# Spring Migration (1953) in the Faeroe Islands.

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## Introduction.

When I re-visited Faeroe for a month's stay between May 8th and June 5th 1953 I hoped to observe what I could of the spring migration and discover if any correlation were possible between events there and at Fair Isle, where observations were being maintained in my absence by JAMES A. STOUT and visitors to the Bird Observatory. Fair Isle, which lies midway between Orkney and Shetland, is 250 miles (400 km.) southeast of the Faeroe Islands. If a coincidence in the bird-movements could be shown, and studied in relation to the meteorological conditions at the time, then it might provide evidence for the view that occurrences of Continental species in these distant islands are explicable on the theory of a down-wind drift.

That much of the Faeroe passage-migration-at least of Continental passerines—is due to drift off their normal course by easterly and south-easterly winds was pointed out by SALOMONSEN (1935). This concept of passage-migration, which began with the work of RINTOUL & BAXTER (1918), and was for a long time strangely neglected, has become routine investigation at the Fair Isle Bird Observatory in recent years. The present author has considered it in relation to the synoptical situations involved, both in regard to Continental immigrants of a wide variety of species, and Greenland-Iceland birds ranging in size from buntings to geese (WILLIAMSON 1952, 1953). Although this thesis, that the bulk of passagemigration through Britain and the northeast Atlantic area is due to drift, is now accepted by most workers, there are differences of opinion as to the exact modus operandi of the phenomenon. My own view is that such drift is always downwind, whereas others hold that the new course is a resultant between the velocity of the wind and the bird's pre-orientated flight. Which of these views is correct can only be resolved ultimately by the collection and study of a long series of

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observations, embracing a wide variety of meteorological situations; and the following analysis of part of the spring passage at Faeroe and Fair Isle in 1953 is made as a contribution towards this end.

I am grateful to my friends NIELS & BOTNI of Nólsoy, SAMUEL PETERSEN of Klakksvík, and TORBEIN REIN of Saltangará for allowing me to use their observations in this study. NIELS & BOTNI also supplied a number of valuable notes made by JACOB JOENSEN at Borin, the south point of Nólsoy. I thank my wife for supplying a translation of these various notes, and Dr. FINN SALOMONSEN for appending a Danish summary. The diagrams showing the synoptical situations are based on the *Daily Weather Report* of the Meteorological Office of the Air Ministry and are used by permission of the Controller of Her Majesty's Stationery Office, a privilege which is gratefully acknowledged.

### 1. The Passerine Migration.

Observations on Species.

The spring passage of passerine species was disappointingly brief at both Faeroe and Fair Isle, and the only movements of any importance from an analytical point of view took place during the third week of May, beginning on 15th at Fair Isle, and reaching a peak at both places next day.

At this time two species of summer visitor, the Willow Warbler (*Phylloscopus trochilus*) and Lesser Whitethroat (*Sylvia curruca*) reached Nólsoy and Fair Isle overnight on May 15th/16th. Swallows (*Hirundo rustica*) increased at Fair Isle from a few to 12 on 16th, and two were present in Nólsoy village from 16th–18th. On this last date there was again an increase at Fair Isle from 6 to 15 birds, and in Tórshavn plantation on that evening I watched 3 Swallows, together with the fourth Sand Martin (*Riparia riparia*) to be recorded in Faeroe, hawking flies above the small ponds. Single Sand Martins were recorded at Fair Isle on 16th and 19th. House Martins (*Delichon urbica*) appear to have reached the more northerly islands first; they were noted at Borin on May 15th, and there were several in the village on the following day. These had disappeared on 18th, but I saw a single bird near Nólsoy

village on the following afternoon. At Fair Isle the first appeared on 16th and was followed by 12 next day.

Other summer visitors reached Fair Isle and Faeroe at about the same time, and as these are in most cases scarcer and less obvious species than the foregoing one feels that the lack of exact agreement in the dates may be due to the accident of observation as much as to any real discrepancy in the time of arrival. These species include a Red-spotted Bluethroat (*Luscinia s. svecica*), of which one is recorded for Fair Isle on May 15th, whilst a fine  $\Im$  seen near Borin on 16th was collected by NIELS  $\bigwedge$  BOTNI next day, this being only the second example on record for the Faeroe Islands.

Single Garden Warblers (Sylvia borin) appeared at Nólsoy on 16th and Fair Isle on 18th; two  $\Im$  Blackcaps (Sylvia atricapilla) were in and about Niels á Botni's garden when I visited him on 19th, whilst the only Blackcap of the spring at Fair Isle is dated 20th. Two Common Whitethroats (Sylvia communis) were seen at Fair Isle on 15th and increased to 7 next day, and two were present on Nólsoy from 18th-22nd. Single Spotted Flycatchers (Muscicapa striata) were noted at both places on 17th and single Pied Flycatchers (Muscicapa hypoleuca) were at Fair Isle on 18th-19th and at Borin on 19th. The only Redstart (Phoenicurus phoenicurus) noted in Faeroe was at Nólsoy on 19th, having been preceded by 3 at Fair Isle on 15th. When at Borin on 19th I had close views of a Redwing (Turdus musicus) which showed all the characteristics of the Scandinavian bird.

The Whinchat (Saxicola rubetra) was a dominant bird at Fair Isle with 8 on 15th, but this and several other species represented there by one or a few individuals were not seen by the observers in Faeroe. The reverse is true in the case of one bird, a  $\Im$  Siskin (Carduelis spinus) which I heard and watched in a Tórshavn garden at an early hour on 19th, — the first record of this species in the Faeroe Islands.

Finally, it is worth while recording that a Lesser Whitethroat (*Sylvia curruca*) was singing in Tórshavn plantation during most of the morning of June 5th, and a second *Sylvia* sp. was also seen. My wife heard the bird singing again on June 8th. Also a Wood Pigeon (*Columba palumbus*) was found feeding



Cyclonic Drift of migrants ahead of frontal weather, May 15 th–16th 1953. Vejrkort visende frontbevægelsen 15.–16. maj 1953. Denne cyklon frembragte afdriftstræk.

in a garden near the plantation on May 11th and was flushed from the trees on 16th.

The Meteorological Environment.

The synoptical situation at the time of these movements strongly supports the view that the arrivals, which were so nearly simultaneous at Fair Isle and in the Faroe Islands, were due to a cyclonic drift of migrants from the western shores of Denmark, the Skagerrak sea-crossing, or south-west Norway. The fact that the migration was stronger at the more southerly station on 15th accords with expectation in view of the movement of the fronts associated with the depression which created the drift.

Conditions in Denmark and Germany had been good for migration during the previous two days, with an anticyclone situated to the south bringing fairly clear and calm weather. By contrast, the conditions in the British Isles were unfavourable for bird-movement, a depression centred to the west of Ireland causing fresh to strong south-west winds over most of the country. During the night of 14th–15th the wind was southerly on the west Danish coast and about S.SE. in the Skagerrak and south-west Norway, backing markedly in seaarea Forties ahead of the occluded front of the depression so that it was due east in Shetland and Faeroe; a warm front with an associated rain-belt followed this occlusion northwards during 15th and there was no material change in the easterly trend of the wind between the Skagerrak and the Faeroe Islands (figs. 1 and 2).

During 16th and 17th there was fog in Faeroe and this must have inhibited bird-movement among the islands. The apparent new influx of 18th–19th in the Tórshavn–Nólsoy area coincided with the dispersal of this fog and, as the islands now lay at the centre of the rapidly filling low, with the wind very light, there seems little doubt that these occurrences were due to the onward flow of passage of birds drifted to the islands two days before (fig. 3). Similarly, the new movement noted at Fair Isle was in all likelihood due to the continuing migration of birds previously carried to northern Scotland by the easterly winds and now taking advantage of the calm weather to pursue their journey. This alternation of drift and redetermined passage is a notable feature of spring and autumn migration at Fair Isle (WILLIAMSON & BUTTERFIELD 1952).

A somewhat similar situation to that of 15th-16th again developed on 19th-20th, with light breezes or calms in Denmark and south-west Norway and a moderate south-easterly airstream across Forties extending to Shetland and Faeroe on the northern perimeter of a small depression in the North Sea (fig. 4). Light to moderate easterly winds prevailed in Faeroe, and apparently over much of the northern North Sea, until 22nd. There were fewer signs of movement than before, however: some Golden Plover (Charadrius apricarius) may well have arrived from the Continent at this time (see below); there was a Swallow singing near Tórshavn plantation on the morning of 20th, and I watched a Willow-warbler in a town garden. SAMUEL PETERSEN noted several Swallows at Klakksvik on May 22nd-23rd, a movement which coincided with a further marked passage of hirundines at Fair Isle due to cyclonic drift on the northern side of a low centred to westward of Britain.



Fig. 3. Inter island movement, May 18th–19th. Vejrkort over 18.–19. maj 1953.



Fig. 4.

Weak cyclonic drift across Forties, may 20th-21st 1853. Vejrkort over 20.-21. maj 1953. Svagt cyklonisk afdriftstræk over Nordsøen.

### 2. Waterfowl and Waders.

Observations on Species.

Mallard (Anas platyrhynchos) and Teal (Anas crecca). NIELS & BOTNI reports Mallard movement on April 28th, and 12 Teal arrived at Borin the same day. The Teal declined to 4 on May 3rd and one next day.

Gadwall (Anas strepera). A pair at Grothusvatn, Sandoy, on May 21st constitutes the first Faeroe record of this increasing Icelandic species (GUDMUNDSSON, 1951); but it must surely be a regular, if scarce, passage migrant.

Wigeon (*Anas penelope*). Parties of 8 on April 24th and 4 on 30th at Nólsoy were undoubtedly migrants. It is probable that passage was also proceeding on May 11th when there were 3 pairs and 3 additional ducks on Toftavatn, where only a single drake was to be found on June 1st; also on May 21st, when there was a minimum of 15 birds on Grothusvatn, Sandoy.

Pintail (*Anas acuta*). Two at Borin on February 5th, 4 on April 30th and 3 on May 9th were probably migrants. A pair at Stóravatn, Sandoy, on May 21st are more likely to have been breeding-birds, so also a pair at Toftavatn on June 11th, the drake only being seen on 20th.

Scaup (Aythya marila). A pair at Nólsoy on May 7th. A drake at Toftavatn on 11th and pairs there on June 1st and 11th. Three drakes and 2 ducks at Stóravatn, Sandoy, on May 21st were doubtless on passage, and there was a female with the Eiders near Tórshavn on May 25th-26th and 30th.

Pochard (Aythya ferina). TORBEIN REIN recorded a pair of this rare Faeroe species at Toftavatn on June 11th.

Tufted duck (*Aythya fuligula*). There is no doubt that this duck, which I found scarce but regular in its appearances during the war years (WILLIAMSON 1947) has greatly increased as a passage-migrant,—surely a reflection of the general increase which has taken place in the Icelandic population (GUDMUNDS-SON 1951). I saw more birds in the spring of 1953 than in all the war years: *viz.* 9 drakes and 5 ducks at Toftavatn, May 11th; 6 drakes and 3 ducks there on June 1st; 2 drakes and a duck with the Scaup on Stóravatn and a pair on Gróthúsvatn on May 21st; a female with Eiders near Tórshavn on May 26th, and 2 pairs at a hill tarn on Velbastaðhalsur, Streymoy, on June 3rd. In addition, TORBEIN REIN reports a pair on Toftavatn, June 11th; 3 drakes and 2 ducks on 15th (which suggests that passage was still continuing); and again a pair on 25th.

Common Scoter (*Melanitta nigra*). Five were close to Nólsoy village on April 30th and there was a pair in a small bay near Tórshavn on May 25th. The drake I saw on Sandsvatn on May 21st was very probably a breeding bird.

Red-Breasted Merganser (*Mergus serrator*). There was a remarkable concentration at Toftavatn in June: 13 males and 8 females on 10th; 16 males and 12 females next day; 13 males and 2 females on 15th; 12 males and 3 females on 20th, and 13 birds on 25th.

Goosander (*Mergus merganser*). TORBEIN REIN and I saw a single drake on Toftavatn on June 1st and he recorded a pair on June 10th and again on 20th. Although the Goosander, breeds in Iceland it appears, like the Gadwall, to be singularly scarce in Faeroe, and these appear to be the only records of it in the present century.

Grey Lag Goose (Anser anser). One at Borin on April 1st and 7 there on 25th.

Pinkfoot (Anser arvensis brachyrhynchus). There were 6 on Nólsoy on May 23rd.

Whooper Swan (*Cygnus cygnus*). Single birds or small groups were passing at Nólsoy from April 20th into the first week of May. REIN reported a herd of up to 10 birds at Toftavatn on several days in mid-May, the last being 7 on 24th.

Coot (*Fulica atra*). One at Toftavatn on May 11th: an uncommon winter visitor with only one previous May record (1874).

Golden Plover (*Charadrius apricarius*). The only flock I saw during my stay consisted of 13 birds in a wet, peaty valley on Sandoy on May 21st. They were of particular interest in that not one of them had the full black front of the Northern race *Charadrius apricarius altifrons*, to which the majority of Faeroese breeding-birds can be assigned, and in this respect they all presented a very marked contrast with the nesting pairs occupying territories in the neighbourhood. They formed a compact group and were either very tame or tired, and I believe they were drift-migrant birds of the Southern race *Ch. a. apricarius* which had come from southern Norway in an easterly cyclonic airstream that had prevailed the previous day (fig. 4).

Turnstone (Arenaria interpres). There is increasing evidence that this species now winters in large numbers in the Faeroes (WILLIAMSON 1947), and it may be suggested that this change in status is a concomitant of the milder winter weather brought about by the recent climatic amelioration. SAMUEL PETERSEN tells me that a large number winter annually at Klakksvík on the sandy shore at the head of the bay, as also happens at the settlements on Vágar Island. According to NIELS  $\acute{A}$  BOTNI there were many at Nólsoy in the latter half of December and January, sometimes over 50 feeding in the *bour*. A decrease took place in early February but a small flock remained until mid-April. There were 6 on the shore near Tórshavn on May 9th and fewer occasionally afterwards down to June 4th, when my observations ceased.

Black-Tailed Godwit (*Limosa limosa*). There were 5 at Nólsoy on May 26th-27th.

Redshank (*Tringa totanus*). Singly at Tórshavn on May 9th, 26th, 30th; at Nólsoy I saw 2 on 19th and at Svínoy one on 28th. There was a flock of 12 at Toftavatn on May 11th and 4 others were flying in pairs, but doubtless all were on passage as none was present on June 1st. SAMUEL PETERSEN says an off-passage flock of up to 20 birds appears regularly in certain fields near Klakksvík in late April and early May, staying over several days. Two birds near Gróthúsvatn on Sandoy on May 21st were apparently breeding.

Knot (*Calidris canutus*). Two red birds visited Tórshavn on June 4th.

Dunlin (*Calidris alpina*). It is difficult to identify passage movements, but 3 at Sandsvatn on May 21st and 6 at Toftavatn on June 1st were in all likelihood migrants; and this almost certainly applies to 6 birds asleep on a rock in a bay near Tórshavn on May 30th, with a seventh consorting with a Ringed Plover (*Charadrius hiaticula*) nearby. These had decreased to 4 on 31st and 2 only on June 2nd. There were a number at Toftavatn on June 25th. Red-necked Phalarope (*Phalaropus lobatus*). None at Gróthúsvatn, a regular breeding-haunt, on May 21st; but on that afternoon I found 2 swimming among Eiders outside Skopun harbour, Sandoy. There are one or two nesting-pools close to Skopun, so it is possible these were local birds. If so, they were a week earlier than the first arrivals at one of the Shetland colonies (*teste* TOM HENDERSON). One was flying with the 6 Dunlins at Toftavatn on June 1st: I know of no nestingrecord for this lake, although conditions at the northern end are suitable.

Glaucous Gull (*Larus hyperboreus*). An adult  $\Im$  in summer plumage was obtained at Nólsoy on May 28th, the first that NIELS  $\bigwedge$  BOTNI has seen there in breeding-dress.

Arctic Tern (*Sterna paradisaea*). The first arrivals in Nólsoyarfjord were on May 19th.

The Meteorological Environment.

I have dealt separately with observations concerning migrant Anseriformes and Charadriiformes since in the great majority of these birds the destination of spring migration is different (Iceland) from the passerine species, and it seems reasonable to assume that the Faeroe Islands must lie in the direct path of their migration under normal circumstances. It is more difficult in this case to relate movement to meteorological events because, without continuous recording at one or more of the suitable haunts, there is no really satisfactory way of determining the main arrival and departure dates or indeed the periods of peak passage.

Nevertheless, there is some evidence among the observations given above of certain migration peaks. There was an arrival of Mallard and Teal at Nólsoy on April 28th, and of Wigeon on April 24th and 30th. Pintail and Common Scoter also appeared on this last day, and it is significant that NIELS  $\measuredangle$  BOTNI reports that the first big number of Wheatears (*Oenanthe oenanthe*) coincided. May 11th seems obviously to have been a peak-day, the species involved being Wigeon, Tufted Duck and Redshank. Also May 26th, when Scaup, Tufted Duck, Scoter and Black-tailed Godwit appeared in the Nólsoy-Tórshavn area.

With regard to the movement of Mallard and Teal, both species in this case seem likely to have been drift-migrants from the Continent rather than birds *en route* for Iceland, since at this time an easterly airstream extended to Faeroe from the coast of south-west Norway on the northern side of a depression centred over the British Isles,—conditions similar to those which later caused the drift of passerine birds previously discussed. The remaining dates show situations of a different kind, and are similar in that they involve anticyclonic weather or some other pressure pattern giving calms or light winds suitable for migration.

The first Wigeon influx followed an anticyclonic situation on 23rd in the North Sea and British area (the presumed area of origin of birds on passage to Iceland), with a light southwest wind in the Faeroe Islands. At the end of the month Faeroe was at the centre of a filling low, with almost calm and clear conditions existing in northern Scotland, and a southerly wind in the sea-area Fair Isle (fig. 5). This situation affords an interesting parallel with that of May 19th, when there was much local movement of passerine species (fig. 3), and suggests that it is not the distribution of pressure so much as the clear and almost windless conditions which provide the stimulus for migration.

The north-east Atlantic, including Scotland, was covered by a ridge of a Greenland anticyclone on May 10th-11th, when there was an unusual concourse of ducks and Redshanks at Toftavatn (fig. 6). The next period, May 25th-26th, was one in which an anticyclone, building up over Norway, moved westwards into sea-area Forties, giving light S.SE. winds between Britain and the Faeroe Islands (fig. 7). This situation changed rapidly late on 25th, a low developing over Faeroe, accompanied by rain.

There is a strong suggestion in this material that the passage migration of Icelandic waterfowl through the Faeroe Islands is most marked during periods when the wind is light and the sky clear, and especially when anticyclonic weather dominates the region between Scotland and the isles. Such conditions have been shown to be conducive to the initiation of migratory movements among these same populations in the autumn



Fig. 5. Waterfowl peak of April 30th 1953. Vejrkort for 30. april 1953. Maksimalt svømmefugletræk.



Fig. 6. Waterfowl peak of May 11th 1953. Vejrkort for 11. maj 1953. Maksimalt svømmefugletræk.



Fig. 7. Waterfowl peak of May 25th-26th 1953. Vejrkort for 25.-26. maj 1953. Maksimalt svømmefugletræk.

season (Williamson 1953). But more extended observations than I found it possible to undertake are required before any firm conclusions can be drawn.

Simultaneous observations over a period by a team of observers, in both spring and autumn, at selected Faeroe lakes such as Toftavatn and those at Eiði, Vágar and Sandoy, is perhaps the greatest desideratum in Faeroe ornithology at the present day, and would contribute greatly towards a full understanding of the duck and wader migration in the northeast Atlantic area.

#### Summary.

Aspects of spring passage-migration through the Faeroe Islands were studied during a month's stay between May 8th and June 5th 1953.

Passerine Migration. A coincidence is demonstrated between arrivals of a number of summer visitors in Faeroe and at Fair Isle 250 miles (400 km.) to south-east, on May 15th-16th, indicating a cyclonic drift from the Skagerrak region on the northern side of a depression. A further movement of May 18th-19th is identified with the onward flow of passage through the islands, inhibited by fog during 16th-17th. A smaller influx probably took place under weak cyclonic conditions from 20th-22nd.

Waterfowl and Wader Migration. Apparent peaks of passage of Icelandic waterfowl and waders mainly coincided with anticyclonic weather affecting the area between Scotland and the Faeroe Islands, but movement was also noted with Faeroe at the centre of a filling low. It is suggested that the important factors in these situations are the clear skies and lack of wind.

Faunistic. A pair of Gadwall (*Anas strepera*) and a Siskin (*Carduelis spinus*) are first records for the Faeroe Islands. A Red-spotted Bluethroat (*Luscinia s. svecica*) is the 2nd record, and a Sand Martin (*Riparia riparia*) the 4th. Other species rarely recorded are Pochard (*Aythya ferina*) and Goosander (*Mergus merganser*). A flock of Golden Plover on Sandoy on May 21st are believed to be drift-migrant of the southern form *Charadrius a. apricarius*.

# DANSK RESUMÉ Forårstrækket på Færøerne 1953.

Forskellige sider af forårstrækket over Færøerne blev studeret under en måneds ophold på Færøerne fra 8. maj til 5. juni 1953.

Træk af spurvefugle. Der påvistes en tidsmæssig overensstemmelse mellem ankomsten af et antal sommergæster til Færøerne og Fair Isle (400 km mod sydøst) d. 15.–16. maj, hvilket tyder på, at der er sket en afdrift som følge af en cyklon i Skagerakområdet på nordsiden af et lavtryk. Et yderligere træk d. 18.–19. maj påvistes at skyldes et over øerne videregående træk, som var standset på grund af tåge d. 16. og 17. maj. – Der var sandsynligvis en mindre indflyvning d. 20.–22. maj under svage cyklonforhold (se fig. 1–4).

Træk af vadere og svømmefugle. Tilsyneladende store mængder af trækkende islandske vade- og svømmefugle ankom i det rolige vejr, som herskede i området mellem Skotland og Færøerne, men der blev også observeret træk med Færøerne som centrum i et udfyldende lavtryk. Det må formodes, at de vigtigste faktorer under disse omstændigheder er klar himmel og vindstille vejr (se fig. 5–7).

Faunistik. Et par Knarænder (Anas strepera) og en Grønsisken (Carduelis spinus) rapporteredes for første gang fra Færøerne. En Blåhals (Luscinia s. svecica) meldtes for anden gang, og en Digesvale (Riparia riparia) for fjerde gang. Andre sjældnere forekommende arter er: Taffeland (Athya ferina) og Stor Skallesluger (Mergus merganser). En flok Hjejler på Sanðoy 21. maj menes at tilhøre den sydlige form, Charadrius a. apricarius, som er blevet slået ud af deres kurs.

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