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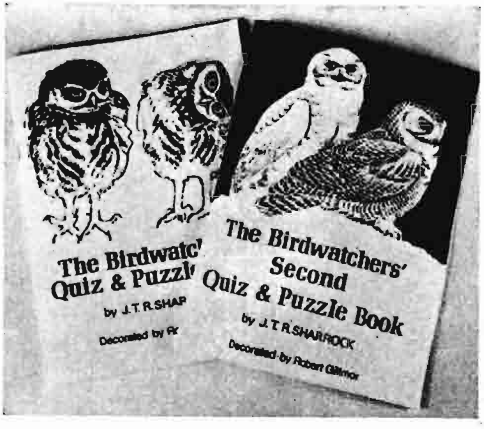

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CONTENTS OF VOLUME 9, NUMBER 3, AUTUMN 1976

Editor D. J. Bates
Business Editor Major A. D. Peirse-Duncombe

SCOTTISH BIRDS

THE JOURNAL OF THE SCOTTISH ORNITHOLOGISTS' CLUB

Volume 9 No. 3 **Autumn 1976**

Editorial

Corrections The Isle of May Supplement map scale (8 : 95) should read : scale of miles—0 . . . $\frac{1}{8}$ . . . $\frac{1}{4}$; scale of kilometres—0 . . . $\frac{1}{4}$ . . . $\frac{1}{2}$.

In the short notes on Scaup x Tufted Duck hybrids (9: 123, line three) delete "lacked" and substitute "showed". The Editor was responsible for this careless transcription error, which made nonsense of the comparison with Lesser Scaup, and he apologizes to Mr Verrall for any embarrassment caused.

Current literature Recent material of Scottish interest includes:

Prey of Short-eared Owls in breeding quarters in the Outer Hebrides. P. E. C. Jeal, 1976. *Bird Study* 23: 56-57.

Survival and local movement in young Stonechats. J. S. Phillips, 1976. *Bird Study* 23: 57-58. (Study in Ayrshire).

Predation and kleptoparasitism by skuas in a Shetland seabird colony. Malte Andersson, 1976. *Ibis* 118: 208-217.

Hybridization of Carrion and Hooded Crows *Corvus c. corone* and *Corvus c. cornix*, in northeastern Scotland. N. Picozzi, 1976. *Ibis* 118: 254-7.

Dispersal and causes of death of Buzzards. N. Picozzi and D. Weir, 1976. *British Birds* 69: 193-201. (Study in Speyside).

The Taxonomic Status of the Scottish Crossbill *Loxia* sp. Alan G. Knox, 1976. *Bulletin of the British Ornithologists' Club* 96: 15-19.

Perthshire Bird Report—1975. R. L. McMillan (comp.), 1976. 20p. Available from SOC Bird Bookshop (see advertisement for new terms) or at 30p (post free) from R. L. McMillan, 44 Durley Dene Crescent, Kintillo, Bridge of Earn, Perthshire.

Behaviour of injured Common Tern. David Merrie, 1976. *British Birds* 69: 272. (Record from Shetland).

Proof of Breeding. Bruce Campbell, 1976. *British Birds* 69: 277. (Discusses Scottish nesting records of Black Redstart and Bluethroat).

Spotted Sandpipers nesting in Scotland. Gordon E. Wilson, 1976. *British Birds* 69: 288-292.

Crossbills feeding at chimney-stacks. Elspeth Bartlett, 1976. *British Birds* 69: 312. (Observation on Scottish Crossbills in Ross).

Chaffinches on nut baskets. Richard F. and Elizabeth M. Coomber, 1976. *British Birds* 69: 312-3. (Observations from Mull).

Current Notes

These notes include unchecked reports and are not intended as a permanent record. Please send items of interest to Local Recorders at the end of January, April, July and October.

Reports of late winter visitors include 9 **Great Northern Divers** in Dunnet Bay (Caith) on 1 May and 1 at Burray (Ork) on 19th June. **White-billed Divers** were at Burray in Feb, Rousay (Ork) in spring, and L Ainort (Skye) on 18 Apr. A pair of **Green-winged Teal** was on L of Bosquoy (Ork) in Jan. The **Steller's Eider** is still resident in S Uist, but only 1 **King Eider** was reported from Shetland—a ♂ at Cliff Sound on 16 Apr. Another **Rough-legged Buzzard** appeared—at Hermaness (Shet) on 28 Apr, a **Goshawk** was at Tobermory (Mull) on 3 Apr, and 1 at Unst (Shet) about the 19th was a casualty of Fulmar oil. **Great Grey Shrikes** were at Tingwall on 29 Apr and Walls (both Shet) on 18 May.

A fuller account of the spring migration has been gathered since the last issue. **Manx Shearwaters** passing Frenchman's Rocks (Islay) totalled 608 in 2 hours on 2 May. A **Bittern** was at Lochend, N Roe (Shet), on 10 May, and a **White Stork** in Islay on 8 June. A **Garganey** reached Strand (Shet) on 15 May, about when remains of one were brought to a Peregrine eyrie in Islay. **Gadwall** reached 3 localities in Shetland. A sub-adult **Spotted Eagle** at Forres (Moray) in late June would be the 1st for Scotland and the 1st for the British Isles since 1915 if accepted. **Honey Buzzards** were at Weisdale (Shet) on 28-30 May and Fair Isle in late May and early July. Two **Marsh Harriers** were near Perth on 20 May and an **Osprey** at Strom (Shet) on the 10th. A **Gyrfalcon** passed Fair Isle on 1 Apr, an **American Kestrel** *Falco sparverius* there in late spring would be new to the British Isles, and a ♀ **Red-footed Falcon** was in Unst from 1-4 May. Several **Quails** reached Fair Isle in late May and 2 were calling at Tranent (E Loth) from 11-14 June. Another **Crane** was reported—Mid Yell on 8 May—and a **Little Ringed Plover** was on Fetlar (Shet) on 19th. Two early **Dotterels** reached Ben Vorlich (Perth) by 23 Apr. A **Woodcock** on Foula (Shet) on 3 July was unexpected. A high number of 48 **Whimbrels** was at L Indaal (Islay) on 3 May. A **Spotted Sandpiper** at Yellowcraig (E Loth) in late May would be only the 3rd Scottish record. No birds returned to last year's nest site. **Temminck's Stints** were at Dunnet Sands on 21 May and Skerries (Shet) on 24-27th. Two ♂♂ **Ruffs** were at L Heilen (Caith) in early June. A **Grey Phalarope** was at Whalsay (Shet) on 7 May and a **Red-necked Phalarope** stayed at Inchnadamph (Suth) from late May-27 June. A **Pomarine Skua** passed Frenchman's Rocks on 16 May and a **Long-tailed Skua** was at Foula on 28th. **Little Gulls** were at Kirkwall (Ork) on 10 May, Strand on 28th and Clickhimin (Shet) on 30th, and 1 remained in Islay from 8 May into July. A **Kittiwake** was inland at Hawick (Rox) on 25 May, and a **White-winged Black Tern** was at Eglesham High Dam (Renf) on 4 June. About 20 **Turtle Doves** were reported

from the Northern Isles and Argyll in May-June. A **Nightjar** reached Tresta (Shet) on 3 June, an **Alpine Swift** was over Fetlar on 29 May, a dying **Roller** at Largs (Ayr) in early June, and a **Hoopoe** at Dunvegan (Skye) on 29 May. A **Great Spotted Woodpecker** stayed at Kirkwall in June, and 3 **Wrynecks** were in Shetland between 20-26 May. Two **Short-toed Larks** were on Skerries on 20-21 May, 1 from 15-22nd. Two **Red-rumped Swallows** passed Fair Isle in spring and 1 reached Eigg in early June. At least 12 **Golden Orioles** reached the Northern Isles in May-June. A fall of 150 **Wheatears** came to Isle of May on 7 May, but few **Black Redstarts** were reported: 1 Whalsay 24 Apr, 3 Skerries 20-25 May, 1 Foula on 28th. A **Nightingale** was at Kergord (Shet) on 5 June, a **Thrush Nightingale** on Skerries on 19 May, and 26 **Bluethroats** at Isle of May and the Northern Isles, with 15 on Skerries, from 21-30 May. A **Great Reed Warbler** died on Skerries on 21 May, and **Reed Warblers** were on Whalsay on 22nd and 28th, Unst on 1 June, and Islay on 1 July. **Icterine Warblers** were on Foula on 26 May, Whalsay on 26th and 28th and Skerries on 27th, **Melodious Warblers** at Whalsay on 28 May and Foula on 4 July, and *Hippolais* sp. at Sumburgh (Shet) on 26 May and Isle of May on 30th. **Willow Warblers** totalled 200 on Isle of May on 7 May. A **Bonelli's Warbler** in Islay on 21st would be the 2nd Scottish record. **Red-breasted Flycatchers** appeared on Isle of May on 30 May, Fetlar on 28th and 31st and Unst on 1 June, and a suspected **Collared Flycatcher** on Skerries on 25 May. Three **Tawny Pipits** were reported from Fair Isle in late May and 1 on Foula on 1 June. **Yellow Wagtails** were at Kirkwall on 10 May, Skerries on 9th, Unst (2) on 20th, Sumburgh on 26th, Foula on 28th, a possible hybrid resembling the Iberian race on Skerries on 17th, and **Grey-headed Wagtails** on Skerries on 15th and 21st and Whalsay on 21st. A **Woodchat Shrike** reached Foula on 26 May, and an influx of **Red-backed Shrikes** from mid May-early June brought c30 to Shetland, several to Fair Isle, 4+ to Orkney and 12+ to Isle of May. A **Hawfinch** reached Helendale (Shet) on 29-31 May, and a **Scarlet Rosefinch** was on Fair Isle about that time. An **Ortolan Bunting** was on Skerries from 16-25th, and 5 **Rustic Buntings** visited Fair Isle and Shetland in late May. A **Bimaculated Lark** on Fair Isle on 8 June would be the 1st Scottish and 3rd British record.

Turning to breeding and summering birds, the **Black-browed Albatross** again stayed at Hermaness. A **Fulmar** chick at least a week old on 2 May in Islay was at least 7 weeks early and may be unique. Up to c40 **Storm Petrels** were noted in the Sound of Sleat (Inv) in early July. **Pintails** bred again in Orkney and 1 was seen in Speyside (Inv) on 27 June, where 3 pairs of **Goldeneye** bred. **Whooper Swans** were at Westray (Ork) and Speyside in June and on L Poit na h-I (Mull) from 10-24 July. Ten young **White-tailed Eagles** were imported to Rhum to join the 1-2 survivors from last year. Three **Marsh Harriers** summered in E Loth and 1 at Threipmuir (Midl). **Ospreys** fared much as usual: of 14 pairs 10 reared 20 young, 2 pairs failed to hatch, including the L of Lowes (Perth) triangle, 1 nest was blown down and 1 robbed. In July wandering birds visited Alemoor L (Rox) on 2nd, Langwell Glen (Caith) on 7th, and 1 at Gladhouse (Midl) on 25th was mobbed by a Peregrine. **Quails** were noted in July at Foula, Thurso (Caith), Carse of Lecropt (Perth), and 3 were calling near Middleton (Midl) from July-Aug. **Spotted Crakes** and **Wood Sandpipers** were suspected breeding in Perth. At least 1 of perhaps 3 pairs of **Temminck's Stints** bred in C Highlands. **Long-tailed Skuas** (2-3) visited Fair Isle in July. **Iceland Gulls** were in Shetland until 28 May and Scrabster and Wick (Caith) from May-July. A **Black Guillemot** again summered between Gullane-Fidra (E Loth). Two ♀♀ **Snowy Owls,** but no ♂, summered on Fetlar. A pair of **Wrynecks** bred again in Speyside and possibly in Perth. Two **Blackcaps** sang at Golspie (Suth) in July, when a ♀ was at Bridgend (Islay), and 2-3 pairs of **Lesser Whitethroats** bred at Longniddry (E Loth) 1 of which had been ringed at Doncaster (Yorks)

in 1971 as a juv. A possible hybrid **Yellow Wagtail** resembling the Iberian race may have bred at Grangemouth (Stir). **Snow Buntings** continued to breed in the Cairngorms and colonized 2 new sites in Ross.

A **Great Northern Diver** returned to Gullane on 14 Aug, and 37 **Red-necked Grebes** to nearby Gosford by the 16th. One in Islay on 3 July was less usual. Small numbers of **Sooty Shearwaters** were noted off Barns Ness (E Loth) during Aug. NE winds on 27-29th brought an exciting sea-bird movement to the E coast, but so far we have reports only from Tarbat Ness (E Ross) and the Forth. Sooty Shearwaters were numerous with 1000+ at Tarbat Ness and 50+ at Fife Ness on 29th, and smaller numbers Isle of May, N Berwick (E Loth), Barns Ness, St Abbs Head and Eyemouth (Ber). Fewer **Manx Shearwaters** were involved (max 100+ Tarbat Ness on 29th), and 1 **Cory's Shearwater** passed Tarbat Ness on 29th with 7+ **Great Shearwaters** (+35 probs); Great Shearwaters also passed Fife Ness (2) and Isle of May (1) on 28th and Barns Ness (3) on 29th. A **Sabine's Gull** passed Fife Ness on 29th, with up to 8 Great Skuas there and at Barns Ness. A bird resembling a **frigatebird** sp. was seen with Gannets off Dunure (Ayr) in early Aug. A **Surf Scoter** returned to Murcar (Aber) in mid June and others visited Gullane on 10-11 July and the Ythan (Aber) on 9 Aug. **King Eiders** appeared in July at L Fleet (Suth), Murcar and the Ythan. A **Lesser Golden Plover,** probably Asiatic, at Aberlady (E Loth) from 10-16 July was remarkably early, as were 2 **Whimbrels** at Frenchman's Rocks on the 4th. Two **Spotted Redshanks** inland at Forteviot Bridge (Perth) on 15 Aug were interesting, as was a **Lesser Yellow-legs** at L of Tingwall on 8-10 Aug. **Temminck's Stints** occurred at Drum Hollistan (Caith) on 10 July, the Ythan estuary on 1 Aug and the Eden estuary (Fife) on 17th. **Buff-breasted Sandpipers** at Tyninghame (E Loth) on 8 July and Scale (Ork) about the same time were very early. A **Red-necked Phalarope** was at Hoy (Ork) on 22 July. A **Black-winged Pratincole** at Strathbeg (Aber) in late July would be the 2nd Scottish record and a **Caspian** Tern at the Ythan on 1 Aug would be the 5th. A **Turtle Dove** was at Prestonpans (E Loth) on 24 Aug. **Wrynecks** arrived at Fife Ness and St Abbs Head (2) on 29th and 1 was later found dead at North Berwick. The 1st **Fieldfare** reached Coldingham (Ber) in late Aug, and an early **Black Redstart** visited Fair Isle in mid Aug. A **Reed Warbler** was on Isle of May on 28th and a probable at Barns Ness on 29th. **Icterine Warblers** were also at Isle of May on 28th and Barns Ness on 29th and a **Booted Warbler** on Fair Isle in late Aug would be the 5th Scottish (all Fair Isle) and 6th British. The only **Barred Warbler** was reported from Fair Isle about 12 Aug, and a **Wood Warbler** was on Isle of May on 28th. **Yellow Wagtails** were at Drem on 31st July and Scoughall (E Loth) on 8 Aug. **Rose-coloured Starlings** were reported from Halkirk (Caith) on 27 June and Helmsdale (Suth) on 2 July, and a **Crossbill** from Kergord (Shet) on 18 June.

Club policy on ornithological research, and fieldwork and discussion groups

The Scottish Ornithologists' Club has a broadly based membership. It is not the exclusive preserve of either the expert or the beginner, but provides a meeting ground for everyone interested in wild birds in Scotland, and it seeks to cater for both the scientific and the aesthetic approach to birds.

Recently some members have argued that the SOC should

do more to initiate and organize ornithological research in Scotland : others fear that it may be leaning too much towards research, and risking its virtues as a friendly meeting point for all kinds of birdwatcher—casual and dedicated, amateur and professional. Council has therefore sought the views of Branches and discussed this several times, with a view to clarifying the role of the Club. These notes have been endorsed by Council on 15th June 1976 as an outline of its policy.

It is important that the SOC should preserve its individual character and distinction from other organizations such as the BTO, RSPB and SWT. In particular it should not seek to take over the function of the BTO in Scotland but should co-operate in appropriate BTO inquiries, long-term and short-term, and only promote its own to cover specifically Scottish matters where these will not seriously detract from support for important BTO inquiries.

Much of what the Club does is to a degree concerned with ornithological research. In recent years, for examples, the SOC has :

—officially promoted and urged members to take part in the BTO Atlas project and Operation Seafarer,

—appointed a small Research Committee to advise on projects proposed to it, and supported inquiries recommended by it, including the BTO Habitat Register, the 1975 Rookery Survey, censuses of Great Crested Grebes (1973 and 1975), and the Scottish Effluent Inquiry,

—commissioned and published an extensive survey by Ian Lyster of ornithological research work being done in Scotland (*Scot. Birds* 7 : 228-242),

—set up a network of Local Recorders to produce annual Scottish Bird Reports from 1968 onwards,

—published *Scottish Birds* as the principal outlet for ornithological material in Scotland and in it many research-based contributions and requests for help and information,

—encouraged members to take part in such activities as wildfowl counts, Birds of Estuaries Inquiry, corporate ringing projects, nest recording, Common Bird Census, and Beached Bird Surveys, and provided facilities at annual Conferences for meetings of those involved in various of these activities,

—arranged lectures at Conferences and Branch meetings on research topics, and provided opportunity on these occasions for research-minded members to give talks on their own subjects, and to meet, exchange information and organize themselves into the groups of active workers which are associated with most Branches,

—directed most of the grants from its endowment fund for research work, and

—maintained a first-class working ornithological Library in Edinburgh, used mainly by those doing research work.

Council wishes to encourage interested members to organize and take part in active fieldwork and co-operative inquiries and will be pleased to hear from those seeking official Club support for projects which they have in mind. The Club does not, however, have the resources to organize research from the office nor the expertise to appoint and direct a research co-ordinator. Council believes also that more can be achieved by those with enthusiasm for research work organizing it themselves under the umbrella of the Club than by Council attempting to create a network of possibly unwilling organizers to cover areas where no local impetus is evident. Various local groups work in different ways, and it seems best to encourage these to develop freely in the directions that their individual enthusiasms lead them.

It is the responsibility of Branch office bearers and Committees to see that the needs of all members, whether active or passive, beginner or expert, are catered for by their Branch activities. Though many people may join the SOC simply to attend lectures, Branches should offer a much wider range of activities, and members should be able to get details from their local Branch Secretaries.

For beginners, Branch Committees should arrange relatively frequent and informal discussion meetings and outings to learn the elements of birdwatching and identification and the sort of places to visit. A regular rendezvous or system for finding out what is on may be what is basically needed.

For those who want to take an active part in fieldwork and discussion there are already groups informally associated with most of the Branches, usually meeting on different dates from the Branches, in the members' houses or elsewhere; or projects are announced at Branch meetings. It is understandable that members of such groups may sometimes prefer to restrict them to those who will take an active part in their activities, particularly to prevent them getting unworkably large, but if a group is based on an SOC Branch it is important to avoid any suggestion of a clique. Council hopes that Branch Committees and the members of associated groups will give thought to this problem, with the aim of making sure that anyone interested in fieldwork is made aware of the possibilities and encouraged to take part, preferably by suitable announcements at Branch meetings. If the only group activity is in fact private, and the members of the group just happen to attend a particular Branch, then the Branch Committee will need to consider

what should be done for those who are excluded from the group.

Some Branches and groups produce their own newsletters and reports, and so long as these complement rather than compete with *Scottish Birds* these are a welcome stimulus and testimony to local enthusiasm. The costs of production should however be financed locally, as a token of the demand for the publication. Council would welcome the chance of getting copies of all such publications for the Club's Library, both for reference and for historical record.

In areas where there are no Branches of the SOC there may be support for the formation of local groups, and Council is keen to encourage these, whether official Club Groups or informal fieldwork and discussion groups. Advice and help in getting a group off the ground is available from the Club Secretary. Publicity may also be given in *Scottish Birds*, if desired, about the formation of new groups and the activities of existing ones.

June 1976 ANDREW T. MACMILLAN, *President.*

First recorded erythristic eggs of Arctic Skua and Herring Gull in Britain

D. J. BATES, H. M. S. BLAIR, I. H. J. LYSTER

On 25th May 1973 DJB visited a small colony of Arctic Skuas in Scotland. One dark bird, which was thought to have a light phase mate, was sitting on an apparently fresh clutch of two reddish eggs. None of the other birds seemed to have begun incubation and no other eggs could be found for comparison.

He again visited the colony on 24th May 1974 and found presumably the same dark phase bird on a similar clutch of eggs in the same nest site. On this occasion a light bird was definitely in attendance. The other members of the colony again were thought not to have laid.

Colour transparencies of both clutches were obtained and were virtually identical in both years. One egg was slightly larger than the other and had a light pinkish buff ground, many underlying greyish blotches and many mid-brown surface blotches. The markings were heavier near the large end. The smaller egg was warmer in colour, having a warm pinkish buff ground, underlying greyish blotches mostly at the large end, and warm brown surface blotches mainly concentrated in a ring round the large end.

These would appear to be only the third and fourth ery-

thristic clutches of Arctic Skua eggs ever found (see notes below), and the first to be recorded in Britain.

A short note in *Scottish Birds* (6: 282) records the finding in May 1969 of a clutch of three erythristic eggs of the Herring Gull in Sutherland, apparently the first such clutch to be found in Britain. The eggs were later presented to the Royal Scottish Museum (Registered Number 1972.21) and are illustrated in *Highland Birds* (Nethersole-Thompson 1971, p. 94). Recently, however, during a major rearrangement of the Museum's egg collections, an earlier clutch of three erythristic eggs of the Herring Gull was noticed. This clutch (Registered Number 1957.75) had been found by Dr I. J. Patterson in May 1957 on St Abbs Head, Berwickshire.

The eggs in the 1957 clutch, like those found in 1969, are of normal size for the Herring Gull and have a background colour of pale pinkish brown, overlaid with flecks of violet and brownish red. These eggs differ, however, in both the size and intensity of the flecking: on one egg the markings are quite bold, on the second they are finer and more evenly distributed, and on the third, the palest of the eggs, they merge closely with the background colour.

Before discussing erythrism, it might be mentioned that the eggs of both species are very variable. The ground colour in both is usually pale or greenish brown, and generally darker in the Arctic Skua; the markings are dark brown, but may be paler in the Arctic Skua or darker in the Herring Gull. Rarely the ground colour is pale blue, which is sometimes unmarked in the Herring Gull, and in exceptional cases the latter is well known to lay creamy or pinkish eggs with pink or reddish brown speckling.

No more than two kinds of pigment are present in the eggshells of most birds, in this part of the world at least, and often one alone or practically none. One of these pigments is blue or greenish and when present occurs throughout the shell structure. The other is brownish, ranging from red to black, and when present is usually near the surface. A small amount makes a white shell yellowish or pale brown and a blue shell green or olive. The brownish pigment also produces any markings that are present which may occur at various depths as the shell is formed, varying in shade according to their depth and the shell colour.

An individual female usually lays eggs of the same type throughout her life, although some species show consistent variation within clutches, and the colour and pattern of her eggs are not influenced by her mate. Abnormal coloration usually has a genetic or physiological cause, and again such a type would be laid by the bird throughout her life.

Although some species normally lay only reddish eggs, such as falcons, erythrism may be defined as having the reddish colour exaggerated or abnormally replacing the bluish pigment. The obverse condition, called cyanism, is the abnormal emphasis of blue by the suppression of brownish pigment. Cyanism sometimes occurs in the Arctic Skua and Herring Gull, and of course blue is the normal colour of such eggs as Dunnock and Starling. Whether the term erythristic should be applied to species whose eggs are normally reddish, or cyanic to those that are normally blue, seems to be a matter of personal preference.

Erythristic eggs of the Arctic Skua must clearly be very rare, as HMSB has succeeded in tracing only two other clutches. These are included in the collection formed by the late Dr A. B. Wessel and now preserved in the Museum of Bergen University. Both were taken on the Varanger Fjord, in arctic Norway, one in 1902, the other in 1912. Dr Wessel referred to the former in an account of the avifauna of Sydvaranger published in 1904 (*Ornithologiske Meddelelser fra Sydvaranger*, page 106, published in *Tromso Museums Aarshefter*. The latter has not so far been recorded, and for the details we are indebted to the Museum's Curator of Zoology, Dr J. F. Willgohs. Dr Willgohs has also kindly supplied excellent coloured photographs of the two clutches under consideration. While one of the eggs taken in 1902 is blotched with brownish red on a deep orange ground, the other is paler, its ground being almost a cream. The 1912 clutch represents a more extreme and striking variety, marked with a few scattered flecks of dark brown on a dark ground.

For well over a century naturalists have known of the curious eggs, red or pink in colour, laid by some Herring Gulls. Analysis of the many records shows that all but a few of these handsome specimens come from arctic Norway, with the gulleries of Troms and Finmark as the principal sources. Indeed, previous to the discoveries at St Abbs and in Sutherland, the only locality beyond Norway from which erythrism had been reported for this widely distributed and plentiful bird was Goteborg in Sweden. While not so common, red eggs of the Great Black-backed Gull are preserved in various museums and private collections, and again these have all been received from arctic Norway. Erythristic eggs of the Black-headed Gull are rare; three examples from Loch Rogart in Sutherland are illustrated without data in *A Vertebrate Fauna of Sutherland, Caithness and West Cromarty* (Harvie-Brown and Buckley 1887) and mentioned by Jourdain and Borrer (*British Birds* 7: 256). With the Common Gull erythrism appears to be very rare, with only one fully authenticated clutch,

from Sweden, on record. As yet the Lesser Black-backed Gull has never been known to lay such abnormal eggs.

In view of the concentration around arctic Norway of so many records of erythrism in the larger gulls, it becomes significant that two similar clutches of Arctic Skuas' eggs have been taken near the Varanger Fjord on the 70th parallel. Mention should also be made of a striking pair of Arctic Terns' eggs collected by the late Alfred Chapman in the same latitude on the Tana River, and described by him as being like "very rich Merlin's eggs".

Some of the first erythristic eggs gathered in Norway came into the hands of Dr Kjaerbolling of Copenhagen, who pronounced them to be Glaucous and Iceland Gulls'. His determination was later questioned by Herr Nordvi, a naturalist resident in Finmark, who assured John Wolley that the eggs were in fact Herring Gulls'. When the two white-winged gulls proved to be no more than winter visitants to Norway, most ornithologists accepted Nordvi's identification. The original error did, unfortunately, persist in some quarters, and erythristic eggs in the National Collection appeared under the Glaucous Gull in the official catalogue published in 1902. Only in the present decade has the occurrence of erythrism in the Glaucous Gull been confirmed. Mr Aevar Peterson, of the Icelandic Museum of Natural History, to whom we are indebted for the information, notes that the eggs are also the only examples of the abnormality so far recorded for any gull or skua breeding in Iceland. The two clutches, obviously laid by the same bird, were found in 1973 and 1974 on a small island in latitude 65° 19'N. The record is of further interest as each clutch consists of two erythristic eggs and one typical in colour. Mr Peterson learned that the same combination of the normal and the abnormal had been seen on the island for several years previous to 1973.

To turn to the Nearctic Region, an erythristic clutch at Tring remains unique for the Iceland Gull. While red or pink eggs have yet to be recorded for any other of the larger gulls breeding within the limits of Canada and the United States, three such clutches of the eggs of the Western Gull *Larus occidentalis wymani* have been taken in Mexico. These important specimens are now preserved in the Museum of the Western Foundation of Verbetrate Zoology, and the Curator, Mr Lloyd F. Kiff, has very kindly furnished copies of the data accompanying them. All came from the Coronado Islands off Baja California. Two, collected in 1929 and 1931, had every appearance of being laid by the same bird; but the third, taken in 1941, was more richly coloured.

A tendency for erythrism to recur locally has been noticed

with other birds besides gulls. At times, for example, some Dutch farmers harvesting Lapwings' eggs have come across striking red varieties. With some warblers erythrism becomes almost the rule over wide areas. Thus red and pink types outnumber others amongst eggs laid by Sardinian, Subalpine and Dartford Warblers in parts of southern Spain, but occur very rarely, if at all, further to the east. On the other hand, erythrism has yet to be noticed in the former district with the equally common Blackcap, a bird which regularly, if not very frequently, lays such eggs further to the north, in Britain and southern Scandinavia.

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Recent distribution, ecology and breeding of Snow Buntings in Scotland

DESMOND NETHERSOLE-THOMPSON

(Plates 13 - 16)

Since *The Snow Bunting* (Nethersole-Thompson 1966) several ornithologists have investigated the breeding distribution, dispersion and ecology of Snow Buntings in Scotland. In the West Cairngorms Professor V. C. Wynne-Edwards has annually visited the known nesting corries and Tim Milsom and Clive Owen have spent over 60 days on the central tops, specially studying numbers, habitat selection and feeding ecology. Adam Watson, Adam Watson Sr. and Sandy Tewnion have also regularly monitored numbers and territorial patterns in the Central Cairngorms, and in the Nevis area John Currie has started the first long-term study since the Observatory closed early in the century. These are the most continuous projects but several correspondents have also made observations in the Beinn Eighe Reserve, Fannichs, and several other hills in Ross and Sutherland, as well as in the Cairngorms.

The Snow Bunting poses many problems. No special Scottish race appears to have survived since the last Ice Age. The bird's history thus differs markedly from that of the Ptarmigan, an ice-age relict, which has probably bred continuously in northern Scotland since the retreat of the glaciers. In Scotland, on the fringe of its world breeding range, the Snow Bunting is apparently sensitive to climatic change or oscillation. In

cooler decades, given suitable conditions on Scottish hills, a few spend the summer, nest and apparently establish small unstable groups which breed for some years until they die out or are reinforced by new settlers.

The origins of these colonists are unknown, but white-rumped cocks of the nominate race *Plectrophenax n. nivalis*, which breeds in northern Europe and Greenland, and black or dark-rumped cocks, identical with the more sedentary Iceland subspecies *P. n. insulae*, have both nested in Scotland, sometimes in the same year. Between 1968-70, for example, there were at least two mated and three unmated white-rumped cocks in the Cairngorms, possibly colonists from Greenland or northern Europe. On the other hand, in 1971-3 there were four mated and six unmated dark-rumps against one unmated and two mated white-rumps. Outside the Cairngorms, a mated cock in the Nevis area in 1973 and the cock at a nest in the Fannichs in 1974 had white rumps. In these years, therefore, both forms have bred in different parts of the Highlands.

Climate

In the last 25 years the Scottish climate has changed slightly. F. H. Green (pers. comm.) tells me that there has been an almost continuous tendency for there to be more snow in the early winter, followed by a midwinter recession, and then generally an increase from late winter to spring. This tendency has repeated in cycles since early in the last century. From 1950 onwards there have also been more northerlies and easterlies than in the first half of the century, with a tendency towards longer winters, late springs, and cooler summers, with more rainfall in the east and less in the west. The climate is thus now possibly reverting to that recorded in the last half of the nineteenth century, with the first half of this century the odd man out (Cranna 1971).

In a discussion of climatic changes in Greenland, Iceland and England, W. Dansgaard *et al.* (1975) have also concluded that the warmer phase of the twentieth century has terminated. 'Most of the climatic improvement from 1920 to 1935 seems to have been lost, and although the average cooling of the Northern Hemisphere has only been in the order of 0.4°C it is highly significant'.

In *The Snow Bunting* I speculated that, if the cooling climate abroad and favourable factors on the Scottish hills continued, more Snow Buntings were likely to be found on the hill in summer in the years ahead. The last decade has not disproved this idea. Between 1880-1909 Snow Buntings nested or were seen in suitable habitats in summer in Shetland, Sutherland,

Ross, Perth and St Kilda, as well as on hills like Ben Avon and Lochnagar, besides the higher bens of the Cairngorms. In the years from 1930-64, on the contrary, the only proven nesting record, apart from those in the high Cairngorms, was that of a brood seen on Ben Nevis in 1954. The picture has now greatly changed. Since 1966 nests or broods have been recorded on at least eleven different hills in Sutherland, Ross, Inverness, Banff and Aberdeen and Snow Buntings have also been located in summer on at least twenty other suitable breeding habitats in Shetland, Caithness, Sutherland, Cairngorms, East Grampians, Perth, Argyll, St Kilda and Skye. It is always easy to overlook the odd pair or bird, particularly if the cock is not singing or when you are visiting the corries in rough or misty weather. But it is now likely that the breeding distribution in Scotland closely resembles that in the late nineteenth century.

Settlement by other boreal birds

The Snow Bunting is only one of several boreal birds to expand or consolidate in periods of cooler climate. From the 1850s, boreal ducks like Wigeon, Long-tailed Duck, Eider, Scoter, Goosander and Red-breasted Merganser all settled or extended their breeding range in northern Scotland. In the 1950s, '60s and '70s, other boreal birds have expanded even more dramatically, with Great Northern Diver, Scaup, Goldeneye, Whooper Swan, Goshawk, Green Sandpiper, Temminck's Stint, Snowy Owl, Bluethroat and Brambling* all nesting. Wood Sandpiper, Osprey, Fieldfare and Redwing are now well established; Waxwings have prospected in summer, Shore Larks probably bred, and displaying Sanderlings, a drake Steller's Eider, a Long-tailed Skua, and a male Lapland Bunting in breeding plumage have all been reported in summer on suitable breeding habitats in the Highlands and Islands. About 1927 Dotterels ceased to breed regularly in England, but since 1968 a few pairs have probably nested annually and others have bred in Kirkcudbright in 1967 and 1975, in Selkirk/Peebles in 1970, and in Wales in 1968. From 1961 Dotterels also settled in entirely new habitats on reclaimed polders in north-east Holland. All these unexpected changes have synchronised with the resurgence and expansion of the snow bird's range in the north of Scotland.

Breeding distribution 1967-75

Shetland No proof of breeding. In 1966 a cock summered on Foula and on 7th July 1972 another cock was recorded there.

*Unpublished record given to author in confidence.

Cocks were reported on 11th and 13th June 1970 on Fetlar and on 15th June 1971 on Unst (R. J. Tulloch).

Orkney No breeding records.

Caithness No breeding records, but on 14th May 1972 a hen, recently dead, was found on Morven (P. M. Collett).

Sutherland On 4th June 1973 D. and G. Thorogood watched three Snow Buntings and on 30th May 1974 D. Britton saw a cock on hills in north Sutherland. On 13th June 1974 D. L. Clugston and J. R. Mullins found a nest with five eggs near the top of another hill.

Ross and Cromarty On 28th July 1967 Eric Hunter located a juvenile Snow Bunting at about 1,500 feet on Beinn Eighe. Between 1968-73 R. Balharry has annually recorded flying broods in the Beinn Eighe Reserve, with at least two in 1968. Balharry also reports broods in the Fannichs in 1967-71, and in 1974 another correspondent found a nest with young on one of these hills. The Atlas recorders, between 1968-72, also confirmed breeding on a Torridon hill and reported Snow Buntings on suitable breeding grounds in summer on five other hills in Wester Ross, on at least two of which they probably nested.

Outer Isles A pair possibly bred on St Kilda (Atlas).

Inner Isles In June 1972 a cock was seen on a stony scree above 2,500 feet just south of Sgurr Alasdair in Skye (per J. Robson).

West Inverness No confirmed breeding records outside Nevis.

Nevis area John Currie gives this summary:

1967-70—No summer records.
1971—Breeding possible. A pair displayed in late spring and a cock sang in June.
1972—No known summer records.
1973—At least three cocks and two hens on one hill. One pair, and possibly two, bred successfully. On 7th July four juveniles were in one corrie and on 20th August four juveniles were in another.
1974—Three cocks and two hens but no nests or broods were recorded (J. Currie). A cock sang on Ben Nevis from 15th June-28th July (D. A. Skinner).
1975—One cock was recorded on 25th May and a second sang on 31st May. On 8th June there was one pair on territory and a second pair holding territory in another corrie. Four cocks and two hens were present.

There was extensive snow-lie in 1971 and 1974. The favourite snow bird corrie contains granite screes, similar to those in main breeding habitats in the Cairngorms.

Argyll No confirmed breeding records. In late spring 1973

three Snow Buntings were reported on suitable breeding habitat in Glencoe and a cock sang on another hill at about 2,400 feet (J. Currie).

West Cairngorms Professor Wynne-Edwards gives this summary. On 16th June 1968, two cocks sang against one another, 'each one roughly every 15 seconds with the other in the interval between. Saw a third bird in flight, perhaps taking food to young or returning to nest; heard buzz note. Another cock sang at the head of the next burn to the west and half a mile WNW of the last burn'.

On 6th July 1969, four or five cocks were singing in different corries. Two were within half a mile of the first recorded and a fourth at the head of a burn and a fifth in the next hollow to the west.

Between 1968-9 the Snow Buntings had shifted from the corries which they haunted in the 1950s and early 1960s, moving about half a mile away.

1970—No Snow Buntings recorded in any of the corries visited (Wynne-Edwards), but a pair nested on another West Cairngorms hill about five miles away (D. N. Weir).
1971—Snow Buntings recorded on 1st June (A. Archer-Lock).
1972—No Snow Buntings recorded.
1973—No reports.
1974—No Snow Buntings recorded.
1975—On 25th June a cock was singing a few hundred yards north of the main top of the highest hill (T. Milsom) and there were Snow Buntings in two corries (Wynne-Edwards).

Snow Buntings have not recently been recorded nesting in Horseman's Corrie where they bred in the 1940s and they do not now appear to favour the corrie where Tewnion discovered them breeding in the 1950s. Are these changes caused by new positions of snowfields or by the extinction of small groups and no subsequent replacements ?

Wynne-Edwards writes : 'In 1950-69 I was in the right place at the right time on twelve occasions and in every year found one or more singing buntings. I had bad luck between 1970-4, but other people found Snow Buntings in those years. This goes to show that people like me, who know what they are looking and listening for, can easily miss the birds in a passing visit, which is little more than a transect. One correspondent, who spent several days looking for them in the right general area, missed them in a year that I found them. This makes me wonder whether they have ever been missing altogether in the last 25 years or the last thousand either'.

Central Cairngorms 1968—In early June D. N. Weir located three cocks. In early July there were single cocks and in the

second week a pair with two fledglings. In early July Sandy Tewnion heard a cock singing in a favourite nesting corrie. In this year Snow Buntings were reported nesting on cliff scree where none were known to breed between 1934-64.

1969—Sandy Tewnion reported Snow Buntings scarce or missing from some regular nesting habitats. Two cocks sang and gave display flights.

1970—Tim Milsom and C. Owen located two pairs and an unmated cock. Between 20th-21st June they watched two white-rumped cocks (one feeding young) and saw a hen building. In July three fledged young were on a boulder field close to the nest.

1971—On 4th June A. Archer-Lock watched an unmated cock challenging a pair on its breeding territory. Five minutes later, by use of tape recorder, he discovered that the mateless cock had moved and was singing in another corrie about a mile away. In July Milsom and Owen watched a black-rumped cock with a hen and fledged young and located two possibly unmated cocks in song.

1972—Eight or nine singing cocks and at least five nests recorded. One cock was mated to two hens whose nests were 200 to 300 yards apart. One of these hens later mated with an unmated cock (Watsons, Archer-Lock, Smitton, Milsom and Owen, Bates).

1973—On 29th May one pair was watched nest-site selecting. A second cock was singing about 200-300 yards away (D. J. Bates). On 17th June J. R. Mullins found a nest with chicks about six days old and on 23rd June a second nest was found with five chicks which had hatched about a week later than those in the first nest. There were also three or more unmated cocks besides a total of four to six pairs with at least 20 flying chicks. A pair was located in a corrie outside the central block, but no nest or brood was discovered there.

1974—At least ten singing cocks, three or four hens and three nests with eggs were found (Milsom, Clugston, Mullins, Smitton and Watsons).

1975—The snowlie was deeper and more extensive with many regular feeding and nesting places buried under many feet of snow. However, Snow Buntings were absent from some screes where the snowlie differed little from that in previous years. Milsom and the Watsons recorded three cocks—one singing very weakly—but found no nests. Milsom mentions that between 1971-4 there was little turnover in the cocks occupying these habitats. By 1975 the groups would have been composed of old birds. No one yet knows where the fledged young go in winter or whether they return to their birthplace in spring.

PLATE 13. Cock Snow Bunting bringing leather-jackets (Tipulidae) to feed chicks, Cairngorms, June 1971.

Photograph by A. Tewnion

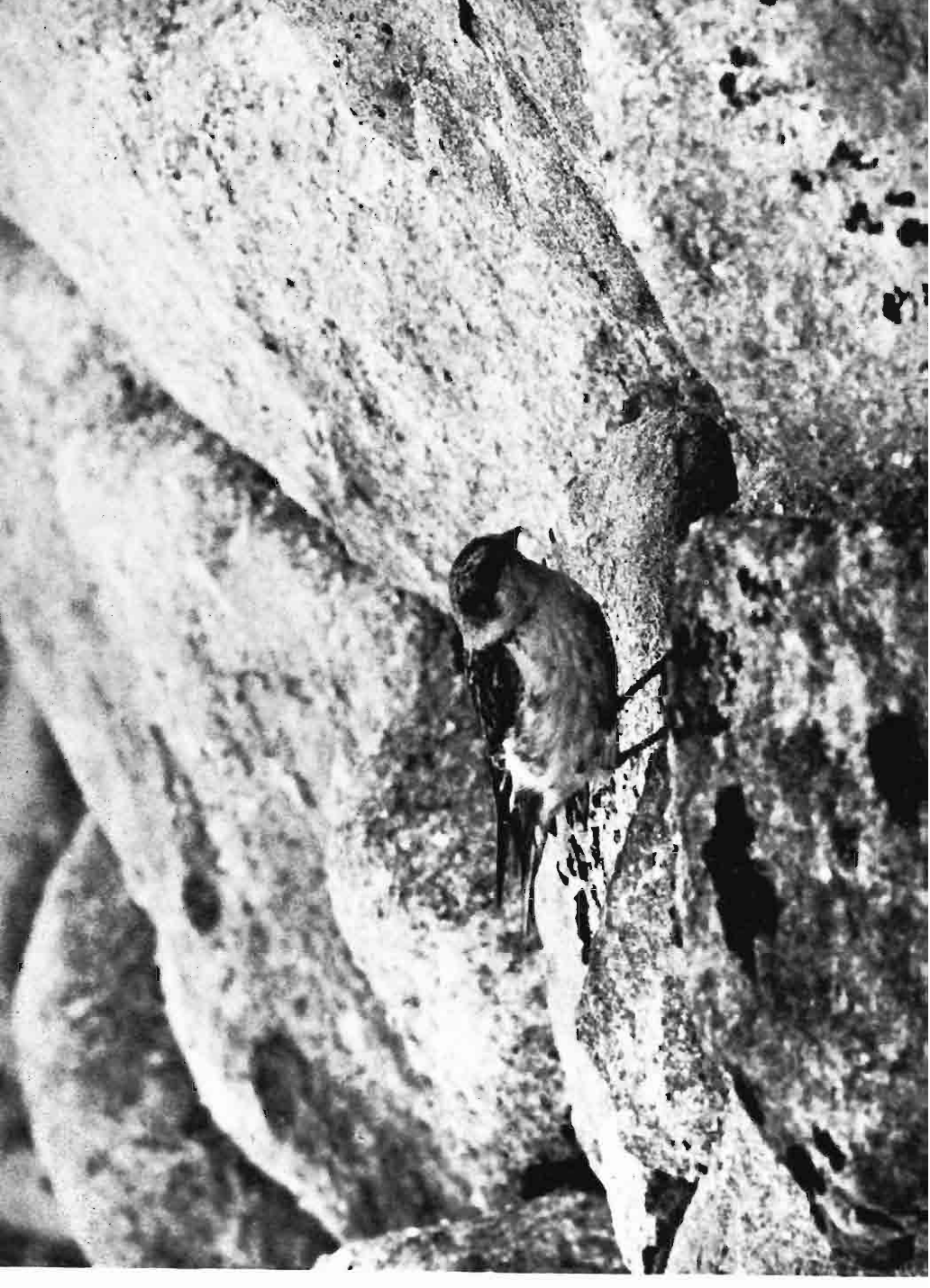

PLATE 14. Hen Snow Bunting on a Cairngorms breeding ground at 3,750 feet. June 1972.

Photograph by A. Tewnion

PLATE 15. Snow Bunting nest and nestlings, Cairngorms, June 1972 (exposed for photography).

Photograph by A. Tewnion

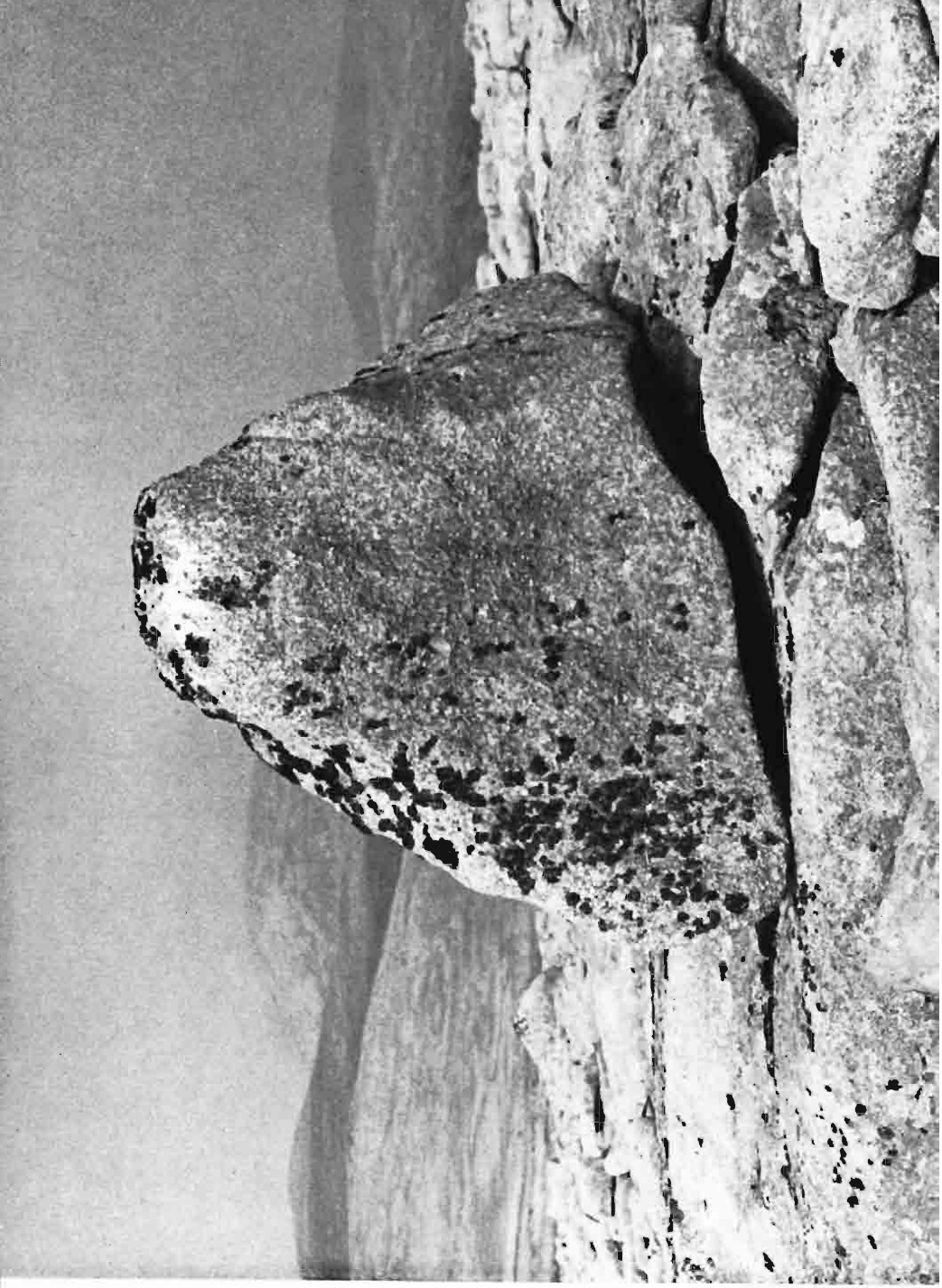

PLATE 16. Cock Snow Bunting's song post, Cairngorms. Note white splashes from droppings just below the top.

Photograph by A. Tewnion

East Cairngorms In June 1973 and June 1974, cocks sang in the same corrie (A. Watson and A. Knox).

East Grampians On 12th May 1969, A. Watson watched a cock singing at the top of a cliff on a high hill and in June 1970 D. Rose tells me that a pair was recorded in a corrie of this hill. A pair was seen on 31st May 1973 and a cock was singing on the same hill in early June (Sharrock 1975).

Perth On 14th May 1967 D. Merrie heard a cock singing at 3,600 feet near the top of a hill in north-east Perth and on 18th May 1968 M. J. P. Gregory saw another cock near the summit of a ben where Harvie-Brown had recorded breeding early in the century. In late June 1973 a cock was singing on a hill in Perth (R. W. Summers), and in the last week of May 1974 a pair was located on another hill in north-west Perth (G. N. Cope). Snow Buntings also possibly nested on a hill in south Perth (Atlas).

Habitat selection

Between 1934-65 all breeding pairs located in the Central Cairngorms selected the same general block of slopes, ridges and screes. From 1967 onwards, however, unmated cocks have frequently sung and pairs occasionally nested on other screes and corries on the central plateau where no Snow Buntings were ever suspected of breeding in the earlier period. These more occasional breeding habitats, which include one and possibly two nesting territories on cliff screes, are probably marginal and occupied only in years of unusually high numbers. All territories where nests have been found in the central block from 1967 onwards were occupied at some time between the 1930s and early 1960s, although not always in the same year. Milsom suggests that positions of snowfields, snowflushes and montane grasslands have been significant factors in habitat selection. In 1970-2 all nests were situated among block screes and within 200 yards of snowfields and adjacent to the snowflushes and montane grasslands which swarmed with craneflies and small moths in the second and third weeks of July. The Snow Buntings exploited these habitats and later the areas uncovered by the melting snowfields. In 1973, however, one pair continued to hold its old living-space, although it then lacked a snowfield and held fewer snowflushes. Spring heads and tracts of bare gravel and rock, however, still provided plenty of good feeding places.

From the 1930s onwards the Snow Buntings have regularly used large prominent boulders as singing, advertising and look-out posts. To my knowledge, one large and peculiarly-shaped rock has been used almost continuously for over 40 years and doubtless in every year since Snow Buntings occu-

pied these habitats from the last Ice Age onwards. Milsom suggests that in thick mists large rocks or boulders near the nest are important as landmarks to guide the birds back to nests or broods.

Territory and dispersion

Snow Buntings have flexible spacing patterns with well defended and apparently rigid territories in parts of East Greenland, but much smaller and less defined territories in many of the House Sparrow-like colonies in some Arctic settlements.

In the Central Cairngorms from the 1930s to 1960s, unmated cocks often patrolled large tracts of scree and hillside over which they sang and displayed, frequently invading the territories of mated pairs, where they sometimes attempted to seduce the hens within the living-space of their own mates. Some of these wandering males covered great distances in their daily movements. One cock, identified by peculiarities of colour pattern and song rhythm, displayed in corries on both sides of the Lairig Ghru.

In the early 1970s the prevalent pattern was often different, with some unmated males moving less and restricting song and display to the same defended places day after day. On possibly marginal habitats, however, where Snow Buntings were never recorded in earlier decades, the cocks had the same patterns as those previously observed. Higher numbers are probably largely responsible for changed patterns, the cocks clashing and displaying against one another more regularly when more space is occupied and defended. But the origin of settlers which have never previously bred or have never established firm territories might also be a contributory factor. However, some unmated cocks still succeed in mating with hens which have left their first flying broods in charge of their first mates. In July 1972, Milsom watched one of the bigamous cock's hens take an unmated cock for her second nest. At another nest in 1972 the territory-holding cock took little part in feeding his brood as he was involved in driving away a most persistent intruder.

The properties of particular territories are probably of different and variable quality. But it is not yet possible to determine statistically whether some consistently produce more flying young than others. In periods of expansion and settlement, early-arrived or dominant cocks may establish themselves in the higher quality territories and later-arrived or less dominant birds in those that are poorer or more marginal. Once mated and firmly established, however, a cock appears

to return to roughly the same territory year after year, although some of its properties may have changed.

Does the black-rumped Iceland race, which tends to nest earlier in Iceland than does the nominate form in Greenland and in other parts of its range, attain breeding condition earlier and so succeed in establishing a territory and winning a mate before the white-rumped race? Some white-rumped cocks in the central block, however, have not lacked dynamism in song and display and have mated successfully with mated hens later in the season. In some years there is possibly much interplay between the older established territory-holders and potential colonists, but some pairs are maintained in consecutive years and other snow birds are already paired when they take up their territories in spring (Nethersole-Thompson 1966).

Food and feeding

As from the 1930s to 1960s, craneflies (Tipulidae) continue to be the favourite food in the Central Cairngorms. In the 1970s, however, the feeding behaviour appears to have changed. In earlier years the buntings made much use of snowfields and snowpatches, where they often fed on trapped windborne insects. Recently Milsom, Owen and Smitton have not watched them doing this. Most recent work on feeding ecology, however, took place in July when there were innumerable craneflies on snowflushes, montane grasslands, squashy places between burns and streams and on stones and boulders.

As in the 1930s, '40s and '50s, pairs varied in their rates of feeding broods and in the distances they flew from nests to feeding grounds. The shares between the sexes also varied greatly. Milsom and Owen noticed that cocks and hens usually equally divided this task towards the end of the fledging period, but that at one nest the cock did less than the hen as he was courting a second mate and driving off two intruding cocks. On the other hand, another cock was a better provider than his mate. Most pairs continued to visit separate feeding grounds and usually arrived at nests independently of one another. Some flew to habitats which were several hundred yards away from their nests, but others caught craneflies on montane grasslands less than 100 yards from the brood, or sometimes gathered beakfuls of insects on boulders almost beside nests. One pair changed their feeding grounds when the mist was particularly thick; a feeding rate of 4.5 minutes in clear weather quickened to 2.9 minutes in thick mist. Both birds took different directions in mist from those taken in clear weather. This behaviour differed from that sometimes recorded in earlier decades, when some pairs had a slower feeding

rhythm on cold, wet, misty days. However, pairs probably vary greatly in this behaviour.

After leaving its nest a young Snow Bunting sheltered under a stone during a heavy rain shower, but later started to search for and pick up small seeds (Smitton). Milsom and Owen watched a flying juvenile trying to catch insects on the wing. The practice whereby a cock and hen fed different members of the brood after they had left the nest still continues.

Age

Some cocks can be identified by peculiarities of plumage, song and behaviour and hens by the shape and colour pattern of eggs. Between 1971-4 Milsom found that one cock held territory in every year and that two others were present in two consecutive years. This age structure conforms closely with our earlier records when a hen, which annually laid a small and unusually-shaped egg in her clutch, nested in the same territorial block in 1948-50. Another pair also nested in the same block in 1959-60, and a hen was mated to one cock in 1960-1 and to a second in 1962 (Nethersole-Thompson 1966).

Breeding biology

Polygamy Occasional polygamy still continues. In 1972 Milsom and Owen discovered that one cock had two hens with nests 200 to 300 yards apart. One of these hens later mated with another cock and laid a second clutch. At least one other mated hen produced clutches for two different cocks in the same year.

Nest-site selection On 29th May 1973 D. J. Bates watched a pair apparently prospecting for a nest-site. A cock with a beakful of moss and grass briefly entered a crevice accompanied by a hen with an empty bill. The cock emerged without the grass, but still carrying the moss which it later dropped. The cock then threatened the hen, crouching open-beaked in front of her.

Egg and clutch The Sutherland nest contained five eggs. Four clutches in the Cairngorms held 1/6, 3/5.

Incubation and laying season The cock was not seen at the Sutherland nest, although the hen was off eggs for at least ten minutes.

In the Cairngorms on 16th June 1974 Clugston and Mullins watched a cock call a hen off her nest to which she returned exactly ten minutes later. Between 12.30-14.20 on 22nd June 1974 Smitton was possibly present at the laying of the second egg of a clutch. At this nest the cock fed leatherjackets to the

hen at intervals of about 15-20 minutes. The hen, which was brooding restlessly, also foraged in the scree around the nest. On 17th June 1973 Clugston and Mullins found an early nest which contained five chicks about six days old. The clutch was probably complete about 29th-30th May. A second nest found on 23rd June, with five chicks, probably held a complete clutch about 5th-6th June.

Acknowledgments

I particularly thank Tim Milsom for sending me a summary of his and Clive Owen's unpublished observations of Snow Buntings in the Central Cairngorms. We now await his detailed paper on the feeding ecology and habitat structure of these groups. In the West Cairngorms Professor V. C. Wynne-Edwards and in the Central and East Cairngorms Adam Watson, Adam Watson Sr. and Sandy Tewnion have kindly given me details of their recent observations. John Currie has summarised his notes on the Nevis area, for which I am most grateful. I also thank Tim Sharrock and the BTO recorders for notes made between 1968-72 and for the use of the Atlas map. Many other friends and correspondents have also given helpful notes and observations :

Shetland : Bobby Tulloch;
Caithness : P. M. Collett;
Orkney : David Lea and Tim Milsom;
Sutherland : D. L. Clugston and J. R. Mullins;
Ross : R. Balharry, I. and M. Hills and E. Hunter;
West Cairngorms : A. Archer-Lock, T. Milsom and D. N. Weir;
Central Cairgorms : D. J. Bates, D. L. Clugston, J. Edelsten, H. Marshall, J. R. Mullins and I. Smitton;
East Cairngorms : A. Knox;
East Grampians : D. Merrie and D. Rose;
Perth : M. J. P. Gregory and D. Merrie;
West Inverness : Hamish Brown;
Argyll : J. Currie;
Skye : J. Robson.

Frank Green and R. Cranna kindly helped with notes about the climate.

Summary

In the last 25 years, possibly responding to climatic change, a number of boreal birds have nested or extended their breeding range in Scotland. In this period, Snow Buntings have been reported in summer and some have nested on more hills in the north of Scotland than at any time since 1880-1909. Breeding has been proved in Sutherland, Ross, West Inverness, and in the Central and West Cairngorms, and Snow Buntings have been recorded on suitable nesting habitat in Shetland, Caithness, East Cairngorms, East Grampians, Argyll, Perth, Skye and St Kilda.

Cocks of both nominate and Iceland races have nested, sometimes in the same year. A detailed analysis of breeding and summer records is given. Some factors in habitat selection in the Central Cairngorms are described and changes in territorial patterns are discussed. There are notes and observations on age structure, polygamy, clutch-size, laying season and nest-site selection, brooding, fledging and feeding patterns.

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Desmond Nethersole-Thompson, Ivy Cottage, Culrain, Ardgay, Ross-shire IV24 3DW.

Short Notes

Baird's Sandpiper in Midlothian

At 10.50 BST on 14th September 1974 I found a small strange wader feeding in the company of three Dunlin and a Little Stint at the water's edge of Gladhouse Reservoir, Midlothian. It was about the same size as the Dunlin, but readily distinguished from them by its clean white underparts, gingery back and breast, relatively small, straighter bill, and its much neater appearance. When the bird flew a few yards I could see no wing-bar and suspected that it was an American peep. I continued to watch the bird for over an hour. The weather was excellent, with good visibility and a light south-westerly breeze blowing. Excellent views were had of the bird, both on the ground and in flight, and detailed notes were taken. The bird flew only when approached closer than about ten yards, uttering a call that I noted as *trik-trik.* When feeding it had a noticeably horizontal stance, picking from the water's edge and not probing; the wings protruded a quarter of an inch beyond the tail, suggesting that it was a Baird's Sandpiper. Later that day R. W. J. Smith and I watched the bird for a further 30 minutes. We noted further a dark line from the bill through the eye and a pale buffish-white stripe above and behind the eye, a definite scaly pattern on the back (as on a Ruff) and its neat, round head and more obvious neck when alert. When flying with a party of ten Dunlin it was readily picked out by its longer wings, more bouncy flight and the absence of a wing-bar.

Description A pale wader, size of the smallest Dunlin, but slimmer, with lightly streaked sandy-buff head, back and breast. Buffish-white stripe above eye, meeting in thin V on forehead, but thicker and more noticeable behind eye; dark brown stripe from the base of bill through eye and dropping downwards behind eye. Throat and underparts except breast clean white, neatly separated from brown breast. Dark brown centre of tail with outer feathers a paler brown. Wings scaly

due to dark brown centres and buff edges of feathers; wingtips darker than mantle; no wing-bar. Thin black bill same length as head and straight, with hint of downward curve at tip; black legs. Call : a double or treble *trik* or *kreet*.

The bird was observed by G. L. Sandeman and A. Brown on the 16th, and was last seen by myself, D. Moss and Mrs E. M. Smith on the 17th. All agreed it was a Baird's Sandpiper.

L. L. J. VICK.

(Although there were over 50 records for the British Isles by 1974, most of them in recent years and also in September, this was only the third for Scotland, both the others being from the Outer Hebrides: St Kilda in 1911 and North Uist in 1971. The species breeds from north-east Siberia across arctic America to north-west Greenland, and normally winters in South America.—ED.)

White-winged Black Tern at Fair Isle

At 13.45 on 10th June 1973 I was sitting finishing lunch at the Observatory when I noticed a small-medium sized tern fly over Landberg and towards the Observatory. It veered away towards the Havens, over which it circled a few times before returning briefly to the flat ground some 50 yards in front of the Observatory. It finally circled back to the Havens, then flew up and south along the grassy ridge of Buness before being lost to sight as it flew south towards the Sheep Rock over the sea. It was seen by most people at the Observatory who were eating lunch together (including N. Riddiford and J. W. F. Davis). I identified the bird as a White-winged Black Tern, with which the other observers agreed. It was a small-medium sized, fairly compact tern with a shallowly forked tail that lacked the streamers of Common or Arctic Terns; the wings were not particularly elongated. The flight was buoyant, low over the ground and sea. Over the land it dipped occasionally, almost to touch the ground—typical of a marsh tern. During the time we were able to watch the bird it spent about 60% of its time over the short-cropped turf.

Description Plumage very distinctive: as far as could be seen the whole of the body, head and mantle were black, contrasting strongly with the fore-wing, which appeared to be almost white, and with the rump and tail, which were also whitish. As it flew past the Observatory window on both occasions RAB, NR and JWFD noted that the under wing-coverts appeared to be as black as the body. The underside of the flight feathers were greyish white, much paler than the coverts. The forewing was the palest part of the upper wing surface, the rest of the wings being a greyer white. It was impossible to make out the bill or leg colour at this range.

When the bird disappeared from view to the south, I took the car and tried to relocate it elsewhere. This I failed to do but it had been seen again by Brian Wilson. He reported a "striking tern with a black body and white wings" that had just flown over his head near the shop. It had come from the direction of Sheep Rock and disappeared towards the Reevas.

R. A. BROAD.

(There were only nine Scottish records prior to this, all since 1964 and mostly in the north in midsummer. The eleventh occurrence, and first in autumn, was at the Ythan estuary, Aberdeenshire, in the following September. As many as 268 or so had been recorded in the British Isles by 1973, about 20 a year being the recent average, the majority in early autumn near the south and east coasts of England. In the west of its range it breeds in south-eastern Europe, very sporadically in western Europe, and winters in tropical Africa.—ED.)

Probable Siberian Chiffchaffs wintering in Morayshire

The increasing incidence of wintering summer visitors in Britain has recently been commented upon (Marchant 1975). One of the commoner species involved has been the Chiffchaff *Phylloscopus collybita*. Records for December, January and February published in *Scottish Birds* amounted to four in the eight winters from 1963/64 to 1970/71 (3: 150, 322; 6: 118) but during the next three winters there were at least 12 records of 14 birds from Dumfries to Shetland (7: 154, 376; 8: 269, 457).

The origin of these Scottish wintering birds is unknown. As well as the British and west European subspecies *collybita*, they may include some Scandinavian *abietinus* and Siberian *tristis* and *fulvescens*, although the latter is considered a poorly defined race (Williamson 1967). These Northern Chiffchaffs are regularly recorded in small numbers in late autumn on Fair Isle and the Isle of May and on some occasions are thought to winter in England (British Ornithologists' Union 1971). It may therefore be of interest to place on record some notes of Chiffchaffs present at Elgin, Morayshire, during the winter of 1974/75.

Two Chiffchaffs were present in the vicinity of the Elgin sewage disposal works from January to April 1975. They were first observed on 16th January but were probably in the area prior to this as regular visits to the site were only begun in early January. In the field the plumage appeared to be dull grey-brown. On 1st February I trapped one in a mist-net and in the hand it resembled the Siberian race *tristis*. On 23rd

February I trapped the second bird, which was identical to the description given by Williamson (1967) of *tristis*, with no yellow except on the bend of the wing and on the axillaries. The first bird was retrapped on 9th March. On 30th March both were retrapped together and were found to be moulting head, body and tail feathers, the last rather irregularly. No significant weight increase was noted at this late date to suggest the proximity of a lengthy migration. The only subsequent sighting was of one bird on 6th April.

A prenuptial moult of body and central tail feathers is normal in Chiffchaffs. According to C. B. Ticehurst (*The Genus Phylloscopus*, 1938), *collybita* usually moults in January (extremes 27th December-23rd February), *abietinus* from January to mid February and *tristis* from mid February to the end of March. Thus the Elgin birds apparently also resembled *tristis* in the timing of their moult. However, in *The Handbook* vol. 2, published almost simultaneously, the moult periods for all races are combined as January to February, occasionally March to early April, and later authors agree with this. C. B. Ticehurst was the brother of N. F. Ticehurst, the co-author of *The Handbook*, and his work is acknowledged in the Preface to vol. 2 by H. F. Witherby, who also compiled the *Handbook* notes on Chiffchaff moult : "Dr C. B. Ticehurst, who has for long been making a special study of the difficult genus *Phylloscopus*, and whose work on the subject is now in the press, has generously given us the benefit of his findings on many points concerning those species of the genus which are on the British list." H. B. Ginn of the BTO kindly examined the Trust's moult cards and sent the following information. Only three *tristis* were identified: all moulting the tail irregularly in March and two in body or head moult; one from Nepal, one from India and the other unknown. Four unspecified Chiffchaffs, all from England, including one that had wintered, were moulting the tail irregularly in March or April, with one moulting tertials. Thirteen unspecified from Coto Donana, Spain, in February and March showed moult in different combinations—tertials, tail and body. Thus it is not clear why the descriptions of moult of Chiffchaff subspecies should differ in the standard works, and the BTO moult data are still inconclusive on this question.

Both birds called readily during the period of observation. The usual call was unlike the familiar *hweet* of *collybita*, being a harsh *cheeip*. *Abietinus* is said to utter this call (Williamson 1967) and R. H. Dennis informs me that Northern Chiffchaffs on passage on Fair Isle have a similar distinctive note. I also recognised it as resembling calls of pale passage migrants at Gibraltar, which were tentatively identified as *abietinus* at

the time. The calls of the northern races may well be diagnostic, as Witherby *et al* (1938) suggest. A weaker *seep* was also heard from both birds on release after trapping.

The Chiffchaffs frequented a very mixed habitat, feeding readily on the sludge-drying beds and filter beds of the sewage works, in a nearby wood of mature Larch and Scots Pine and at the ringing site itself, a steep disused railway embankment with dense stands of tall dead flower stalks of Weld. Sewage works do not easily freeze in winter and provide an abundance of food for many species, in this case flocks of Pied and Grey Wagtails, Meadow Pipits, Chaffinches and Reed Buntings. As with most subspecies, identification cannot be made with certainty, but this record may throw some light on the possible origin of our wintering Chiffchaffs. Future observers would do well to pay particular attention to voice and plumage details, although close observation in the field is often difficult.

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N. ELKINS

Reviews

Discovering Bird Song. By Edward A. Armstrong. Princes Risborough, Shire Publications, 1975. Pp. 72; 15 photographs; 30 drawings and sonagrams. 18 x 11½ cm. 50 pence.

Born to Sing. By Charles Hartshorne. Bloomington, Indiana University Press, 1973. Pp. 304; 15 tables; 9 figures; 7 staff notations of songs, 5 spectrograms. 24 x 16 cm. $10.00.

The study of bird song has excited ever-increasing interest over the last few decades, and over that period it has risen from inexact, largely anthropomorphic, description to a many-faceted, exact, if still incomplete, science. Within this science, *Discovering Bird Song* and *Born to Sing* make important, albeit differing, contributions; one as an excellent concise introduction to the nature and function of sounds in the life of birds, and the other as a scholarly treatise exploring the hypothesis that birds take an aesthetic interest in song; that the bird takes pleasure in singing.

In *Discovering Bird Song*, Edward Armstrong, an acknowledged authority on the subject, begins with some useful advice on enjoying bird song. He continues by describing bird language, describing the various types of calls uttered, and the situations in which they are employed.

The text is well illustrated by sonagrams, some original, some reproduced from published sources. The standard of reproduction is excellent. Armstrong continues by discussing territorial song, courtship and nesting song, vocal communication between parents and offspring, how birds acquire their songs, interactions of song and the environment, and finally some helpful advice on the study of bird song, emphasizing the value of keeping notes on the relationship between a bird's utterances and its behaviour. Brief mention is made of the use of portable tape-recorders in studying bird song. A brief but useful list of sources of recordings of bird songs is given. The bibliography is scanty, referring to only five publications. However, these represent the nucleus of literature on bird song, and, as Armstrong says, provide references to most of the literature on the subject. The index is good.

There is little that can be said to fault this excellent little book, particularly considering its exceptionally modest price. Sonagrams 3a and 3b, illustrating drumming in Lesser Spotted and Great Spotted Woodpeckers, are reproduced at differing scales, which detract somewhat from comparison. Nothing is said concerning the vocal mechanism of birds—the involvement of the syrinx rather than the larynx in sound production—but the book is concerned with the nature and function of the sounds themselves rather than with the means of their generation. Mr Armstrong rightly points out that there is still much to be learnt about bird song. His book should do much to encourage interest in that direction.

Born to Sing, sub-titled *An Interpretation and World Survey of Bird Song*, is written by a distinguished professional philosopher-aesthetician who has spent many years studying bird song in the field, travelling widely in five continents. Professor Hartshorne uses his observational data to support the thesis that to some degree birds take an aesthetic interest in their songs. Certainly his observations indicate that the functional attributes of song do not preclude the possibility of the bird deriving pleasure from singing. Hartshorne begins with a chapter entitled "The aesthetic analogy as scientific hypothesis", in which he considers the analogy between bird song and human music. He then goes on to consider "Animal music in general", including animals as diverse as insects and mammals. The third chapter compares bird song with human music, and shows that to a large extent bird songs resemble human music both in the sound patterns and in the behaviour setting. Chapter 4 considers imitative chatter and singing, and is followed by a chapter discussing methods of describing songs. In chapter 6 Hartshorne suggests how some aspect of song may be quantified, and proposes a 6-dimensional method of measuring song-development by assessing loudness, scope (complexity), continuity, tone, organization, and imitativeness. Chapter 7 discusses the monotony-threshold, and Hartshorne's anti-monotony principle, suggesting that the evolution of song has been towards increasing sensitivity to the value of contrast and unexpectedness. In Chapter 8, the relationship between song-development and amount of singing is considered, showing that the quality of song and the amount of singing are positively correlated. Chapters 9-11 discuss "Well-equipped singers", "Highly-developed or superior songs" and "Less well-equipped singers". The final chapter summarizes Hartshorne's findings and poses questions. There follows a series of appendices quantifying song quality in a large number of species according to Hartshorne's method; some staff notations of songs; some sound spectrograms, unfortunately of poor quality and lacking scales; a useful glossary; a comprehensive bibliography, and indices of species, persons and topics. Each chapter is ended by a concise summary, and at the end of chapter 6 there is a preview of later chapters.

Of necessity, much of Hartshorne's book is speculative, perhaps too

much so for some ethologists. Chapter 11 betrays a certain lack of familiarity with the detailed structure of the vocal organs in non-passerine birds, inasmuch as Hartshorne seems to overlook their often markedly different syringeal structure from the passerine pattern, especially in such groups as ducks, pigeons and parrots. This does not, however, detract from Hartshorne's conclusions, and is excusable insofar as vocal anatomy is still a little-studied branch of avian science.

Hartshorne's *Born to Sing* is a valuable addition to the literature on bird song. Clearly written and well-produced, it forms, as the author says in the preface, a valuable complement to Thorpe's *Bird Song* and Armstrong's *A Siudy of Bird Song.*

ROBERT W. WARNER

Pine Crossbills. By Desmond Nethersole-Thompson. Berkhamsted, T. & A. D. Poyser Ltd. 1975. Pp. 256; 1 colour plate, 16 black-and-white photographs; numerous black-and-white drawings; sound spectrograms and distribution maps. 24 x 16 cm. £5.00.

Pine Crossbills is the vernacular name adopted by Desmond Nethersole-Thompson for the Parrot Crossbill of Europe which he brackets as conspecific with the Scottish Crossbill. He is not the first to have done this (e.g. Hartert *Erganzungsbund* 68-69). There are morphological similarities, and the preferred habitat of both is Pine forest *Pinus sylvestris*, but this author goes further. Following a reasonable hypothesis that the Pine Crossbill of Europe evolved from the Scottish Crossbill rather than vice versa, Nethersole-Thompson "would re-designate the Scottish Crossbill *Loxia pinicola pinicola* and tentatively place the European Pine Crossbill . . . as *Loxia pinicola pityopsittacus*".

This is not the final word however—and indeed there may be no final word—as both Salomonsen and Alan Knox regard the Scottish Crossbill as a monotypic species *Loxia scotica.* The latter, from his study of crossbills at Aberdeen University Department of Natural History, contributes a chapter on crossbill taxonomy in which there is a detailed account of the taxonomic history of the Scottish Crossbill. Further to all this, Nethersole-Thompson correlates his arguments with the geographical history of European coniferous woodland. Some birdwatchers may consider this sort of material dull and of no consequence, but any serious student of the history of Scottish birds cannot fail to be interested by these detailed discussions of a very Scottish bird—perhaps the only one now that *Lagopus scoticus* has succumbed to a take-over bid by *Lagopus lagopus* !

Nethersole-Thompson is a field ornithologist *par excellence* and writes with an enthusiasm which has not diminished with the passage of the years. He began watching crossbills in the Brecklands of Norfolk over forty years ago when his associates were mainly egg collectors—colourful characters whose exploits and idiosyncracies he portrays with obvious delight—though none of these could hold a candle to William Stirling of Fairburn, Ross-shire (grandfather of the present laird) who, between 1900 and 1907, supervised the finding of no less than 91 crossbills' nests on his estate, and shared out the spoils to such guests as F. C. Selous, Norman Gilroy, George Lodge and Edgar Chance. There is less personal reminiscence in this volume, which is probably a good thing, and although the writer's predilection for purple passages appears to be waning he can still produce a few beauties on occasion.

Throughout, Nethersole-Thompson combines his own notes and personal experiences of crossbills with those of other workers, including a considerable amount of Russian material, to produce a remarkably comprehensive account of crossbill biology and relationships. This naturally

varies in quality but one chapter of outstanding content and interest is on "Food", quoting at length Pullianen's work on nutrition of crossbills in Lapland where it is shown that the nutritional value of Spruce seeds varies not only from year to year but also from place to place in a north-south direction: a crossbill in Lapland has to work harder than one further south to achieve the same nutritional status, thus the habitat is a marginal one even in good years. Elsewhere, poor seed years influence numbers of non-breeders, failed breeders and emigrants, but *quantity* of seed alone is not an adequate criterion for assessment as the actual chemical composition varies annually and regionally. It is assumed that the Scottish Pine Crossbill numbers and movements are similarly influenced but no work has been done in Scotland comparable with Pullianen's in Finland.

Scottish readers, especially those who have the opportunity of visiting Pine forests, will naturally be attracted by the chapter on "Distribution"—of Pine and Common Crossbills in Scotland—and undoubtedly interest will be stimulated to help work out the true picture which even now is incomplete and obscure.

The illustrations deserve a special word of praise and appreciation. As a reviewer I have commented elsewhere on Donald Watson's talent as a black-and-white artist: how sensible of author and publisher to ask Donald Watson to produce the utterly delightful and life-like drawings for this book. The photographs are a magnificent selection and in particular illustrate beautifully the differences in bill structure between crossbill species.

In the reviewer's opinion this is Nethersole-Thompson's best monograph yet and can be thoroughly recommended to all interested in crossbills, Pine forests or Scottish birds in general.

IAN D. PENNIE.

All Heaven in a Rage: a Study of Importation of Wild Birds into the United Kingdom. By T. P. Inskipp. Sandy, The Royal Society for the Protection of Birds, 1975. Pp 40; 10 photographs; 30 tables; 6 figures. 21 x 30 cm. 85p.

In 1972 the Royal Society for the Protection of Birds decided to investigate the importation of wild birds into Britain. Few facts were available, so T. P. Inskipp was appointed investigator and he concentrated his efforts at Heathrow Airport, the main import point in Britain. The RSPCA maintains a hostel at the airport where birds in transit receive attention, so this was a natural focus for inquiry. This excellent report is the result of two years patient detective work. Its conclusions will be a revelation to ornithologists who think of aviculture in terms of Budgerigars and Canaries.

Britain is a major importer of wild birds captured abroad by liming and other barbarous methods banned in this country. These are then transported by air in cramped and cruel conditions. Every year 600,000 wild birds are imported into Britain and half a million more pass through in transit. These figures are conservative estimates, no reliable statistics are kept. The world trade is estimated as at least five million, and no one knows how many birds have to die in the hands of primitive bird catchers to produce this figure. The main importers of wild birds are the USA, Japan and the EEC states. The main exporters are in southern Asia (especially India), tropical Africa and South America. The pattern is familiar; as with furs and ivory the fauna of the Third World is pillaged to meet the selfish luxury demands of industrial nations. The trade is big business, worth over £1,500,000 retail in Britain per annum, and major airlines find it a lucrative freight.

Rare species are imported regularly. To name but a few, Spoonbills, Black Storks, Andean Condors, one Siberian Crane, crowned pigeons, birds of paradise, Rothschild's Mynah and many endangered parrots were all recorded in the study period. Rare species have a high market value, and are usually cared for in transit.

However, overcrowding and ill-treatment is the rule of the day for most ordinary species and this leads to high mortality. The report instances many cases of downright cruelty : falcons' eyelids sewn up with string, swans stuffed into boxes without food or drink, seven hundred manakins packed into a box designed to take one hundred. Nectar eaters like hummingbirds suffer terribly and it is common for one bird in three to be dead on arrival at Heathrow. Whole consignments can perish en route. Even the seed eaters suffer a 3% mortality rate, and further deaths occur along the distribution network.

Australia, Indonesia and other countries prohibit the export of their rare birds. These are then smuggled into Britain. Once the customs have been evaded it is then legal to advertise and sell the bird in Britain ! A pair of Golden-shouldered Parrots, brought illegally out of Queensland to London were worth £4,500 to the smuggler. The licensing system for importing birds of prey is abused on a wide scale and dealers to the falconry trade made a mockery of the regulations by various subterfuges. If unlicensed birds should be seized by the customs, it is usual for them to be sold like any other confiscated article ! They can then be bought by dealers which defeats the object of the restriction.

The RSPB is to be congratulated on this study and this concise, factual report will remain a classic in this field for many years. At 85p it is excellent value and deserves a place on every bird-lovers' bookshelf. It is eminently suitable for public libraries and school teachers should find it valuable for projects. The report makes simple recommendations about packaging, licences, etc., which would greatly improve conditions in this dubious trade.

R. A. EADES.

Scottish Ornithologists' Club

ANNUAL CONFERENCE

The 29th Annual Conference will be held in the University of Stirling from 28th-30th January 1977. The theme for the Saturday morning will be on birds of prey, with particular reference to Scotland, and with talks given by several speakers. On the Sunday morning before the interval, three short talks will be given on different aspects of current ornithological research in Scotland.

Full details of the programme, together with the conference booking form, will be sent to all members with the winter number of the journal early in December.

BRANCH AND GROUP SECRETARIES

Members are asked to note the following new Branch and Group Secretaries :

AYR Mr J. Miller, 7 Kirkhill Crescent, Prestwick, Ayrshire (tel. 0292 78835).

STIRLING Mr A. B. Mitchell, 7 Gladstone Place, Stirling FK8 2NN (tel. 0786 4383).

WIGTOWN Mr G. Shepherd, Bay House Restaurant, Cairnryan Road, Stranraer, Wigtownshire (tel. 0776 3789).

WINTER EXCURSIONS

AYR BRANCH

Saturday 9th October 1976 MARTNAHAM LOCH (by kind permission of Colonel Bryce M. Knox). Meet Wellington Square, Ayr, 1.30 p.m. or Marnaham Lodge Gates 2.00 p.m. Leader, R. Hissett.

Saturday 13th November CAERLAVEROCK, WILDFOWL TRUST. Meet Wellington Square 9.00 a.m. Coach. Bookings with fare (£3) and s.a.e. for confirmation of booking to Leader, J. K. R. Melrose, The Shieling, Arran View, Dunure, Ayr (tel. Dunure 215) **by Saturday 30th Oct.** Bring picnic lunch.

Saturday 11th December DOONFOOT. Meet 1.30 p.m. at car park at Doonfoot. Leader, W. R. Brackenridge.

Sunday 9th January 1977 LOCH RYAN & CORSEWALL POINT. Meet Wellington Square 9.00 a.m. Leader, J. Miller. Bring picnic lunch.

Sunday 6th February DIPPLE SHORE, NEAR GIRVAN. Meet Wellington Square 1.00 p.m. or Dipple lay-by on A77 near Alginate factory at 1.30 p.m. Leader, R. H. Hogg.

Sunday 6th March LOCH KEN. Meet Wellington Square 9.30 a.m. Leader, M. E. Castle. Bring picnic lunch.

Note: All excursions, except November, will be in private cars. Further details from J. Miller, 7 Kirkhill Crescent, Prestwick (tel. Prestwick 78835). Send s.a.e. if writing.

DUNDEE BRANCH

Sunday 24th October 1976 LINTRATHEN, BACKWATER & KINNORDIE. Leader, B. Pounder.

Saturday 20th November MONTROSE AREA. Leader, N. K. Atkinson.

Sunday 12th December TENTSMUIR & TAYFIELD. Leader, D. B. Thomson.

Saturday 8th January 1977 PITCUR WOODS. Leader, J. E. Forrest.

Sunday 27th February ST ANDREWS & LEVEN. Leader, Mrs J. A. R. Grant.

Saturday 26th March ROHALLION. Leader, P. N. J. Clark.

Sunday 24th April TROSSACHS. Leader, P. N. J. Clark. Coach outing; full details from the Branch Secretary.

All excursions, except 24th April, are by private car and start at 10 a.m. from City Square, Dundee on Sundays and from Dudhope car park, Dundee on Saturdays.

For details of the coach outing on 24th April, and further information about the other excursions, contact the Branch Secretary, Mrs A. Noltie, 14 Menteith Street, Broughty Ferry, Dundee DD5 3EN (tel. 0382 75074); **please send s.a.e. if writing.**

INVERNESS BRANCH

Sunday 3rd October 1976 LOCH OF STRATHBEG. Meet South Kessock Ferry at 8.00 a.m. (Lunch and tea). Leader Jim Dunbar.

Sunday 21st November BURGHEAD AND SPEY BAY. Meet South Kessock Ferry at 9.00 a.m. (Lunch and tea). Leader Malcolm Harvey.

Saturday 12th February 1977 CAIRNGORMS AND LOCH GARTEN. Meet South Kessock Ferry at 9.00 a.m. (Lunch and tea). Leader Roy Dennis.

Names to and further information from Mrs J. Morrison, 83 Dochfour Drive, Inverness IV1 5ED (tel. Inverness 32666). Please send s.a.e. if writing.

BRANCH & GROUP NEWS

Dumfries

To the Ladies' Committee especially, for their planning and hard work, and to members and friends for their support, congratulations are offered for making the Branch coffee morning such a notable success. Thus, in raising the handsome sum of £202 the Branch won by a distance the Dry Rot Appeal Stakes!

The summer excursions, graced, as seems usual nowadays, by blue skies and light winds, were happy and, we are assured, helpful occasions. To Major and Mrs Johnson-Ferguson and to Mr and Mrs John Gladstone, into whose homes participating members were invited on two of the outings, the Committee's thanks must be recorded.

Moving back to February, the annual wildfowl watching weekend, in which some three dozen visiting members joined the local people, was considered as enjoyable as ever. Once again on the Saturday evening the Branch's brilliant photographers delighted a packed audience in the County Hotel's Prince Charlie's Room with a quite outstanding colour transparency programme.

Whilst on the subject of the wildfowl weekend, now may be a suitable opportunity to remind members that the months of February and March are not necessarily the best times for seeing Caerlaverock's famous Barnacle Goose flock at its optimum number. In fact, from October to December, visitors are much more likely to see, often at close quarters, the entire 5,000 plus assembly of these fine geese. Which, of course, is not to say that such a number may not also be present later in the winter, but close viewing of a great mass of Barnacles is a surer prospect earlier than later in the season. On the other hand, March and April are undoubtedly the best months for watching at close range the Pink-footed Geese of the Caerlaverock area. The birds, freed from the disturbances of the shooting season, flock in huge numbers on the merses and grassy fields at Glencaple on the Nith estuary and throughout Caerlaverock and the neighbouring parishes. So, for the wild-goose watcher two visits to the Solway region, one in November and one in March may be the answer.

WILLIAM AUSTIN

Glasgow

For one reason—and another—our April meeting never materialized. Firstly Brian Sage the lecturer could not come on the appointed date and we decided to hold yet another members' night programme. Frantic phone calls to the loyal few, counting on their unfailing good natured co-operation, ensured an evening's entertainment. The second blow, however, came in the form of an industrial dispute at the Art Gallery where our meetings are held. There was nothing for it but to write to each of the 300 Glasgow members to tell them the meeting was cancelled. We hadn't realised how many members we had on our list!

Material for our members' nights has always been of a very high standard and unfortunately this seems to deter some members who may only have one or two holiday slides to show. This is a great pity because the audience greatly enjoys the variety this provides.

The branch spring and early summer outings to Inchcailloch, Inversnaid and Bass Rock went off as planned but the boat trip to Ailsa Craig, organized with great good humour and not a little difficulty by David Clugston, went on the rocks at the eleventh hour. David had the unenviable task of phoning the twelve members of the party cancelling the outing. The boatman had called off fearing bad weather the following day. As the Ailsa Craig skipper is also the coxswain of the local lifeboat, his premonition had to be taken seriously. All David's hard work and consequent disappointment, however, was rewarded by a consolation trip to Aberlady Bay where he saw a Lesser Golden Plover and a Surf Scoter.

MURIEL DRAPER

Wildfowl Counts in Scotland

For more than 20 years the task of organising the winter Wildfowl Counts in Scotland was undertaken by a succession of dedicated SOC members; first by Miss Rintoul and Miss Baxter, then by Miss Betty Garden and finally by Miss Valerie Thom. When Miss Thom resigned in 1971, no overall Scottish Organiser could be found to continue the work centrally, and so a number of Regional Organisers were appointed who deal direct with the Wildfowl Trust in Slimbridge. The Club agreed to be responsible for appointing Regional Organisers when necessary in future, and a copy of the counts for all parts of Scotland is maintained in the Club's Reference Library in Edinburgh.

A list of the Regional Organisers is given below, and anyone who is interested in helping with the counts is asked to write to their nearest Organiser.

Shetland P. Kinnear, 2 Mounthooly Street, Lerwick, Shetland ZE1 OBJ

Orkney D. Lea, Easter Sower, Orphir, Orkney, KW17 2RE.

Caithness S. Laybourne, Old Schoolhouse, Harpsdale, Halkirk, Caithness, KW12 6UN.

Sutherland (West) Dr I. D. Pennie, Varkasaig, Scourie, Sutherland.

Moray Firth C. G. Headlam, Dallachie, Fearn, Ross-shire IV20 1TN.

Banffshire, Morayshire, Nairnshire J. Edelsten, 14 South High Street, Banffshire, AB4 2NT.

Aberdeenshire, Kincardineshire Dr R. S. Bailey, Cairnaquheen, Torphins, Aberdeenshire, AB3 4JS.

Angus B. Pounder, 64 Forfar Road, Dundee, Angus.

Perthshire (East) E. D. Cameron, Strathclyde, 14 Union Road, Scone, Perth, PH2 6RZ

Argyllshire Miss M. P. Macmillan, An Fhuaran, Clachan Seil, Argyllshire.

Fife, Kinross-shire Mrs J. A. R. Grant, Brackmont, Crail, Fife.

Clackmannanshire, Perthshire (West), Stirlingshire A. B. Mitchell, 7 Gladstone Place, Stirling FK8 2NN.

Clyde R. A. Jeffrey, 5 Victoria Road, Paisley, Renfrewshire.

Bute J. B. Simpson, Estate Office, Rothesay, Bute.

Lothians R. W. J. Smith, 33 Hunter Terrace, Loanhead, Midlothian.

Ayrshire A. G. Stewart, 31 St Andrews Avenue, Prestwick, Ayrshire, KA9 2DY.

Borders (write to D. Salmon, The Wildfowl Trust, Slimbridge, Gloucester, GL2 7BT).

Dumfriesshire, Kirkcudbrightshire, Wigtownshire R. T. Smith, Applegarthtown, Lockerbie, Dumfriesshire.

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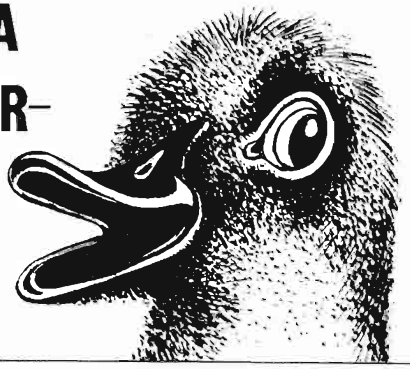

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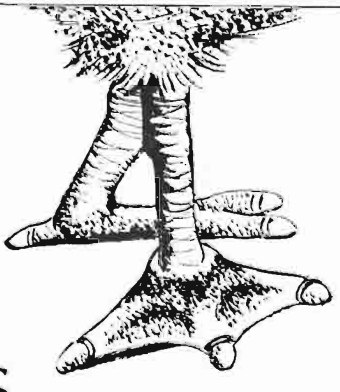

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