 October 1911.

#### THE DOTTEREL—*Eudromias morinellus* (L.)

The most glamorous of Lakeland birds, the Dotterel is still a summer-visitor and passage-migrant, but in smaller numbers than in bygone years.

Northward-bound trips of from three to twelve or more birds make brief halts on the Pennines and the central fells, and used to be seen regularly on certain upland pastures and on coastal ground where they now seldom if ever appear. They were a notable feature of the Solway, yet since the period of 1902 to 1907, when there was an unbroken sequence, only four visits have been recorded, the last in 1928. Pasture land between Appleby and Orton, Westmorland, was formerly well known to Dotterel shooters as an annual place of call. One spring about thirty years ago T. Stainton saw a large flock of Dotterel which had alighted in a field by the River Bela near Milnthorpe, after two or three of their number had crashed into a newly erected telephone wire. This is particularly interesting as the place lies in a direct line between the Orton locality and a former regular coastal haunt south of Carnforth. In North Lancashire the Dotterel is now known only as a very rare spring passage-migrant, and it does not seem ever to have visited the southern estuaries in any numbers. The main spring passage takes place during the second and third weeks of May. There have been early trips in April, and, much more rarely, in March.

The breeding places of the very few pairs that stay to nest in Cumberland and Westmorland are on stone-littered ground, mostly above 2400 feet, on certain of the higher fells, and sometimes actually on the summit plateaux. In part, the elusiveness of the Dotterel is accounted for by the fact that any given haunt is not necessarily resorted to annually, and may not be occupied for several seasons. It is sufficient to add that, in one haunt or another, the Dotterel continues as a nesting species, although a scarce one. Incubated eggs have been found before the end of May, and the breeding grounds appear to be deserted normally in August.

The autumn passage is not so well marked as that in spring, although some birds do travel southward along the Pennines, where parties have been seen both on the high ground and on the foothills by J. Oliver Wilson. A juvenile Dotterel was picked up under telegraph wires at Wigton, Cumberland, on 13 September 1932.

THE LAPWING—*Vanellus vanellus* (L.)

A very common resident and winter-visitor. Though its numbers vary from year to year in different localities, the Lapwing seems to be increasing slightly as a breeding bird in Lakeland. Most of the nesting birds establish themselves below the 1500 foot contour, but some go up to 1800 feet in the central region and up to 2400 feet and even 2700 feet in the Pennines. Breeding pairs are more local in their nesting and generally less numerous in some of the central valleys. With the great increase in ploughland due to the demands of war it has been noticed, since 1941, that in some South Westmorland districts bordering on the fells they have more or less deserted many of their old haunts in favour of the newly cultivated ground.

The higher breeding grounds and most of the central region are deserted in winter except for occasional visitors or flocks moved up by the weather. Very many Lapwings, however, continue to frequent the lower and more cultivated land and immense flocks winter in the estuaries. They return to their nesting grounds in February and their nests are found from late March onward. The time of flocking is confused by the gatherings of seemingly non-breeding birds in May and June but some of the nesting Lapwings do flock as early as the middle of June and most have left the high ground by the end of July.

It is probable that there is a certain amount of passage-migration through the area, and weather movements are very noticeable in winter. The records of birds ringed as nestlings in Lakeland and recovered in winter show that some remain not far from where they were bred, while of those that leave the area, the majority winter in the west of Ireland. A few have been recovered in south-west France and in Spain and Portugal, and one each in Holland, North Italy and Western Morocco.

The remarkable cross-Atlantic flight of some hundreds of Lapwings, which appeared in Newfoundland in December 1927, has particular local interest as one of the birds had been ringed at Ullswater in May 1926. From a study of the weather conditions at the time of the flight, H. F. Witherby thought it possible that the whole flock had in fact set out from north-west England and been carried by the high easterly wind past Ireland, which would have been their normal objective.

Several nests with five eggs have been found in the area.

On 5 November 1908 W. Nichol saw near Sillioth an albinistic Lapwing, nearly all white. Another almost white bird, a cock with dark flight feathers and very faint markings, has bred for several seasons in the same place in North Cumberland and has been seen in the same locality in winter.

THE AVOCET—*Recurvirostra avosetta* L.

On 11 August 1934 three Avocets were seen on the Kent estuary, Westmorland, first by J. Rodick and later by M. Bratby.

When flushed in the morning they were on the soft mud below the marsh edge, busily feeding, and they had returned to the same place by the afternoon. They once more allowed a close approach and only flew about two hundred yards when put up. Next day, however, they had disappeared and were not seen again.

This is the only known occurrence of Avocets in Lakeland.

THE BRITISH OYSTER-CATCHER—*Hæmatopus ostralegus occidentalis* Neum.

A common resident which has increased greatly during the present century.

Oyster-catchers are common all round the coast, but their chief haunt is the Solway, where immense flocks flight to and from the sandbanks and mussel scaurs according to the tides.

In Morecambe Bay, where they are relatively as numerous, their congregations are less noticeable as the suitable ground is more restricted. Most of these must be non-breeding birds; certainly only a small proportion breed locally, and their numbers remain fairly constant throughout the year.

Breeding Oyster-catchers were formerly almost confined to the shingle beaches and saltings of the coast but, since 1900, they have not only increased but also extended their range far inland. In Cumberland, T. L. Johnston noted a pair nesting near Little Orton in 1901, and R. Armstrong knew one or two pairs established on the Irthing in 1905. They now nest in some numbers in ploughed fields in the Solway region and the Cumberland plain, and on the shingle beds of the rivers Esk, Liddle, Lyne, Irthing up to Lanercost, Caldew, Petteiril, Eden up to Kirkby Stephen, Lune, and one or two pairs on a reservoir in East Westmorland. These inland breeding birds arrive in February or March and leave as soon as nesting is over.

In the central region Oyster-catchers are so far only occasional visitors; odd birds appear from time to time on the lakes and there has always been a certain amount of overland migration.

Sub-Order LARI-LIMICOLÆ.

THE CREAM-COLOURED COURSER—*Cursorius cursor cursor* (Lath.)

A rare wanderer from North Africa, of which Macpherson included in his *Fauna* a record of a specimen shot on the beach at Allonby, Cumberland, in October 1862 (*Zoologist*, 1865, p. 9457).

THE PRATINCOLE—*Glareola pratincola pratincola* (L.)

As repeated by Macpherson in his *Fauna*, one of the first specimens of this wanderer from Mediterranean countries ever obtained in the British Isles was shot at Bowness-on-Solway, Cumberland, in 1807 (Graves, *British Ornithology*).

## Sub-Order GRUES.

THE STONE-CURLEW—*Burhinus œdicnemus œdicnemus* (L.)

The Stone-Curlew has been twice recognised as a straggler to Cumberland.

The first bird was observed by D. Losh Thorpe on an islet in the River Eden at Carlisle, on 27 March 1909, and the second by William Nichol while he was trying to get within gunshot of a gaggle of Grey Lag-Geese on Longnewton Marsh on 18 March 1922 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 35).

THE GREAT BUSTARD—*Otis tarda tarda* L.

Macpherson could find no evidence of the presence of the Great Bustard in Lakeland in former times. He includes mention of a female shot in a turnip field at Leeshill, near Lanercost, Cumberland, on 8 March 1854 (*Zoologist*, 1854, p. 4407). This remains the only record for the area.

THE COMMON CRANE—*Grus grus grus* (L.)

The only Crane known to have visited Lakeland was a solitary bird that made its appearance in the neighbourhood of Allonby, Cumberland, in the spring of 1869, and for a time frequented some rough meadow lands near the Solway, as described by Macpherson.

## Sub-Order LARI.

THE BLACK TERN—*Chlidonias niger niger* (L.)

An irregular spring and autumn passage-migrant which has appeared more often in recent times than formerly.

There is evidence of a fairly regular migration in spring from early May to early June when small parties, or occasionally single birds, are noted travelling up the coast from Morecambe Bay to the Solway and continuing their journey eastward through Cumberland, visiting the inland loughs and tarns where they spend a short time hawking for winged insects. Twenty-four Black Terns have been reported at this season since 1904. Ten on the coast include two together seen at Rampside, North Lancashire, on 30 May and 1 June 1924 by W. Dodd, and a party of four at Bowness-on-Solway in June 1936 by W. Storey. Fourteen inland include four parties of three seen respectively at Ullswater on 28 May 1929 by N. Tracy (*British Birds*, Vol. 25, p. 79); Monk-hill Lough, Cumberland, on 4 May 1933 by Ritson Graham (*North Western Naturalist*, Vol. 9, p. 353); Sunbiggin Tarn, East Westmorland, on 13 May 1935 by T. W. I. Cleasby, and Tindale Tarn, North-east Cumberland, on 16 May 1936 by E. Glaister. The Tindale party finally went away in a north-easterly direction.

The autumn passage begins towards the end of July, and in 1934 a single bird frequented the River Derwent near Workington as late as 1 to 8 November. Since 1898 more than thirty Black Terns have been observed in autumn, 1934 being particu-

larly notable for the number that were reported. They have generally appeared singly, and all but one have been juveniles but, in August 1942, a party of eleven including four adults, was seen by J. A. G. Barnes in the Kent estuary (*British Birds*, Vol. 36, p. 144). The six inland records are all from places in the central region: Keswick in Cumberland, and Windermere and Grasmere in Westmorland.

The only Lakeland nesting record, as mentioned by Macpherson, is of a clutch of eggs taken by Thomas Armstrong on Solway Flow, Cumberland, in 1855 (*Naturalist*, Vol. 7, p. 251).

#### THE WHITE-WINGED BLACK TERN—*Chlidonias leucopterus* (Temm.)

William Nichol, who was perfectly familiar with the Black Tern on passage on the Solway, recognised a single White-winged Black Tern at Skinburness on 8 May 1915. This bird was sitting out on the sands close to where a number of Black-headed Gulls were fishing. The species has neither before nor since been recorded from Lakeland.

#### THE SANDWICH TERN—*Sterna sandvicensis sandvicensis* Lath.

A regular summer-resident, breeding at two well-known haunts, Walney Island, North Lancashire, and Ravenglass, Cumberland.

Sandwich Terns have bred on Walney Island since 1843, but the number of nests is very variable and the birds constantly change their breeding ground between there and Ravenglass. Black-headed Gulls and Jackdaws destroy many eggs, and in 1931 and 1932 a large proportion of the birds left, when a colony of Lesser Black-backed Gulls became established on the island. In 1936 early arrivals to Walney Island were noted on 18 March.

A small colony on the mainland at Roanhead was first noted by J. P. Rodgers in 1912.

The Ravenglass colony was started before 1887, probably as an overflow from Walney, and is subject to similar fluctuations. In particular there was a great increase in 1931 and 1932, corresponding to the decrease on Walney. In 1932 nearly four hundred pairs of the terns bred at Ravenglass, the maximum number up to that date, though it was perhaps exceeded in 1933 and 1939. 1938 was a disastrous breeding season for Sandwich as well as other terns and gulls; owing to gales and almost continuous rain few if any young were reared. Sandwich Terns arrive at Ravenglass from the third week of March onward and eggs have been found on 27 April, though most are laid in early May.

This tern is occasionally seen on the Solway in summer, and on 30 June 1926 R. H. Brown found a pair which had hatched out one nestling among the colony of Common Terns on Rockcliffe Marsh.

On 22 May 1913 J. Storey saw about a hundred birds in small parties flying down the Solway from the north-east, and on 3 May 1931 T. L. Johnston observed five following a similar line. In 1913 three birds remained near Anthorn for a few days in early June.

During August and September both adults and young wander north along the coast and have been seen in the Solway region at Skinburness. On their return south Moore Kitchen has observed them, particularly in recent years, resting for a few days in Allonby Bay. In 1935 a party of about twenty was off Walney Island so late as 8 October.

Ringing records show that Sandwich Terns bred in Lakeland winter in West Africa from the Gold Coast south to Portuguese West Africa and may remain there as late as June in their second year. One bird, ringed in June 1934, was recovered near Durban, Natal, in March 1937.

#### THE ROSEATE TERN—*Sterna dougallii dougallii* Mont.

A scarce summer-resident, nesting irregularly on Walney Island, North Lancashire, where J. E. Harting found it established in 1864. It formerly bred on the adjacent island of Foulney.

In 1927, H. W. Robinson knew of at least four pairs nesting on Walney. A pair nested at Ravenglass, Cumberland, about 1904, as recorded by the Rev. E. U. Savage (*British Birds*, Vol. 17, p. 249). One of the birds was snared on the nest by Tyson Brown, the watcher, for identification. The eggs were afterwards safely hatched.

#### THE COMMON TERN—*Sterna hirundo hirundo* L.

A common summer-resident and passage-migrant on the coast, occasionally seen inland.

There are large colonies at Walney Island, Ravenglass and Rockcliffe Marsh, and several small breeding stations on the coasts of Cumberland and North Lancashire. There is no colony in Westmorland, though H. W. Robinson states that a few pairs have bred there in the past, and a nest was found on Meathop Marsh in 1939 by J. A. G. Barnes. Numbers in different colonies sometimes vary considerably from one season to another.

The colony at Walney Island was abandoned in 1912; that at Ravenglass showed a decrease in the same year and was practically deserted from 1913 to 1917, the birds that came in 1913 leaving after laying a few eggs. In 1918, however, the terns again nested in numbers at Ravenglass and there are now large colonies both there and at Walney.

The decrease at Ravenglass corresponded with a decided increase at a small colony on Longnewton Marsh, where T. L. Johnston found the first nest in 1911, and the formation of a new colony on another Solway Marsh. The Rockcliffe colony, which

has been established for over a hundred years, had about one hundred and fifty pairs in 1934, but during the past few years has decreased rapidly owing to the growth of a colony of Lesser Black-backed Gulls which have now taken possession of most of the ground.

Except when high tides destroy the nests, as so often happens, young hatch out from 20 June onward, and the breeding grounds are usually deserted by mid-August, though some birds remain on the coast till late September. A northward drift has been noted along the west coast towards the Solway in late summer, before the general departure for the south. A party of fifteen Common Terns was met at 3200 feet above Rockcliffe Marsh by R. A. Carr-Lewty when flying there one day in June 1941.

In the central region the Common Tern is known only as a passage-migrant occurring irregularly in small numbers in spring and autumn. A few birds visit the lakes during the Mayfly season and take that insect freely. Some also frequent rivers inland during the autumn. The fairly fresh remains of an adult Common Tern were found by E. Blezard in a Peregrine's eyrie containing two young in the Westmorland Pennines in June 1932.

Common Terns ringed as nestlings at Ravenglass and Walney Island have been recovered in the late autumn in France, Spain and Portugal, and one was found in Senegal, West Africa, in May of the year after it had been marked. A bird ringed as a nestling on the Solway in 1937 was picked up dead there five years later.

#### THE ARCTIC TERN—*Sterna macrura* Naumann

As a summer-resident, the Arctic Tern has colonised new ground, although it is still much less numerous than the Common Tern.

The oldest, and for long the only breeding haunt, that on Walney Island, attracts numbers which vary greatly year by year. J. P. Rodgers informed E. B. Dunlop that, in 1913, a hundred nests hatched out. This number appears roughly to represent the maximum strength of the colony.

The Arctic Tern is a comparative newcomer to Ravenglass, where it now nests. E. B. Dunlop had no satisfactory proof of its occurrence there up to 1913. Furthermore, H. W. Robinson has no knowledge of its nesting there before 1918, and adds that its strength is difficult to estimate as the birds are widely scattered.

On Rockcliffe Marsh, Solway, Arctic Terns have nested in company with the Common Terns since at least 1923. While usually an odd pair or two, and sometimes half-a-dozen, there was a distinct colony of nearly twenty pairs in 1934. The species was recognised in a Common Tern colony on another Solway marsh in 1938.

A northward movement in summer along the west coast is reported by Moore Kitchen, and it seems probable that late autumn stragglers on the Solway are southward passage-migrants.

THE LITTLE TERN—*Sterna albifrons albifrons* Pall.

A regular summer-resident along the coast, but a very rare straggler inland.

There are breeding colonies at Foulney, Walney and Roan-head in North Lancashire, and Ravenglass and other localities along the Cumberland coast northward to Skinburness.

Nesting as they often do below the spring-tide mark, Little Terns suffer great losses through high tides, storms and drifting sand, and from these or other causes they are very fickle and inconstant in their choice of breeding localities. One Solway haunt whose history is typical of others was almost abandoned in 1882 and not occupied by more than a few pairs until 1906. Between then and 1917 the birds increased from twelve to over a hundred pairs, but in 1919 high tides washed away much of the shingle from the beach, and during the next twelve years the colony dwindled almost to nothing. In 1934 about twenty pairs returned, and more in 1935, when about a hundred and thirty birds, most of them adult, were seen on 2 August. Bad nesting seasons since then have caused nearly all the terns to leave again.

Little Terns arrive in spring from about 1 May onward, the breeding grounds being deserted before the end of September.

The only inland records are from Westmorland and are of two seen by J. F. Peters on Windermere on 8 September 1918, one picked up dead by the Rev. E. U. Savage at Sizergh in September 1917, and one, also found dead, near Thirlmere in May 1943, and sent to Miss C. M. Clarke.

THE SOOTY TERN—*Sterna fuscata fuscata* L.

The rare occurrences of the tropical Sooty Tern in the British Isles include one at Ravenglass, Cumberland, in June 1933, thus recorded by W. Marchant:—

“I think it may be worth recording that an adult Sooty Tern has lately been seen with the Sandwich Terns and Black-headed Gulls at Ravenglass. There is no doubt that it is a Sooty Tern. It is practically black all over its back, head, wings and tail on the upper side, except the outer edges of the outside tail feathers, which are white. The underside is white, and the feet and beak are black. There is a white patch between the shoulders and the cheeks, and the bird is approximately the size of a Sandwich Tern. It is very tame and has several times flown within ten feet of me” (*Field*, 29.7.1933, p. 294).

SABINE'S GULL—*Xema sabini* (Sabine)

Three examples of this arctic breeding gull obtained on the Cumberland Solway are in the Carlisle Museum.

The first, an immature female, was shot by W. T. Routledge on Rockcliffe Marsh, on 29 September 1893 (*Vict. Hist. Cumb.*, Vol. 1, p. 213). On 8 October 1921, an immature male, thickly coated with waste oil but still able to fly, was shot near Anthorn

by J. Storey (*British Birds*, Vol. 15, p. 158). On 9 December 1929, W. Storey found an adult female lying dead in a pool of water on Longnewton Marsh. The finding of this bird followed upon a three days westerly gale (*British Birds*, Vol. 23, p. 250).

#### THE LITTLE GULL—*Larus minutus* Pall.

A rare spring and autumn passage-migrant, occasionally seen in winter, and more frequently recorded in recent years than formerly.

During the spring passage the Little Gull has been observed several times in the Solway region in the latter half of April, and in May and June, generally birds in second year plumage, the only adult being one shot at Skinburness on 29 June 1894, by William Nichol (*Vict. Hist. Cumb.*, Vol. 1, p. 213). An immature bird was observed by E. Blezard at Carlatton, East Cumberland, on 24 May 1932, in company with a Black Tern, neither mixing with the colony of Black-headed Gulls which were nesting there (*British Birds*, Vol. 26, p. 138).

More birds have been seen during the autumn than in the spring, most of them juveniles and several in second year plumage. Eight have been recorded from the coastal regions and seven inland on southward passage up the Eden valley. One was seen by R. S. R. Fitter on the Eden, near Carlisle, on 12 September 1942.

During the winter birds have been observed in December, January and February. One, almost adult, was shot at Bowness-on-Solway on 30 December 1897 (*Vict. Hist. Cumb.*, Vol. 1, p. 213), and B. Johnston noted a party of three which frequented a refuse tip in Carlisle in February 1895.

Little Gulls have occurred, though only rarely, on the southern estuaries, but have not been recorded from the central region.

#### THE BLACK-HEADED GULL—*Larus ridibundus ridibundus* L.

A very common resident, showing a considerable increase during the present century, and also visiting Lakeland as a passage-migrant in autumn and spring.

The gullery on the sand-dunes at Ravenglass, Cumberland, is the largest and best known in the area. Many thousands of birds nest there, and though kept in check to some extent in order to protect the more interesting tern colonies, and in spite of a high rate of mortality in both adults and young, they show no sign of decreasing. The largest Solway gullery is at Rockcliffe, and it increased while older colonies on Solway and Bowness Mosses and Moorthwaite Lough became almost or entirely deserted. The Moorthwaite colony started with four pairs in 1878, grew to a large size, and was abandoned in 1932. Since 1934, however, the numbers at Rockcliffe have very greatly decreased.

The inland gullery at Sunbiggin Tarn, Westmorland, was known to Macpherson, and had grown to about four or five hun-

dred pairs in 1938. In July, when much larger counts have been made, this tarn seems to be a gathering place for adult Black-headed Gulls from other districts. There are smaller colonies on tarns and mosses in many places in all three counties, even as far east as the Pennine region. Some only last a year or two, as the birds are by no means always welcome, and there seems in fact to be a large floating population ready to colonise almost any suitable locality.

The hatching of the bracken beetles, *Phyllopertha horticola* L., on the fellsides of the central region in June used to attract hundreds of Black-headed Gulls to feed on them, and in more recent years plagues of Antler Moth caterpillars, *Cerapteryx graminis* L., on the high fell-sides have brought flocks of gulls from long distances.

A large increase in numbers is noticed in August and September on the coastal marshes, and a regular autumn passage has been observed to take place in a southerly direction over Carlisle, sometimes as late as November. Throughout the winter Black-headed Gulls are very common both on the coast and inland, feeding in the fields in company with Common Gulls and Lapwings and roosting on sandbanks in the estuaries, or on the lakes. A return passage of birds going north is noted in March and early April.

Ringed records show that while a small proportion of locally bred birds travel as far as Ireland, France, or even Spain, most of them winter in England. A young bird ringed at Ravenglass on 13 June 1912 was recovered at Cherbourg, France, five weeks later.

A Black-headed Gull ringed as a nestling at Ravenglass in June 1910 was found dead on its nest in the same place in May 1930.

#### THE COMMON GULL—*Larus canus canus* L.

A very common winter-visitor and passage-migrant, gradually extending its breeding range southward into Cumberland.

Parties of Common Gulls, chiefly adults, begin to appear about the end of July, and have occasionally been seen in both Cumberland and Westmorland as early as the end of June. Migrating birds are observed coming from the north-west in flocks of fifty to a hundred. They travel south through the central region and along the Eden and Lune valleys, and spread throughout the area, remaining until the end of April or beginning of May. A great many adults with a number of second year birds among them pass through Cumberland on return to their breeding grounds in Scotland, in the first week of May. Though not very numerous on the coast they are, with the Black-headed Gulls, the commonest gulls inland throughout the winter and spring, foraging on the pastures and ploughed fields and fighting sometimes long distances to roost at night on the sand-banks of the

estuaries or on the waters of the larger lakes, principally Windermere, Ullswater and Bassenthwaite.

A nest found on Longnewton Marsh, Cumberland, on 30 May 1914 by T. L. Johnston and J. Storey was the second recorded from England, and first from the mainland (*British Birds*, Vol. 8, p. 101). A single pair has bred there since, in 1923 and 1924, and a pair seen by E. Blezard on Rockcliffe Marsh in July 1931 gave every indication of having young. At Ravenglass, a nest was found by Ian Duncan in May 1932, and another containing three eggs, photographed by W. F. Davidson in May 1940.

A Common Gull ringed on the Baltic in June 1924 was recovered near Maryport, Cumberland, in January 1928. Two from Sweden have also been recovered in Cumberland, the first, ringed in July 1929, just a year later, and the second, ringed in July 1938, three years later.

#### THE HERRING-GULL—*Larus argentatus argentatus* Pont.

The Herring-Gull is common all round the coast throughout the year, and as a winter-visitor and passage-migrant inland.

The chief breeding station is on the red sandstone cliffs at St. Bees Head, but Herring Gulls also nest in some numbers on Walney Island, and in smaller numbers on Foulshaw Moss, Westmorland, and Bowness Moss and Rockcliffe Marsh, Cumberland, in company with Lesser Black-backs. H. W. Robinson counted thirty-five pairs on Walney Island in 1934, fifteen per cent. of the big-gull colony. W. F. Davidson saw the nest and eggs of a pair at Ravenglass in May 1940.

Herring-Gulls frequenting the inland pastures and refuse tips in the winter months flight on regular lines to roost on the estuaries and lakes, often in company with Common and Black-headed Gulls. E. B. Dunlop noted a northward passage in the Windermere district at the end of April 1910. A few non-breeding adults are seen inland in summer.

Of two young Herring Gulls marked on Walney Island in June 1930, one was recorded the following August at Dalton-on-Tees and one in October 1931 at Fleetwood, Lancashire. A bird marked as a nestling in Caithness in July 1936 was recovered in February 1937 at Workington, Cumberland.

#### THE SCANDINAVIAN LESSER BLACK-BACKED GULL—

*Larus fuscus fuscus* L.

A passage-migrant and winter-visitor in limited numbers.

Birds of this northern race begin to come to the Solway in September or October, their darker upper parts distinguishing them from the British Lesser Black-backs with which they then associate. At Skinburness, T. L. Johnston saw two in September 1932, and two in October 1933, each time in company with a number of the breeding form. Both on the Solway and off Walney Island, R. A. H. Coombes has, between September and

November in recent years, frequently recognised them, sometimes three or four together, in company with other gulls. In October 1933 he shot one in the Esk estuary to establish identity.

During the winter single birds are not uncommonly seen with Herring-Gulls at refuse tips and other foraging grounds in Cumberland, particularly at Carlisle.

Very dark backed birds, possibly of this form, have been noted by Miss M. Garnett and other observers on Windermere in spring and early autumn.

It is perhaps worth recording that three or four Lesser Black-backed Gulls seen inland in South Westmorland in winter, by Miss M. Garnett, between 1919 and 1938, were all undoubtedly of the British form.

#### THE BRITISH LESSER BLACK-BACKED GULL—*Larus fuscus graellsii* Brehm

A common summer-resident and passage-migrant.

There are large breeding colonies at Rockcliffe in Cumberland, Foulshaw in Westmorland and Walney Island in North Lancashire. Smaller colonies are established on Longnewton Marsh, on other mosses near the Solway, and on some inland mosses, while a few nests are found singly on moorlands in the Pennines and other districts. J. Cooper found a pair nesting on the shore of Ullswater in 1940. The Rockcliffe colony, established about 1907, now comprises about three hundred and fifty to four hundred pairs, having received a great influx in 1928 of birds from an old established colony on Bowness Moss, now almost deserted, which had itself been partly formed from a still older colony on Wedholme Flow.

Foulshaw has been a breeding haunt for a hundred years or more and still flourishes with several hundred pairs, though the colony on Roudsea Moss has decreased. H. W. Robinson found Lesser Black-backed Gulls trying unsuccessfully to nest on Walney Island in 1926 and 1927, but by 1934 two hundred and twenty to two hundred and fifty pairs were established there, some no doubt driven from Foulshaw owing to the large number of eggs taken there every year.

Lesser Black-backed Gulls arrive on the southern estuaries from the middle of February onward, and on the Solway from early March. A flock of fifty were seen flying over Carlisle from the south-south-east on 7 March 1937 by T. L. Johnston, and the spring passage over Windermere continues through March and April.

Throughout the area and especially in the central region, non-breeding birds, many of them nearly adult, are to be met with all summer, foraging everywhere over the fells as well as on the lakes.

The autumn passage movement commences in September or earlier, and most birds have left by mid-October, though in re-

cent years there has been a tendency for a few to stay much later and they may occasionally spend the winter in the estuaries and inland as on the Solway and in the Windermere district. Ringing records show that birds bred in Lakeland travel down the west coast of France to winter in Spain and Portugal; a few have been recovered in Morocco and one in Senegal, West Africa. A young bird ringed at Foulshaw in August 1933 was found in Denmark just a year later.

A Lesser Black-back showing a large, rounded white patch on the upper surface of each wing was seen by several observers, first at Grinsdale, Cumberland, in April, and then at Carlisle in August and September 1942. It was back at Carlisle in April 1943.

#### THE GREAT BLACK-BACKED GULL—*Larus marinus* L.

A resident, breeding sparingly in several localities and not uncommon on the coast and estuaries but seldom seen inland.

A few pairs of these fine birds nest on the coastal mosses on the outskirts of most of the Lesser Black-backed Gull colonies. An old established colony on Bowness Moss, Cumberland, gradually increased from five pairs in 1903 to about twenty pairs in 1926, but is now almost deserted. Most of the Lesser Black-backs left the place in 1928 to form a new breeding colony on Rockcliffe Marsh and a pair or two of Great Black-backs went with them.

Nearly a dozen pairs now nest at scattered places between Foulshaw and Meathop in Westmorland, and Roudsea and Foxfield Mosses are nesting haunts in North Lancashire. A small tarn in Finsthwaite which held a pair for many years has been abandoned since 1909 when the water level was raised and the island on which the birds nested was flooded.

Although Great Black-backs are inclined to be gregarious during the nesting season, they are usually solitary or in pairs at other times, each pair having its allotted territory along the salt marshes, estuaries or coast-line. They gather together in winter, however, in the southern estuaries and J. A. G. Barnes counted thirty at the mouth of the Kent one day in February 1943. Inland, in winter, M. G. Robinson saw five on Ullswater in January 1943, and six to seven frequenting Whins Tarn, Cumberland, from December 1942 to February 1943. He also noted one on Bassenthwaite Lake in February 1942, and Miss M. Garnett found one in company with Common and Herring-Gulls at Killington Reservoir, Westmorland, in February 1941.

A nest containing the exceptional clutch of four eggs was found by J. Storey on Bowness Moss in May 1913.

#### THE GLAUCOUS GULL—*Larus hyperboreus* Gunn.

A rare winter-visitor. Six occurrences, all in Cumberland, between 1877 and 1892, are recorded by Macpherson. The Glau-

cous Gull has since been recognised seven times in Cumberland and once in Westmorland.

W. Nichol saw one at Skinburness about 1900, and Moore Kitchen two in Allonby Bay, one of them in 1903, the other in a later winter. A bird in the white phase of plumage resorted to the outskirts of Carlisle during February and March 1914, and was seen by E. B. Dunlop and L. E. Hope. An immature male, its white plumage showing vestigial brown markings, was shot by James Storey, near Anthorn, on 28 March 1922. This bird had been seen about the Wampool estuary all winter in company with a smaller white gull which was not obtained (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 36). An immature, reported by W. Percival, frequented Rockcliffe Marsh during the winter of 1942-43, and another was seen by E. Blezard at Anthorn on a late date, 25 April 1943.

A white-plumaged Glaucous Gull, also showing signs of immaturity, and which kept company with Herring-Gulls at Windermere, Westmorland, was seen from 30 January to 4 February 1922, by Miss M. Garnett and J. F. Peters (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 36).

#### THE ICELAND GULL—*Larus glaucoides* Meyer

A very rare winter-visitor to the Cumberland coast.

In his *Fauna* Macpherson mentions the occurrence of four immature birds between 1835 and 1885. The first of these, as H. S. Gladstone points out in his *Birds of Dumfriesshire*, was shot on the Dumfriesshire shore of the Solway and cannot be claimed for Lakeland.

Macpherson later recorded an immature shot near Carlisle on 28 February 1898, and another seen by R. Mann near Maryport on 10 February 1899 (*Vict. Hist. Cumb.*, Vol. 1, p. 215).

An immature, first noticed by D. Losh Thorpe, frequented the River Eden at Carlisle, from 26 January to 20 February 1905 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 1, p. 80).

Moore Kitchen has seen the species once in Allonby Bay, and during the winter of 1921-22 a white gull believed to have been an Iceland Gull frequented the Wampool estuary near Anthorn in company with a Glaucous Gull.

Two birds recorded in the *Fauna*, one shot near Millom in 1882, and one in the Duddon estuary in 1885, are the only examples known to have visited the southern estuaries.

#### THE KITTIWAKE—*Rissa tridactyla tridactyla* (L.)

A resident in limited numbers, also a passage-migrant and occasionally seen in autumn and winter.

This maritime species is not often observed on the Solway and only appears on the upper waters of the firth after south-westerly gales. Ritson Graham has, however, noted odd birds

and occasionally flocks of forty to sixty visiting certain coastal marshes in July and early August.

During the autumn migration, birds passing southward along the west coast of Scotland, after leaving the Mull of Galloway, take a direct route across the open sea, arriving on the Cumberland coast south of the Solway region. H. G. Alexander has observed large numbers in recent years resting on the sand near Seascale (*British Birds*, Vol. 31, p. 202).

Kittiwakes are now established as breeding birds in Cumberland, on St. Bees Head. J. E. Telford reported some twenty pairs nesting there in 1932, and they are gradually increasing.

They occasionally visit Morecambe Bay in winter and spring.

Inland they are seldom seen except as storm-driven waifs. R. H. Brown has observed single birds at Talkin Tarn and Dalston after winter gales. In the central region the only records are of dead birds picked up after stormy weather at Ambleside in March 1903 and Kendal in March 1918. In south-east Westmorland one was found dead at Gaisgill near Tebay in September 1924 and one in Barbon Dale in January 1930.

#### THE IVORY-GULL—*Pagophila eburnea* (Phipps)

The only authentic Lakeland record of this rare wanderer from the Arctic is vouched for by Macpherson, who himself identified an adult which had been shot about 1850 on Cunswick Tarn, Westmorland, a small sheet of water at the foot of Underbarrow Scar, six or seven miles from the Kent estuary.

There is some doubt whether a white gull which frequented Allonby Bay, Cumberland, from November 1911 to March 1912 and was reported as an Ivory Gull, may not in fact have been an adult Iceland Gull.

#### THE GREAT SKUA—*Stercorarius skua skua* (Brünn.)

A rare passage-migrant occurring notably on the north-western coast of Cumberland along the Solway between Bowness and Silloth. Macpherson records three from 1833 onward, the last seen at Skinburness on 7 November 1889 by W. Nichol, who did not again meet with the Great Skua until 14 August 1907, when he watched one hovering over some Cormorants out on the sands. On 8 April 1908 he encountered his third, which he shot and was proved to be a female (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 37).

Another immature female was found by J. Storey on Longnewton Marsh on 12 June 1913, and an immature male by J. Poole at Bowness on 24 September 1914 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 37). W. Nichol saw the species for the fourth time at Skinburness on 30 July 1920, and on 26 October 1936, an immature female was shot at Cardurnock.

Further down the coast, Moore Kitchen has several times seen

the Great Skua in Allonby Bay where also he found a specimen washed up dead.

From the southern estuaries, E. B. Dunlop had a report of a Great Skua shot on the Duddon in 1910.

#### THE POMATHORINE SKUA—*Stercorarius pomarinus* (Temm.)

An irregular passage-migrant appearing usually in the autumn, and sometimes in fair numbers, but only recorded from Cumberland, mainly from the coast between the upper Solway and Drigg.

A good number visited the Solway in the autumn of 1898.

The only Pomathorine Skuas that have been observed in spring were a party of five by W. Nichol at Skinburness on 22 April 1904, and one by E. Blezard on Rockcliffe Marsh on 21 May 1943. This last bird, clearly showing light underparts, dark pectoral band and broad projecting central tail feathers, was being pursued by a Black-headed Gull.

W. Nichol reported two at Skinburness on 19 October 1906, and on 23 October, two adults and an immature. During the autumn of 1907 Pomathorine Skuas began to appear as early as 30 August when W. Nichol observed a party of three near Silloth. Four were seen on 4 September, one on 5 September and three on 16 September. During October, three were seen on the 2nd and one on the 5th.

Moore Kitchen has seen these skuas along the Allonby shore on a few occasions, and has also found them washed up by the tide after stormy weather.

The only inland occurrences are a fine adult shot on the old race-course at Carlisle on 22 December 1894 (*Vict. Hist. Cumb.*, Vol. 1, p. 215), and one shot by W. Bell at Longtown on 11 October 1918, after a very severe storm.

#### THE ARCTIC SKUA—*Stercorarius parasiticus* (L.)

An infrequent passage-migrant.

On the Solway, where it is known in both spring and autumn, W. Nichol saw or shot several examples, mostly immature, near Silloth. He records single birds on 28 May 1908, 26 April 1910, and 30 July 1920.

One was found dead in Allonby Bay in October 1909. James Storey observed two in the Wampool estuary near Anthorn for a few days at the beginning of June 1914.

Herbert Walker reports that some twelve years ago five Arctic Skuas were seen harrying gulls in the Kent estuary near Arnside, Westmorland. On the North Lancashire coast this skua is considered rare.

Macpherson mentions four inland occurrences, three near Alston in different years, and one at Tallentire, Cumberland. The only inland occurrence since then is of a bird seen by Dr Moon at Ullswater in the autumn of 1930.

THE LONG-TAILED SKUA—*Stercorarius longicaudus* Vieill.

A rare passage-migrant which has occurred inland as well as on the coast, generally in autumn.

The first Lakeland record of Long-tailed Skuas is of three shot in Morecambe Bay, near Grange-over-Sands, North Lancashire, in October 1859, and it was not until twenty years later that the species was first observed on the Solway.

Usually only single birds have been recorded, and at long intervals, but in October 1891 there was a remarkable visitation of exhausted and perhaps storm-driven birds which began to appear on 16 October on the upper Solway and were later reported all along the coast as far south as Walney Island, North Lancashire. The same day that the first birds were seen on the Solway, one was shot at Skirwith, East Cumberland, and subsequently another in the Eden valley, near Lowther, Westmorland, where several others were seen. Most of the birds examined at this time by Macpherson were in the plumage of the second year, but four were adults.

There have been few other recorded occurrences of Long-tailed Skuas. An immature bird was obtained inland at Kirkoswald in November 1890, and another found dead on the coast near Maryport on 11 October 1895 (*Vict. Hist. Cumb.*, Vol. 1, p. 215). An adult male was shot at Anthorn by J. Storey on 10 October 1919 (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 37), and M. Kitchen has seen the birds occasionally and found at least one washed up in Allonby Bay.

Of the three summer records the earliest is of a male in poor condition and showing very slight traces of immature plumage which was shot at Kirkandrews-on-Eden on 3 June 1885 after frequenting the river for a few days. An adult flew past W. Nichol's boat while he was fishing off Silloth on 10 June 1908, and another was found dead at Drigg on 11 June 1914 by the Rev. E. U. Savage (*British Birds*, Vol. 8, p. 77).

## Sub-Order ALCÆ.

THE BRITISH RAZORBILL—*Alca torda britannica* Ticehurst

A resident whose only breeding locality is St. Bees Head, Cumberland, where Razorbills have been established from time immemorial. After leaving their breeding cliffs, about August, very few birds are seen close inshore as they prefer to remain well out on the open water until they return in March.

Many dead Razorbills are at times left by the tide along the coast line, and storm-driven birds occasionally occur inland, even in the central region, where odd birds have been found dead on Ullswater, and one was shot on Windermere on 6 October 1926 by T. Battersby.

In June 1943 the carcase of one that had been dead for some months was found on the shore of Skeggles Water, Westmorland, a moorland tarn at 1000 feet.

on 2 February. On 7 February a gamekeeper saw about thirty flying south-south-east over a moor near Kirkby Lonsdale, and the following day C. Hulme Wilson picked up one just dead near the same place. Several others were later found dead in this district.

In the central region, four Little Auks have occurred on or near Windermere. The first was taken in Waterhead Bay by J. Hardy in November 1908 and the second seen on the lake by J. F. Peters on 25 November 1916. The third, caught by a cat at Ambleside, was shown to A. Astley on 20 November 1920, and the fourth was caught alive in a field by A. Dixon of Ambleside on 5 May 1927.

#### THE SOUTHERN PUFFIN—*Fratercula arctica grææ* (Brehm)

A limited resident and a regular autumn- and winter-visitor in small numbers to the coast.

Puffins have been known to frequent the vicinity of St. Bees Head, Cumberland, during the breeding season from before the time of the *Fauna*, 1892, but Macpherson states that they did not nest. They are now established on the cliffs of this headland and A. Barton found them definitely nesting there in 1937. R. Stokoe, also acquainted with the breeding Puffins, learned that, in 1940, there were in all some fifteen pairs settled in three groups.

Although a common breeding bird on the west coast of Scotland, the Puffin is seldom seen in any numbers on the upper Solway. This may be due to the fact that the southward migrants, after leaving the Mull of Galloway, take a direct route across the open sea towards the west coast of Cumberland.

Fewer Puffins than Guillemots or Razorbills are found dead on high-water mark, except on the shores of Walney Island where numbers are sometimes washed up.

Macpherson records a Puffin found dead near Kirkby Stephen, Westmorland, forty miles from the sea, in August 1885. Storm-driven birds have more lately been picked up at shorter distances inland, the most recent after westerly gales.

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### Order RALLIFORMES.

#### Sub-Order RALLI.

#### THE CORN-CRAKE—*Crex crex* (L.)

A summer-resident, formerly very common, but now irregular or scarce in most districts.

The Corn-Crake breeds from the coastal regions to the base of the fells nesting generally in a meadow or clover-hay field but occasionally in a young plantation with a growth of young grass, or in an orchard or on rough waste ground, where it sometimes favours a patch of nettles.

THE NORTHERN GUILLEMOT—*Uria aalge aalge* (Pont.)

THE SOUTHERN GUILLEMOT—*Uria aalge albionis* With.

The Southern Guillemot is a resident, breeding at St. Bees Head, Cumberland, where it outnumbered the Razorbill.

During the winter Guillemots habitually remain far out at sea and only occasionally do odd birds then come close inshore. They are often found washed up dead on the coast line, especially along Cardrunk Point, Walney Island and the southern estuaries. Two examples of the "ringed" or "bridled" variety and an albinistic specimen have been picked up at Allonby.

Storm-driven birds sometimes occur inland, and have been observed near Kirkby Lonsdale, Hincaster, on the Kent at Harforth in Westmorland, and on Rusland Pool in North Lancashire. They have occasionally been recorded from the lakes of the central region.

Northern Guillemots may be included among the autumn- and winter-visitors, as a bird referable to this form was shot by R. A. H. Coombes in the Esk estuary, Solway, on 23 September 1934.

THE BLACK GUILLEMOT—*Uria grylle grylle* (L.)

The Black Guillemot ranked as no more than a rare visitor until nesting at St. Bees Head, Cumberland, was proved in 1940. From the observations of A. Barton and R. Stokoe, three pairs were established there in June, and on one occasion, a bird was repeatedly seen to fly up to a cleft, once with a fish in its beak. On a later date two young were seen on the water with their parents. Nesting in the same year is also recorded by J. W. Bennett and P. S. Burn (*British Birds*, Vol. 34, p. 93). Birds had been present during the breeding season in earlier years. R. H. Brown saw one on a ledge of the cliffs on 24 July 1932 and a pair on the sea nearby on 21 July 1935. Dr M. McKerrow saw a single bird at Seascale, farther south along the coast, on 31 May 1928.

Dead birds are occasionally washed up on the Allonby shore, usually in autumn and winter.

THE LITTLE AUK—*Alle alle alle* (L.)

An irregular and usually storm-driven autumn- and winter-visitor to the coast which has also occurred far inland in winter and spring.

Single birds are fairly frequent in the Solway region but are rare in the estuaries and other parts of southern Lakeland where the latest storm victim was picked up at Bootle on 20 February 1943.

Many Little Auks were observed during the winter of 1895 when dead or exhausted birds were found near Carlisle and Penrith. In the great "wreck" of 1912 one was obtained near Rockcliffe on 26 January and one found exhausted in the Eden valley

In the Cumberland plain, although much reduced in numbers, the breeding birds fluctuate year by year. In some years certain districts are almost deserted, but there are usually Corn-Crakes to be found in the Petteiril valley and other favoured localities. An increase was noted in some parts of Cumberland during 1936 and a further increase in 1937. During 1942 there were indications that a local scarcity might be more apparent than real because in some haunts birds called either very faintly or over a very limited period. On one farm where a nest was found no calling had been heard at all and the presence of the birds quite unsuspected.

In the western coastal region Corn-Crakes were numerous until 1914 but are now very scarce. In 1912 and 1913 H. W. Robinson found nests among the sand dunes at Ravenglass, the owners having perhaps been crowded out from the adjacent fields.

In the central region a decrease, noted in 1911, has continued until now the well known call is rarely heard. The district between the fells and the southern estuaries still attracts a few pairs and there have been years such as 1931 and 1942 when birds have reappeared in some of their old haunts.

Early arrivals have been recorded on 20 April in different years at Carlisle, Kirkby Stephen and Ambleside. Most of the birds appear at the end of April and in early May, some remaining until September, when a few are generally seen during partridge shooting. One was shot on Clifton Moor near Workington on 3 January 1921 by T. Kendal.

On 8 September 1908 E. B. Dunlop shot a Corn-Crake at a height of 1200 feet on Kirkstone Pass and near to where he had seen one on 27 August (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 20).

A bird ringed in Cumberland in July 1912 was recovered in France in the following September.

#### THE SPOTTED CRAKE—*Porzana porzana* (L.)

An irregular visitor which has usually been recorded in autumn, but also sometimes at other seasons.

Macpherson believed that the Spotted Crane probably nested occasionally on some of the Cumberland mosses. Several specimens have been obtained in recent years near Carlisle and in the Solway region, and there are two spring records. A bird was shot on Burgh Marsh in March 1914, and Major G. Elwes observed one frequenting the bank of the Eden near Carlisle in April 1932.

In North Lancashire, although there is no authentic evidence of breeding, C. F. Archibald saw a pair of adults which were shot on Rusland Moss on 8 September 1898, and a juvenile shot at the same place a month later (*Zoologist*, 1898, p. 479). Another Spotted Crane was shot at Rusland on 4 October 1904 (*Zoologist*, 1904, p. 460) and J. F. Peters obtained one near Hawkshead on 7 October 1915.

In South Westmorland E. B. Dunlop mentions a bird shot on 6 October 1910 on a snipe bog near Staveley where two others had been obtained some years before (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 20). One was seen near Arnside in September 1934 by Dr M. S. Wood.

#### THE LITTLE CRAKE—*Porzana parva* (Scop.)

A very rare vagrant of which there are only three records. Two in the *Fauna* are from Cumberland and North Lancashire. The first example, captured in a ditch near Cockermouth Castle in 1850, was lent to the Cockermouth Museum for a time by J. W. Harris. The second was caught alive by a retriever dog in a disused clay-pit near Ulverston on 19 April 1886. This bird was eventually given to the Carlisle Museum by C. F. Archibald.

R. H. Brown records a Little Crake which he disturbed from the border of an overgrown pool in Hawkfoot Quarries, Dalston, Cumberland, on 3 November 1940. Further disturbed by a Stoat, it climbed to the top of the overgrowing branches where, at about ten yards distance, its characters were clearly discernible (*British Birds*, Vol. 37, p. 35).

#### BAILLON'S CRAKE—*Porzana pusilla intermedia* (Herm.)

There is only one definite record, as given in the *Fauna*, of this very rare vagrant. In May 1886 the dog that caught the Little Crake caught a Baillon's Crake in the same disused clay-pits at Ulverston, North Lancashire. This bird was subsequently purchased by C. F. Archibald and presented by him to the Carlisle Museum.

#### THE WATER-RAIL—*Rallus aquaticus aquaticus* L.

A resident and winter-visitor, the Water-Rail is most widely scattered throughout the area during the winter months. It is then frequently flushed by shooting parties on low-lying, damp ground, and often noted on the Solway salt marshes, even in the open creeks.

During the severe winter of 1916-17, Water-Rails were common round Windermere, and in March several were seen feeding out in the open near the reed beds. On Rusland Moss, North Lancashire, a favourite winter haunt, birds appeared to be more numerous than usual in 1924-25.

The retiring nature of the Water-Rail coupled with its choice of swampy nesting haunts has given the impression that it is a rare breeding bird. Actually, though not often seen, it is not uncommon, and there are many places where, in spring, its call may be heard both before and after dusk. Records prove its breeding in the Eden valley, Cumberland plain, west coast region and south Westmorland, and in all probability it breeds in several North Lancashire localities where pairs have been seen.

THE MOORHEN—*Gallinula chloropus chloropus* (L.)

Common and widely distributed, the Moorhen breeds freely from the creeks of the salt marshes and ponds and streams of lowland districts to tarns at an altitude of 1000 feet or more.

There is a tendency, though not so marked as in the Coot, for the higher and more outlying nesting places to be abandoned during the winter months when birds assemble in numbers on some of the lower loughs such as Monkhill and Thurstonfield, on the larger ponds in some districts, and on rivers, as for instance the Eden and the Petteril.

Moorhens are catholic in their choice of nesting sites, and will nest in flood refuse just as well as in rushes and occasionally in trees from twelve to twenty feet above the ground. One bird built on a bare sand bank in the middle of a river, and in 1935 a nest with eggs was found in a six-inch drain pipe used for filling a pond.

An albinistic example, almost entirely white, was obtained at Castletown, Cumberland, on 2 March 1928, and is now in the Carlisle Museum.

A Moorhen ringed as a nestling at Cumdivock in July 1926 was found in the same place in June of the following year.

THE COOT—*Fulica atra atra* L.

A common resident and winter-visitor, not so widely distributed as a breeding bird as the Moorhen, but nesting on all lakes and many tarns, from the coastal regions up to 1000 feet. Coots leave the higher and more exposed tarns during the winter to assemble on the lakes in large flocks, sometimes as early as September.

An increase has been observed in the wintering flocks, especially in East Cumberland, where over a hundred birds were noted on one small tarn on 29 September 1935.

Flocks of from one hundred birds to two hundred appear on Windermere about November, remaining out in the open water over certain shallows where they feed. These flocks usually break up before the end of March.

Large flocks also frequent Cavendish Doek, Barrow-in-Furness, during the winter months.

Order GALLIFORMES.

Sub-Order GALLI.

THE BRITISH BLACK GROUSE—*Lyrurus tetrix britannicus*  
With. & Lönn.

A widely distributed but local resident, whose numbers fluctuate without showing any sign of the marked and steady decline that has taken place in many parts of Scotland.

Black-game are most plentiful on the moors of North Cumberland, and flourish in small numbers in the wooded gills and hillside copses all along the western slopes of the Pennines, becoming more numerous again on the Barbon Fells, but thinning out on the opposite side of the Lune valley. Only a very few birds nest on the Cumberland coastal moorlands and on the low fells to the west of the Eden valley.

In the central region a fair number breed in the district around Greystoke and Mungrisdale in Cumberland, and a few near Haweswater. Troutbeck, Kentmere and Longsleddale in Westmorland, are favoured haunts and usually hold a fair stock. Maximum numbers were reached in these districts in the period from about 1912 to 1920, and the birds tend in good years to spread out and colonize the rough ground east of Windermere and towards Crosthwaite and Crook. On the southern fringes of the fell region the numbers of Black-game have ebbed and flowed since Macpherson's day and they are at present less numerous and less widely spread than they were then on the fells between the Lyth and Rusland valleys. Within the last few years they have ceased to nest on Cartmel Fell and they only occasionally visit the Lyth moorlands. In the Rusland valley, North Lancashire, where they were introduced between 1832 and 1840, they are now scarce, and are only thinly scattered over the fells to the west of Windermere. They breed on the Coniston fells and in Eskdale, but are rarely seen in the heart of the central region.

Black-game are at present on the increase in North Cumberland, especially in the new plantations around Kershope, as they were in 1939 in the Barbon district of Westmorland, but for several years up to 1942 they have been at a comparatively low ebb in Kentmere and Longsleddale. This decrease is no doubt partly due to natural fluctuation, but less careful preservation in some parts of the district in the last two decades has been a contributory factor, and indiscriminate shooting is probably one reason why Black-game have failed to establish themselves more firmly in the outlying districts.

A lek in the Troutbeck valley was in regular use in spring for many years, and another in Kentmere, where fifteen or sixteen Blackcocks might be seen displaying at one time, was frequented for a shorter period. This lek is now abandoned and the birds have used other playing grounds, sometimes only for a single season. Up to eleven cocks have been seen by E. Blezard in early mornings at a gathering place near Greystoke Park. R. H. Brown notes that Blackcocks display in autumn as well as in spring, and their bubbling call can be heard at any season.

The afforestation of large tracts of barren ground in Cumberland and Westmorland will afford Black-game an unlimited area for food, nesting and protection until such time as the trees become too dense to suit their requirements.

THE BRITISH RED GROUSE—*Lagopus scoticus scoticus*  
(Lath.)

A common resident. The Red Grouse is one of the most characteristic birds of Lakeland, ranging from the coastal mosses, where a few pairs breed, to the moors and fell districts wherever there is sufficient heather for its needs. In 1937 a nest was found on the grassy top of Wild Boar Fell at an altitude of over 2200 feet, a sparse growth of Crowberry, *Empetrum nigrum* L., apparently supplying the birds with food. Some years earlier, D. Kinard found a nest on a Solway salt-marsh which lies between two peat-moss haunts and within a flight of a mile of each of them.

The best grouse moors are those in North Cumberland and on the Shap and Tebay fells. Hand rearing has been successfully practised on the Netherby estate and on the Eskdale moors. Grouse disease is rare on Lakeland moors, and on some of the smaller moors has been unknown for forty years or more.

Local movements of birds from one moor to another are not easy to trace and are probably quite irregular. Birds from the coastal mosses have, however, often been observed crossing to and from the Scottish side of the Solway.

E. B. Dunlop records two pure white Grouse chicks hatched near Lazonby in 1911; a white bird was reported there in the autumn and another was seen on Croglin moor the same year.

THE PTARMIGAN—*Lagopus mutus* (Montin)

Evidence of the former existence of Ptarmigan on the fells around Keswick, Cumberland, rests on a statement by Pennant in 1776, corroborated later by Dr John Heysham. Macpherson believed that they had become extinct there by the end of the eighteenth century, though a specimen said to have been killed on Skiddaw was still to be seen in Hutton's Museum, Keswick, in 1841.

THE PHEASANT—*Phasianus colchicus* L.

A rather local resident except where strictly preserved.

After one or two earlier attempts the Pheasant was successfully introduced into Lakeland towards the end of the eighteenth century and has spread throughout the area.

Wild birds nest sparingly in the valleys of the central region. They are not very plentiful even in better preserved districts where numbers soon decline if rearing and preservation are discontinued, the generally small amount of arable land being no doubt largely responsible.

The woods on the slopes of the limestone scars in South Westmorland and North Lancashire provide some of the best Pheasant shooting and highest birds to be found in the area.

The melanistic mutant, now comparatively common, was seen about Skirwith, Cumberland, in 1912, and the pale "Bohemian" variety has occurred locally.

THE COMMON PARTRIDGE—*Perdix perdix perdix* (L.)

A common resident where land is under cultivation, but less plentiful where permanent grass predominates and very local in the fell districts. In the central region Partridges breed occasionally up to 1500 feet, and used to nest regularly on the slopes above Dunmail Raise, where they are now rarely seen. In all districts their numbers vary from year to year, chiefly in accordance with the weather at the end of June and early July when most nests are hatching. Wet weather then or heavy thunder showers play havoc with the young broods, but dry seasons soon bring the stock up again. Over shooting can do much more permanent harm, and, in a few localities during the past ten or fifteen years, has either greatly reduced or completely wiped out the Partridge population. The great increase in plough land since 1939, combined with good nesting seasons, has already had a beneficial effect in some southern districts.

Grey varieties have been shot on the Skirwith Abbey and Edenhall estates in Cumberland.

THE RED-LEGGED PARTRIDGE—*Alectoris rufa rufa* (L.)

Although it has been introduced on a few occasions, as in Cumberland at Gosforth in 1890, and on the Netherby estate about 1900, the Red-legged Partridge has never established itself in Lakeland. The few stragglers shot from time to time, generally in the Cumberland plain or in the eastern districts of Cumberland and Westmorland, have probably wandered from where they were turned down in neighbouring counties.

THE QUAIL—*Coturnix coturnix coturnix* (L.)

An irregular summer-resident, chiefly in the Solway region and Cumberland plain, formerly fairly common but now very scarce.

Quail bred near Carlisle in 1894 and 1897, also at Great Orton in 1896, when a bevy of fourteen was seen by B. Johnston. H. Britten heard several in the Eden valley in June 1904 and one in September 1907. A nest was destroyed during hay-making near Brampton in June 1924, and a brood of nine were observed at Grinsdale, Carlisle, in the same year. In June 1928 a nest with eleven eggs was found when hay was being cut at Drawdykes Castle, Carlisle.

A return of Quail to old nesting haunts in the Carlisle district became evident in 1941. Between the end of May and the early part of July of that year T. L. Johnston heard two different birds calling near Cummersdale. He again heard one there in June 1942, and one day during the same month R. Robson heard one at Grinsdale. On 31 July 1942, T. L. Purdham found a nest containing five eggs in clover fog on Scuggar House Farm, near Carlisle.

The trisyllabic note may still occasionally be heard in certain parts of the Solway region, where T. L. Johnston and Dr E. S. Steward heard a bird calling as recently as July 1937. An adult male was killed by striking a telegraph wire near Drumburgh in June 1930. It was one of a pair which had been frequenting a meadow there. A bevy was seen near Allonby in July 1934, and a bird was shot at Castle Carrock in East Cumberland in the following September. A Quail was heard calling near St. Bees on 21 June 1917 by C. Collison.

The only recent Westmorland record is of a bird seen near Levens in the last week of October 1920, by the Rev. E. U. Savage (*Trans. Carlisle Nat. Hist. Soc.*, Vol. 3, p. 39). Quail occasionally visit the Furness district of North Lancashire in summer.

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## NOTES.

LITTLE OWL. (*Athene noctua vitalii*). One trapped in Holme Hill,  
Estate, DALSTON, on 24/1/44.

**NOTES.**



**NORTH  
CUMBERLAND**

**CUMBERLAND  
PLAIN**

**CUMBERLAND  
CENTRAL**

Maxwelltown

WORKINGTON

LANGHOLM

CARLISLE

PENRITH

LOCHMABEN

DUMFRIES

MARYPORT

LOCKERBIE

ECCLEFECHAN

COCKERMOUTH

MIDDLEBIE

LANNAN

KESWICK

KIRKPATRICK

STANWIX

ELTON

NEWCASTLETON

CANONBY

LONGTOWN

WARRICK

WELTON

SKELTON

BAILEYHEAD

WALTON

BRAMPTON

CASTLE CARROCK

STAFFIELD

EDENHALL

GLASHU HILL

WHITE PRESTON

GILSDALE

CUMREW

RENNICK FELL

LANGWATHBY

EMMETHAUGH

CHURNSIKE

HAITHWISTLE

ALSTON

ALSTON MOOR

MILBURN FOREST

CHARLTON

WARK

NEWBROUGH

ALLENDALE TOWN

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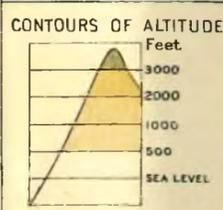
**LAKE & FELL**

**REGION**

**WEST**

**SOUTHERN**

**ESTUARIES**



**The Faunal Area of Lakeland.**  
 Cumberland and Westmorland  
 with Lancashire North of the Sands

Scale 4 Miles to an Inch

Issued with Vol. VI. of the  
 Transactions of the Carlisle  
 Natural History Society