

Migratory Movements of Dunlin *Calidris Alpina* found on the Shannon Estuary

By Roger Forster & Philip Brennan



Dunlin © John N Murphy

The Shannon Wader Ringing Group (SWRG) actively trapped and ringed Dunlin on the Shannon Estuary from 1974 to 1990. The main netting sites were in the vicinity of Green Island and on the shores of Shannon Town and Airport. Bunaclugga Bay was used a few times.

Approximately 4,133 birds were handled, resulting in 83 reports abroad (recoveries). Most of the birds were mist netted at night on rising tides.

Three races of Dunlin were encountered.

1. *Calidris Alpina Schinzii*, which ranges from southeast Greenland, Iceland across the British Isles into the Netherlands and throughout the northern Baltic in southern Fenno Scandinavia.

2. *Calidris A. Alpina*, were commonest. Their normal range is across northern Scandinavia, east to north-west Russia.

3. *Calidris A. Arctica*, in the minority. Found mainly in north west Greenland and a migrant to the west Palaearctic.

The Green is the breeding range for races of Dunlin mentioned in the text.



Range Map © Ferns & Green 1979

Maps 1-3 show the migration pattern of Dunlin to European breeding grounds in spring and their return in autumn.

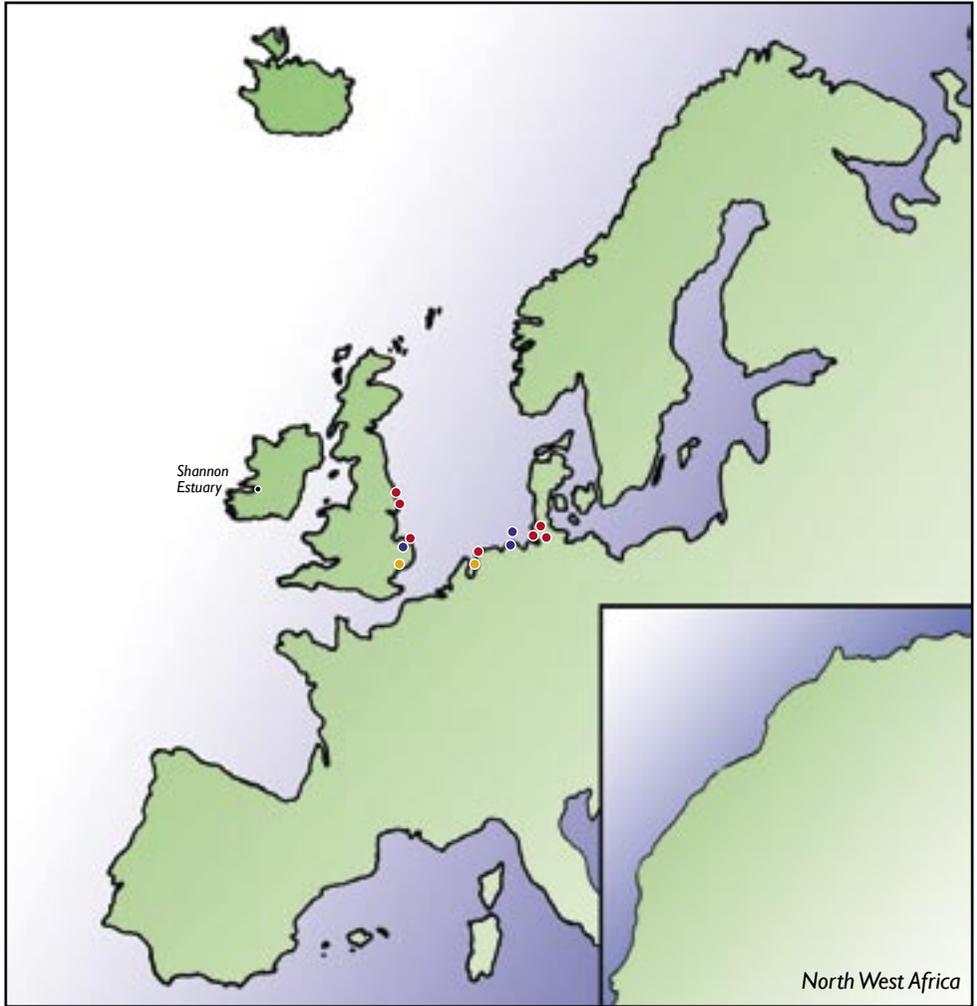
Virtually all these birds were netted on the Shannon sites in winter. Of the 68 birds in question, only three were present on the Shannon in early autumn (one in August and two in September).

Map 4 of this article shows the pattern of movements of Dunlin originating in Greenland and Iceland. These birds were netted on the Shannon in autumn and during their short stop-over in April and May.

MAP 1 (March to May)

By mid to late March, Shannon-wintering Dunlin have left the estuary, with some already in the North Sea by that month, with one bird as far as the Weser estuary in Germany in early April.

As there are no June recoveries, when birds are on the nest, it is clear that they make the jump from the North Sea directly to the breeding grounds.



Map 1 © Philip Brennan

Dunlin ringed or controlled on the Shannon Estuary in late autumn or winter and found elsewhere in Europe in spring. Numbers indicate month found abroad.

Yellow = March Blue = April Red = May

Map 2 (July to August)

One bird was back at the Wash on the east coast of England by July 2nd, but most arrive there from mid-July, with the greatest concentration there in August. Only two of these birds were juveniles, the experienced adults normally outstripping the young birds in the movement west. All the birds caught on the Baltic and North Sea coasts at this time were adults. Both *Calidris A. Schinzii* and *Calidris A. Alpina* birds were mixed up in this movement, and though it might be reasonable to assume that many would be the more southerly schinzzis, an Alpina was recorded as far west as Schleswig-Holstein in Germany as early as the 8th August. The Norwegian birds were all juveniles, presumably still close to the breeding grounds.



Map 2 © Philip Brennan

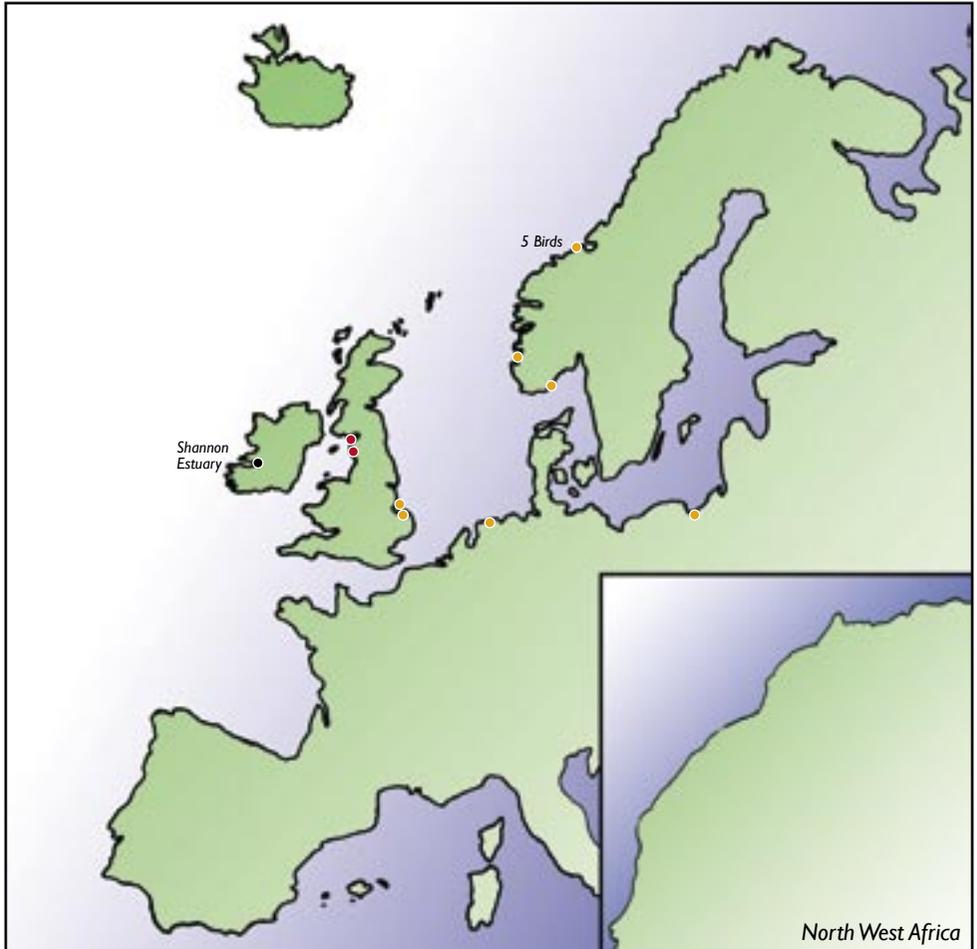
Dunlin ringed or controlled on the Shannon Estuary in late Autumn/Winter and found elsewhere in July and August. **Red** = July **Yellow** = August.

MAP 3 (September to October)

Of the thirteen birds recorded on this map, only three were adults. These were relatively close to the wintering area with singles on the Wash, west Scotland and the furthest away in the Netherlands.

The bulk of Baltic birds had by now moved west, leaving juveniles in Norway and Poland. Most of the Norwegian records were presumably the larger, Arctic-bred *Calidris.A.Alpina*, latest to be born.

Given that the July/August recoveries were overwhelmingly dominated by adult birds, it is clear that though the juveniles move westwards later than the adults, their movement is very swift when it happens-not a single Shannon-bound juvenile was trapped in the Baltic.

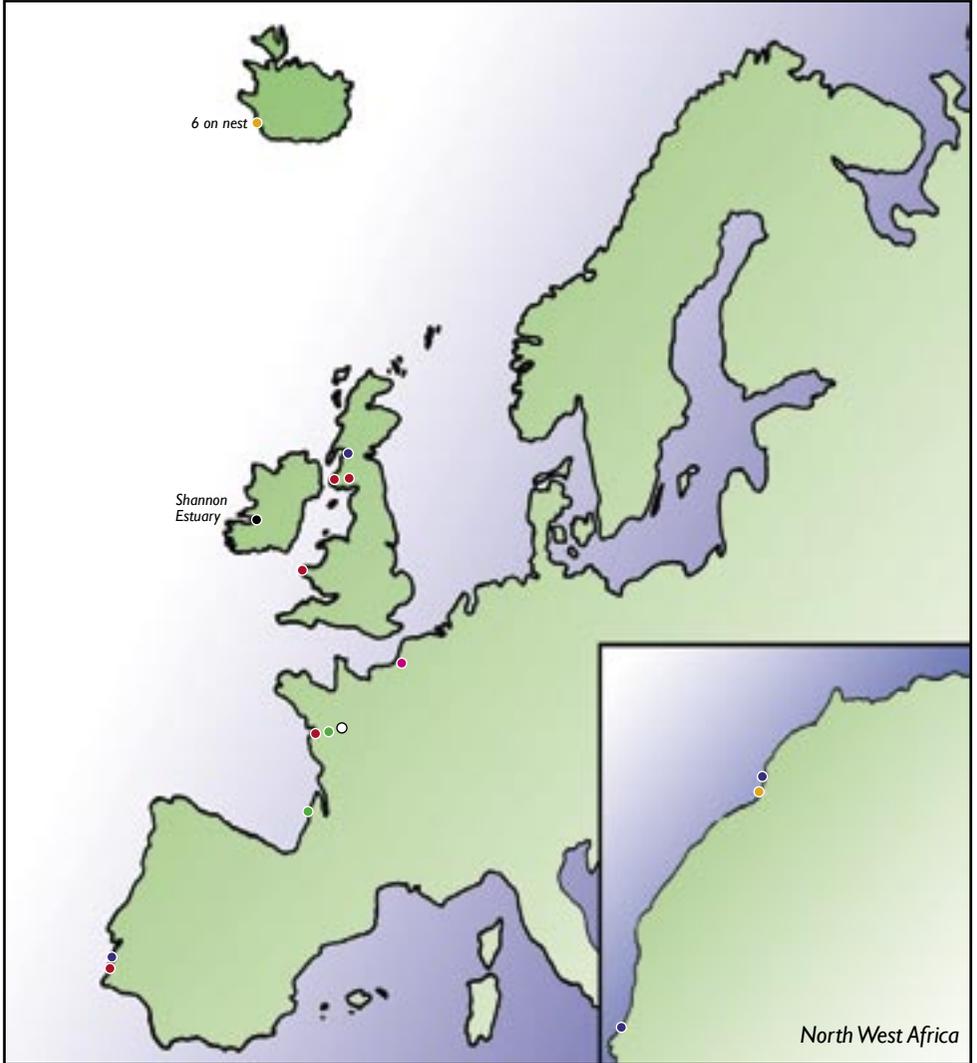


Map 3 © Philip Brennan

Dunlin ringed or controlled on the Shannon Estuary in late Autumn/Winter and found elsewhere in September and October. **Yellow** = September **Red** = October.

MAP 4

This map covers the movement of Greenland and Icelandic Dunlin. These are mainly of the race *Calidris A. Schinzii*, with a minority of the smallest race, *Calidris A. Arctica* of north-east Greenland.



Map 4 © Philip Brennan

Colour spots indicate months of capture or finding abroad.

- Blue = April
- Red = May
- Yellow = June
- Purple = July
- Green = August
- Orange = September
- White = Unsure of date

Autumn Passage

Most of these birds were caught in the autumn on their way south to their West African wintering grounds. Early arrivals in July are predominately adults; by August, most are juveniles. Dunlin caught as juveniles are usually further along their journey in subsequent autumns. An example of this is a bird ringed in Shannon in late September but was present on the Somme estuary in France as early as mid-July some years later.

As the autumn progresses, European birds arrive and mix with the Icelandic and Greenland birds. Only a full analysis of biometrics may show how long the latter remain in the estuary before heading south. The latest ringing date of southbound Dunlin (recovered in France) was 8th October. However, the early October catches show the presence of small birds, some definitely *Calidris A. Arctica*.



Dunlin © John N Murphy

Spring Passage

From early March to mid-April there are virtually no Dunlin on the Shannon Estuary, the European winterers having moved off towards their breeding areas. From mid-April they are replaced by breeding-plumaged birds, that have moved up from Africa. This northward movement is swift as is shown by birds that were recovered strung out between Mauritania, Morocco and Portugal in April but had moved through the Shannon by early June. One was recorded on the nest in Iceland on 14th June. The SWRG had least success with sampling the spring passage, but those successful catches were rewarding as useful biometrics as well as the race and sex of the birds was obtained. Though the sample is small, it is clear that the more northerly Greenland *Calidris A. Alpina* are late to come through the Shannon in spring. They represented only 7% of those caught in early May but had risen to 26% by mid-May. The Shannon Wader Ringing Group was set up in 1974 by Roger Forster and continued from

1980 by Philip Brennan. As the number of local bird ringers was always small, visiting ringers and helpers played an important part in the group's work. Thanks to Kieran O'Brien, Barry O' Mahony, Pat Smiddy, the late Ewart Jones, Tony Mee, Tom Tarpey, Bernard Creegan, Ian Halliday, Mark Fellowes, Phillip Buckley and John Murphy. Thanks to Aer Rianta, Shannon, for help in buying equipment.



Dunlins © John N Murphy