

## THE LAPLAND BUNTING 'INVASION' OF 1953

### I. THE MOVEMENTS

The influx of Lapland Buntings (*Calcarius lapponicus*) into the British Isles this autumn seems to have been the largest ever recorded. The Greenland population of this species migrates south-westwards into the United States, but each autumn a few are drifted south-eastwards to Britain (Williamson, *Scottish Naturalist*, 65: 65-94, 1953). Those which have reached Lundy in previous autumns have, perhaps, been derived from this source. Williamson (*loc. cit.*) suggests that the species is peculiarly affected by certain types of weather-system forming in the North Atlantic during the migration season.

Probably the birds susceptible to drift are those following the eastern coasts of Greenland, and making sea crossings over the larger indentations, or from Greenland to Labrador. Such birds might well be drifted out to sea by westerly winds, and continue to move downwind across the ocean—a good illustration of Williamson's (*Scottish Naturalist*, 64: 1-18, 1952) concept of migrational drift.

Conditions favourable to such a movement come with two main types of weather-system. The first is when a high pressure area covers the North Atlantic, the winds running clockwise round its northern and eastern sides, between Greenland and Britain. The second is when a large depression is dominating the eastern half of the ocean, with winds anti-clockwise around its western and southern flanks. Williamson has given drift movements in these two kinds of system, the designations of 'anti-cyclonic approach' and 'cyclonic approach' respectively. The two may in certain conditions be complementary. The cyclonic approach would normally involve a longer sea-crossing than the anti-cyclonic, which is more likely to carry migrants by way of Iceland and the Faeroes to northern Britain.

Both types of approach were admirably illustrated by the main arrivals recorded on Lundy in 1953. The first arrival, which covered the period September 3rd to 5th (seventeen plus on the 5th), was cyclonic. On the 2nd and 3rd, when these birds would be leaving Greenland, a depression was moving across the British Isles to Scandinavia, and winds were between north and west on the fifteen hundred mile route probably followed. This arrival did not affect Fair Isle, which was near the centre of the depression at that time.

The second arrival, which was anti-cyclonic, affected both Fair Isle and Lundy. From the 8th to 11th, with a great 'high' dominating the North Atlantic, winds were north-westerly across Iceland, the Faeroes, and Britain. Numbers peaked at Lundy on the 10th (twenty-three plus).

By the 14th this anti-cyclone had been displaced by a shallow depression moving in from the west, and centred south-west of Iceland. Winds were already north-westerly on the western side of this trough, from South Greenland across much of the ocean, and early on the 15th the westerly winds reached Lundy, bringing the largest influx of Lapland Buntings we have recorded (thirty-three plus). This influx, like the first, does not seem to have reached northern Britain.

A few birds remained on the Island during the following days, but there was another apparent increase on the 26th and 27th (eleven), when conditions were rather similar to those of the 15th. This time the depression was deeper and the winds much stronger. The sea-crossing would probably be rather longer, but covered more rapidly.

The numbers recorded dropped away to a single bird, September 29th to October 1st, but there were six on the 2nd and seven on the 3rd. If these were newcomers they had made the crossing in the complementary airstream between a depression centred north-east of Iceland and an intensifying anti-cyclone centred about 500 miles west of Ireland.

One or two birds were about until the 9th, then none were seen until the 15th. On that day there were three, and these remained until the 17th, with one on the 18th. These birds are most unlikely to have made the crossing from Greenland during the preceding few days, for winds were southerly or easterly over the intervening sea. They may even have been European birds, since there was a big arrival of continental species on the same day, but it is perhaps more likely that they had arrived in Britain earlier and were just moving on.

The November records were also more probably of birds which had been in the British area for some time. One turned up on the 6th, and one, probably, the same, was seen on the 8th. On the 16th there were two, with one still present on the next day.

## II. FIELD NOTES

The birds which frequented the island for some time generally lived up to their reputation for being 'wild'; there were remarkably few opportunities for watching them at leisure. Their camouflage was astonishingly efficient even in short grass, and often the first sign of their presence was the low 'tututucc' call as the bird or flock took wing from almost beneath one's feet. Sometimes they merely ran ahead, with considerable speed, and taking advantage of every scrap of cover available. Once in the air they rose to a fair height and flew for some distance, often circling widely and later returning to the area they had left. They called frequently, usually following the rippling call by a sweet descending whistle, 'teuu', but often giving the two calls quite separately.

They habitually frequented areas of rough grass such as abound on the airfield and in the south-west field, but some were seen on the muddy margins of small pools, and even on close-cropped sward. They seemed to have no particular liking for the expanses of heather, but were occasionally seen among it both near Pondsby and north of Threequarter Wall. On two or three occasions birds were seen to perch for a while on stone walls. This was only when they had been disturbed.

It had been noticed that single birds tended to be more confiding than parties (which always had a particularly nervous bird to alarm the rest!), but it was not until October 2nd, that I located one in a damp part of the south-west field, tame enough to make an attempt to capture it worthwhile. John Cudworth, Martin Pitt and I hastily improvised a row of small portable traps connected by guide-walls, and placed them strategically in the bird's area. The bird remained a few yards away, feeding busily on the seed-heads of *Holcus* grass. A party of five buntings flew up from a marshy patch nearby, and called overhead. Our bird replied with a much-subdued version of the familiar whistle, but did not fly. We walked very slowly behind it, making it run towards the traps, and after several unsuccessful attempts (which involved repeating the procedure all over again) it entered one of them and was caught. When eventually it was released at the Hotel, it returned at once to the place, and was hardly less confiding than before. This was a first winter female.

We then turned our attention to the small party, which had alighted not far away. We came very close to them by crawling through the bog, and found that two were males, easily picked out by the broader, cream superciliary stripes and the rich chestnut on the wing-coverts. One was brighter than the other, and was taken to be an adult. The five may have been a family party.

They were nervous and flew willingly, but seemed to like the place, so the traps were moved, and several hours were passed in trying to catch them. We had no success until the following day, when four were brought into line with the traps, and quietly and slowly worked towards the barrier. The birds ran in short, rapid bursts along narrow sheep-tracks, then sometimes remained motionless or feeding for several minutes. They seemed most unwilling to cross the wider open spaces among the long grass. Often all four were out of our sight as we snaked forward, but at the least disturbance their heads rose above the grass for a survey, frequently prolonged. The noise of an aircraft low overhead, or of a crofter loudly abjuring his horse, half a mile away, caused the deepest consternation to birds and bird-watchers alike! We were, however, fortunate enough to catch the young male, a most attractive bird.

The female weighed 25.1 gms, the male 28.1. If ever a series of 'normal' weights becomes available, it may be possible to decide

whether or not they were recent arrivals at the time of their capture, for the long crossing from Greenland must involve a considerable loss of body weight.

All who watched these birds (and I should mention Dudley Iles, who played a big part in the strenuous daily counts in September) were delighted to have this opportunity to become familiar with a rare and intriguing species.

## ECTOPARASITES

BY GORDON B. THOMPSON

A considerable amount of material was collected from eighteen host species during 1953. Representatives of four groups of ectoparasites are contained in the collection and there is much of interest but this report must necessarily be brief. Peter Davis is to be congratulated for having made such an excellent job of collecting these ectoparasites.

<i>Host</i>	<i>SIPHONAPTERA (Fleas)</i> <i>Dasypsyllus g. gallinulae</i> (Dale) <i>Nos and Sex</i>	<i>Date</i>
Garden Warbler—ad	1 female	9/5/53
Willow Warbler—ad	1 female	2/5/53
Grasshopper Warbler—ad	1 male	6/5/53
Grasshopper Warbler—ad	4 males	24/4/53
Grasshopper Warbler—ad	1 female	21/4/53
Grasshopper Warbler—ad	1 male	6/5/53
Sedge Warbler—ad	1 male	23/4/53
Sedge Warbler—ad	1 female	9/5/53
Sedge Warbler—ad	1 male	24/4/53
Whitethroat—ad male	1 female	3/5/53
Whitethroat—ad female	1 male	3/5/53
Wren—ad	1 male	24/4/53

All the fleas listed above were collected from the birds' bodies by the chloroform-bath method and were obtained from spring migrants with the exception of the one specimen from a resident Wren. Unfortunately, an exact record of the number of birds examined by the chloroform-bath method was not kept until July, but Peter Davis estimates that approximately 220 birds were examined in all and these were mostly small passerines. Since July eighty-six were examined but no fleas were found. On the basis of the approximate total, fleas were obtained from 8.95 per cent of the birds prior to July and the fifteen fleas were all collected during the period April 21st to May 9th. It is not known whether