Migration of Land-Birds at Blåvandshuk in September and October 1955.

By I. C. T. Nisbet.

(Med et dansk resumé: Træk af landfugle ved Blåvandshuk i september og oktober 1955).

Introduction.

In september 1954 a party of British and Danish ornithologists spent four weeks observing migration at Blåvandshuk, the western point of Denmark, and the results of this expedition were reported in an earlier paper (Jenkins and Nisbet, 1955). The present paper describes the results of a further expedition to Blåvandshuk in september and october 1955, in which particular attention was paid to the study of the migration of passerines and its relation to weather conditions. Little attention was devoted to the other main problem raised by the 1954 observations, the relation of the concentrated migration at the coast to that over a wider area, and this might profitably be the objective of a future visit to the same area.

Regular observations were also made in 1955 of the interesting migration of sea- and shore-birds at Blåvandshuk, and a summary of these has been published separately (Nisbet, 1956). Other activities of the 1955 expedition, such as observations on the neighbouring coastal marshes, added little of interest to the results reported by the 1954 expedition.

The observations described here were made by two independent groups, consisting of the following:

5.–11. september: S. Christophersen, E. Hansen, M. Jonas, K. Nielsen, Mrs. I. Nielsen.

18. september–10. october: M. Barry, P. J. K. Burton, R. A. F. Cox, D. Jenkins, I. C. T. Nisbet.

In addition, one Icelandic ornithologist (A. Ingolfsson) and no fewer than 11 other Danish ornithologists visited Blåvandshuk during september, R. Svendsen and E. Thomsen being frequent visitors. The goodwill and co-operation established between Danish and English ornithologists was one of the most pleasant and noteworthy features of the expedition.

Acknowledgements.

I am most grateful to all the observers mentioned above for their careful and painstaking field-observations; in particular to E. HANSEN, who has summarised the records for 5.–11. september. All the English members of the expedition are much indebted to L. FERDINAND, R. SVENDSEN, E. THOMSEN and other Danish ornithologists for their great kindness and friendship, and particular mention must be made of the unfailing hospitality and goodwill of Mr. and Mrs. N. G. LANGE. The kindness of Mr. J. H. FLYTKJÆR enabled us once again to stay in "Det Gule Hus", and this comfortable accommodation on the spot contributed greatly to the success of the expedition. I am also very grateful to the trustees of the Hans Gadow Fund of Cambridge University for invaluable financial assistance.

Local topography.

The Blåvandshuk area was described, with two sketch-maps, in an earlier paper (JENKINS and NISBET, *op. cit.*). At Blåvandshuk the west coast of Jutland, which extends from north to south in an unbroken straight line for 130 kilometres, turns almost through a right angle to run E.S.E. for 14 kilometres. The northward-running coastline consists of two lines of high and barren sand-dunes, about 800 metres wide, but immediately to the north-east and east is a large area of barren heath, fringed with pine plantations on its north and east sides. As described below, day-migrants tend to follow the sand-dunes or the plantations and to avoid the open heath. A small area of trees and bushes around Blåvandshuk lighthouse is the only cover suitable for small passerines for several kilometres.

Diurnal migration of passerines.

As in 1954, the diurnal migration of passerines was studied quantitatively by means of counts from selected vantage points for two hours each day at the peak of the migration, usually starting about half an hour after dawn. The results of these counts are summarised in Table 1.

Comparison with the 1954 records shows that most of the day-migrants passed ten to fifteen days later in 1955. As

examples may be quoted the small numbers of Bramblings (*Fringilla montifringilla*)[1]) seen, and the fact that Snow Buntings (*Plectrophenax nivalis*) and Twites (*Carduelis flavirostris*) were each seen only once in 1955, whereas in 1954 they were seen regularly from 12. and 19. september respectively.

Attempts were again made to trace the movements of the birds through the area, by watching individual flocks and by observations at two or more points. The three basic types of movement noted in 1954 were again observed at times in 1955: these were illustrated in sketch-maps by JENKINS and NISBET (1955), and may be summarised as follows:

(i) Broad front S.S.W. flight, departing out to sea: noted in optimum conditions in 1954, but only once in 1955, for one hour on 5. october.

(ii) Narrow front migration, arriving along the sand-dunes from the N.N.E. and departing E.S.E.: noted in poor migrating conditions with S.E. wind, as on 23.–24. september 1955.

(iii) Narrow front migration, arriving along the coast from the E.S.E. and departing N.N.E. or N.E.; noted in poor migrating conditions with W. or N.W. wind, as on 19. september 1955.

These types of movement were largely distinct in 1954, but combinations between them were often observed in 1955, and in addition a fourth pattern, illustrated in Fig. 1, was also observed frequently, while it was noted in 1954 only on 18. september. The routes marked 'A' in Figure 1 were followed largely by Meadow Pipits (*Anthus pratensis*) and those marked 'B' by finches (*Fringilla coelebs*, etc.). This interspecific difference was probably due to the large area of barren heath immediately to the north-east of Blåvandshuk, the Meadow Pipits following the dunes southwards, while the other species kept closer to the plantations fringing the landward side of the heath (outside Figure 1), and turned once again along the guiding-line of the coast to approach Blåvandshuk from the east.

The migration pattern of Fig. 1 is, in fact, one example of a general feature of the migration in 1955: the birds seem to

[1]) Scientific names follow those used by LØPPENTHIN (1946).

TABLE 1. Counts of selected diurnally-migrating
Optællinger af udvalgte dagtrækkende

Date (*Dato*)	September											
	5	6	7	8	9	10	18	19	20	21	22	23
Corvus corone	..	..	..	..	..	..	..	..	..	..	..	2
C. monedula	..	..	..	..	..	..	..	..	..	3	..	..
Anthus pratensis	..	..	..	..	..	..	26	287	333	467	1407	1970
A. trivialis	..	..	..	270	..	..	..	3	10	15	10	16
Motacilla flava	..	..	2	170	2	..	..	15	2	8	2	2
M. alba	..	..	..	..	..	..	1	4	15	3	14	3
Sturnus vulgaris	..	..	..	..	..	..	..	9	12	25	59	49
Carduelis spinus	..	..	..	..	..	..	..	..	..	18	25	62
C. cannabina	..	..	25	..	..	..	..	72	251	78	33	11
Fringilla coelebs	..	..	..	..	..	..	..	140	1302	191	213	2236
F. montifringilla	..	..	..	..	..	..	..	..	9	..	1	66
Emberiza citrinella	..	..	..	..	..	..	..	..	6	2	2	12
Other species (*andre arter*)	15	10	..	150	..	..	..	10	13	40	13	16
Total (*Ialt*)...	15	10	27	590	2	0	27	539	1953	850	1779	4445
Principal directions of departure[1]) (*Hovedretning ved afrejse*)	..	..	..	ESE	..	..	..	NNE (ESE)	NNE SSW	SSW ESE	ESE	ESE
Wind direction (*vindretning*)	SW	NW	NNE	ESE	S	S	WSW	WNW	WSW	ESE	SE	ESE
Wind speed; Beaufort scale (*vindstyrke*)	3	4	1	2	3	1	4	5	2	2	2	2
Temperature (° C) (*temperatur i °C*)	15	16	14	13	15	15	13	14	13	13	15	14
Cloud in eighths (*skydække i ottendedele*)	8	4	7	..	8	5	7	7	7	1	4	8
Visibility in km. (*sigtbarhed i km*)	8	25	30	fog	3	15	15	30	25	5	3	5

[1]) The directions are given in the order of numerical importance. Brackets are used where less than 10 % *anvendt når mindre end 10 % af antallet er involveret.*

have been more affected by guiding-lines and less willing to cross the sea than in 1954. As a result the movements were often confused and there was often no definite direction of migration (see Table 1).

In addition to these differences in migration period and in behaviour, the relation of migration to weather changes was different in the two years. In 1954 it was found that the intensity of migration was highly correlated with decreases in wind strength, but examination of Table 1 shows that this correlation was much less pronounced in 1955, and that a better correlation exists with falling temperature. The small

passerines in two-hour periods each day.
spurvefugle i daglige to-timers perioder.

September							October										Total (*Ialt*)
24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	
..	..	..	..	3	..	..	..	2	..	38	33	..	57	65	26	1	227
..	..	..	..	..	..	..	..	2	..	32	..	..	4	650	9	..	700
850	1	13	160	111	93	..	260	2699	79	1721	4602	15	55	72	25	75	15,081
86	..	..	1	1	2	..	..	18	..	1	..	..	..	3	..	3	439
6	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	210
11	..	..	14	3	..	..	..	6	..	14	1	..	..	3	..	..	92
8	..	..	17	299	..	..	..	269	..	309	346	..	..	60	800	37	2,297
72	..	..	20	14	..	..	..	22	25	26	18	..	..	33	12	..	347
3	..	..	32	90	53	..	..	263	81	55	30	..	..	6	..	1	1,084
18159	1	..	423	1507	3	..	..	490	27	154	190	6	41	204	20	..	25,307
21	..	..	9	285	..	..	20	740	3	69	106	3	6	71	5	2	1,416
9	..	..	6	8	..	..	..	30	2	11	5	5	3	23	..	2	126
89	..	..	15	17	1	..	..	126	35	109	89	15	9	137	75	46	1,030
19314	2	13	697	2338	152	0	40	4668	252	2539	5420	44	175	1326	972	167	48,356
ESE (SSE)	..	..	NNE SSW WSW ESE	NNE SSW	NNE	..	..	SSW S NNE (ESE)	NNE ESE (S)	SSW	SSW (NNE) (ESE)	..	ESE	NNE (SSW)	W WSW (NNE)	ESE	
ESE	SSW	SW	WNW	NW	WSW	SW	W	SW	SW	W	SW	SE	ESE	NW	SW	SSE	
3	3	4	3	3	2	4	5	1	2	1	1	6	4	1	2	1	
13	16	15	13	12	13	16	14	12	13	12	9	10	10	12	14	14	
0	8	6	7	2	8	8	4	6	8	8	6	8	8	6	8	8	
20	5	25	30	30	30	8	25	30	15	30	30	3	15	25	4	2	

of the total was involved. *Retningerne er opført i rækkefølge efter deres talmæssige betydning. Parenteser er*

number of birds migrating on 8. october is a striking example of this.

It is thought that all these differences are inter-related, and are connected with the mildness of the autumn weather in 1955, in contrast to the stormy autumn of 1954. A full discussion of this aspect of migration is to be published separately (NISBET, in press).

These results show the value of the observations at Blåvandshuk, and further study of the migration there would be very profitable, especially as the largest movements were probably missed both in 1954 and 1955. The results already

obtained, however, show that the numbers of birds passing Blåvandshuk depend on two alternative concentrations, each of which is determined largely by local weather conditions, so that they probably do not provide a good sample of the migration over a larger area. This is probably the most important problem still unsolved about the migration at Blåvandshuk, and might profitably be studied by means of simultaneous observation at Blåvandshuk and at another complementary point, such as the south point of Skallingen.

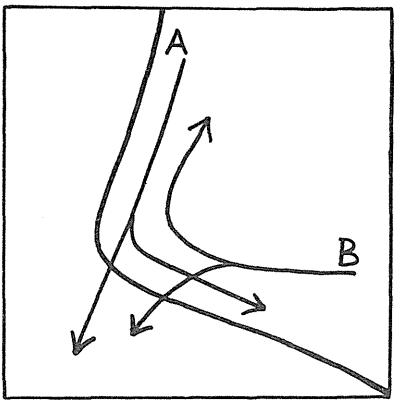

Fig. 1. Migration pattern observed at Blåvandshuk on certain occasions in 1955, illustrating the great effect of guiding-lines. Cf. also the text p. 51–52.
Trækmønstre iagttaget ved Blåvandshuk ved flere lejligheder i 1955, visende ledeliniernes betydning. Jfr. teksten p. 51–52.

Nocturnal migration of passerines.

As in 1954, all night-migrating passerines resting in the area within one kilometre of Blåvandshuk lighthouse were counted on each day. The counts are given for 17 species in Table 2. Observations in other areas along the coast again suggested that these counts were a reliable index of migration into the area during the previous nights.

These birds were not usually present for more than a few hours, although a few individuals, especially Goldcrests (*Regulus regulus*) and Redstarts (*Phoenicurus phoenicurus*) appeared to stay in the area for several days. The majority appeared between one and three hours after dawn (some being

seen to descend from a great height into the trees near the lighthouse) and usually the numbers were much reduced by 1500 hours. On the days of largest migration there was a constant movement of birds through the area, as fresh arrivals flew in from the north and others departed south-eastwards.

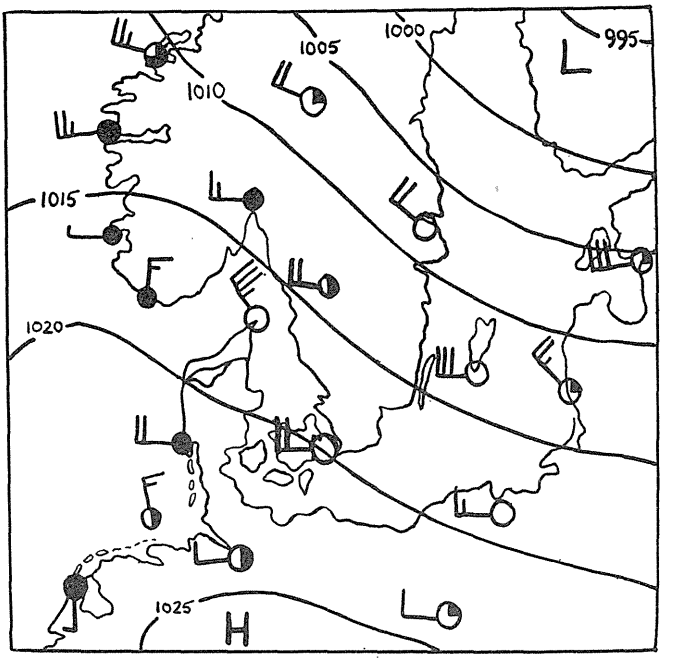

Fig. 2. Weather at 0100 hours C.E.T. on 2. october 1955. Large numbers of night-migrants arrived at Blåvandshuk frequently in such conditions.
Vejrkort fra kl. 1, dansk normaltid, 2. oktober. Et stort antal natvandrere ankom til Blåvandshuk under disse vejrforhold.

With the birds recorded in Table 2 were a few examples of rarer species. Occurrences of Yellow-browed Warbler (*Phylloscopus inornatus*), Siberian Stonechat (*Saxicola torquata maura*) and Scarlet Grosbeak (*Carpodacus erythrinus*) are described later in the paper; other records were of two Bluethroats (*Luscinia svecica*) on 21. september, and of two Barred Warblers (*Sylvia nisoria*) and a Red-breasted Flycatcher (*Siphia parva*) on 23. september.

TABLE 2. Daily census of selected
Daglige optællinger af udvalgte

Date (*Dato*)	September											
	5	6	7	8	17	18	19	20	21	22	23	24
Troglodytes troglodytes	..	..	..	..	..	..	..	..	1	..	1	..
Turdus philomelos	..	..	..	..	..	1	..	2	10	2	7	12
T. musicus	..	..	..	..	..	..	..	..	8	..	..	1
T. merula	..	..	..	..	..	..	..	1	..	..	..	1
Oenanthe oenanthe	25	10	6	..	2	2	2	2	12	6	12	25
Saxicola rubetra	25	5	..	..	..	..	..	..	1	..	1	1
Phoenicurus phoenicurus	..	1	50	..	..	1	2	3	25	9	15	13
Erithacus rubecula	..	..	10	..	..	..	1	..	3	1	..	1
Sylvia atricapilla	..	..	..	..	..	..	..	..	1	4	1	..
S. borin	..	..	1	..	..	..	..	2	8	7	8	1
S. communis	2	..	2	..	..	..	..	1	2	..	2	2
S. curruca	..	..	1	..	1	..	..	..	..	..	..	..
Phylloscopus collybita	..	..	..	..	..	..	..	..	..	..	..	1
Ph. trochilus	..	..	10	..	..	..	..	..	2	..	..	1
Phylloscopus sp.	..	..	..	..	..	..	..	..	2	..	..	2
Regulus regulus	..	..	..	..	..	..	..	..	..	6	5	3
Muscicapa striata	..	..	5	..	..	..	1	..	1	..	..	1
Ficedula hypoleuca	..	..	10	..	5	1	1	3	25	1	..	..

Analysis of movements in 1954 and 1955.

The arrivals of night-migrant passerines in the two seasons fall into three categories.

The most characteristic type of immigration, which normally led to the arrival of large numbers of birds, occurred in 1954 on 13., 18., 19., 22., 28. september and 2. october, and in 1955 on 7., 21., and 28. september and 2., 5. and 8. october. The meteorological situation was the same in each case, and suggests that the movements were due to direct crossing of the Skagerrak from Norway. Each of the movements followed the clearance on the previous day of cyclonic weather in south Norway as a depression moved eastwards across Scandinavia, and thus coincided with more or less clear skies, a drop in wind strength and usually a fall in night-temperatures—conditions described as suitable for the initiation of migration by JENKINS (1953), SVÄRDSON (1953) and others. Figure 2 illustrates a typical meteorological situation for this kind of movement. The fact that these movements originated in Norway is shown particularly clearly in the case of 5. october 1955;

night-migrating passerines.
nattrækkende spurvefugle.

September						October									
25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10
..	..	..	2	6	3	1	4	4	3	30	8	10	10	2	7
2	..	..	12	2	1	..	2	1	3	12	5	10	20	2	20
..	..	..	1	..	..	..	3	..	2	4	3	6	3	..	..
..	..	5	..	..	..	..	2	..	1	6	4	2	4	1	3
2	2	2	4	..	..	2	1	..	1	3	3	5	1	..	..
2	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..
5	3	1	6	1	1	2	1	1	1	3	1	1	2	..	3
..	..	..	50	1	..	..	1	1	..	40	4	4	15	4	3
1	..	..	..	..	..	..	1	3	..	1	1	..	..	2	7
3	1	..	..	..	3	1	3	1	1	..	1	..	2	..	3
..	..	..	..	..	2	1	1	..	..	..	..	..	..	..	..
..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..
1	1	..	15	1	..	1	1	2	..	2	1	1	5	1	..
..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..
1	..	..	3	..	..	1	..	..	..	1	..	..	2	..	..
..	..	..	3	6	3	1	1	..	..	60	11	10	60	9	8
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..

during the previous night a belt of rain associated with a secondary depression affected the whole of Denmark, while the weather described above prevailed in south Norway and the Skagerrak. The large arrival at Blåvandshuk on the 5th is therefore most unlikely to have originated in Denmark, and can be ascribed confidently to direct crossing from Norway.

In each case the birds therefore crossed the Skagerrak with north-west wind, force 1–4, weather in which they could hardly fail to reach Denmark successfully. The coincidence of the migration of these Norwegian breeding-birds with the clearance of cyclonic weather thus appears to be a successful adaptation to make this sea-crossing (which may be as much as 400 kilometres) in favourable conditions (for a fuller discussion see NISBET, in press).

A second type of movement was noted on 25. september 1954 and on 30. september and 1., 3. and 6. october 1955, yielding arrivals of much smaller numbers of birds, notably *Sylvia* warblers. It seems likely that these arrivals were due principally to local factors, and that they originated in north

Denmark or Sweden: the species involved differed from those in the main movements from Norway.

A third type of movement occurred on 6. september 1954 and on 23. september 1955. In each case a high-pressure system covered Sweden, with east to south-east wind over

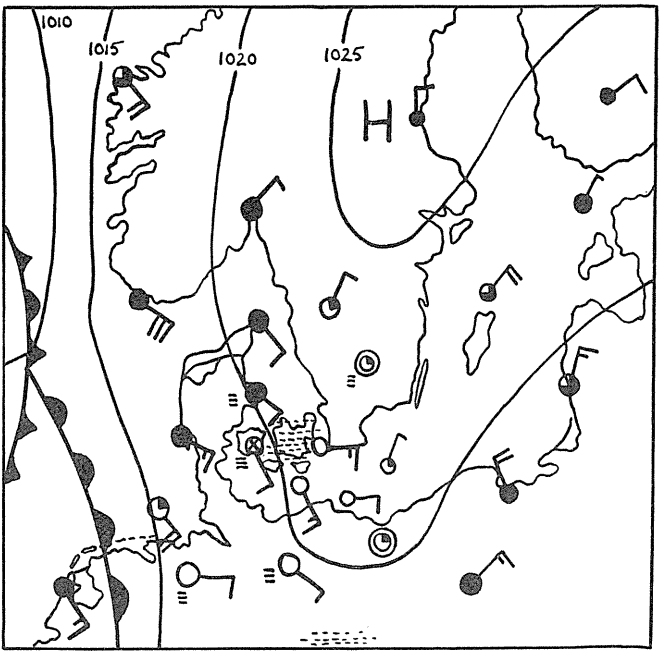

Fig. 3. Weather at 0700 hours C.E.T. on 23. september 1955, illustrating north-westward "drift" into Denmark.
Vejrkort kl. 7, dansk normaltid, 23. september, visende nordvestlig »afdrift« over Danmark.

Denmark and north Germany and overcast weather or fog over the area upwind of Blåvandshuk (see Figure 3). These conditions are typical of those under which large-scale "drift", the downwind flight of birds when unable to navigate, has often been recorded in northern Europe (WILLIAMSON, 1955; etc.) and the inference that these birds arrived from the east or south-east is supported by the occurrence on these two days of several birds of an exclusively eastern range.

The occurrences of eastern birds.

In the 58 days of observation, the following birds undoubtedly or probably of eastern origin have been observed at Blåvandshuk:

1954	6. september	1 *Luscinia svecica cyanecula*
		1 *Ficedula albicollis*
	8.–9. september	1 *Sylvia nisoria*
	14. september	1 *Sylvia nisoria*
	22. september	1 *S. curruca blythi*
	28. september	1 *S. nisoria*
1955	23. september	1 *Siphia parva*
		2 *Sylvia nisoria*
		2 *Carpodacus erythrinus*
	28. september	1 *Saxicola torquata maura*
	8.–9. october	1 *Phylloscopus inornatus*

The records may be divided into three categories, each with its characteristic meteorological situation:

1. The birds on 6. september 1954 and 23. september 1955 probably arrived by westward "drift" migration from Germany or south Sweden, as described above. It is noteworthy that these two occasions of direct drift to Blåvandshuk were the only two days when more than one eastern bird was seen; such occurrences are evidently typical of this kind of migration.

2. The Barred Warblers on 8. and 14. september 1954 probably occurred at Blåvandshuk on southward migration after earlier drift into western Scandinavia from the south-east (Nisbet, in press). Such "redetermined" passage has often been noted in Britain after extensive westward drift (Williamson, 1955). The occurrence of the Siberian Stonechat on 28. september 1955 is somewhat similar; in this case the bird arrived at Blåvandshuk on a day of large migration from Norway.

3. The arrivals on 22. september 1954 and on 8. october 1955 also coincided with large-scale migration from Norway. However on the night of 20./21. september 1954 there was an extensive westward drift across central Scandinavia (Nisbet, in press), examples of *Sylvia curruca blythi* being recorded on the

21st on Utsira, west Norway, and in the Shetlands (R. EDBERG and K. WILLIAMSON *in litt.*). The nights of 5./6. and 6./7. october 1955 were characterised by similar weather, with cloud and easterly wind over central Scandinavia (Figure 4), and a number of eastern birds, including *Phylloscopus inornatus*, were recorded in the Shetlands in the next five days. It therefore seems likely that these two birds reached Blåvandshuk by

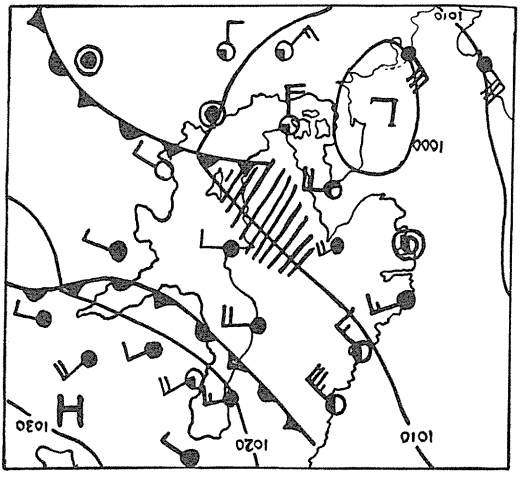

Fig. 4. Weather at 0100 hours C.E.T. on 7. october 1955, illustrating westward drift across central Scandinavia.
Vejrkort kl. 1, dansk normaltid, 7. oktober, visende afdrift tværs over det mellemste Skandinavien.

way of south Norway, after earlier drift from the north-east.

Each of these eastern birds therefore seems to have reached Scandinavia by westward drift, either on the north side of a depression or on the south side of an anticyclone. The frequency of these occurrences at Blåvandshuk after conditions suitable for such drift suggests that this drift is a normal part of migration through south Scandinavia; it is suggested that eastern birds may be expected fairly regularly at Blåvandshuk, or at similar places, during weather such as that illustrated in Figure 3, and following weather such as that illustrated in Figures 3 and 4.

Migration of birds of prey.

Only small numbers of birds of prey were seen migrating at Blåvandshuk on most days, but a larger migration took place between 21. and 24. september 1955. Table 3 gives estimates of the total number of each species which passed on each day at this period, and shows the details of this larger

TABLE 3.

Estimated numbers of hawks seen migrating at Blåvandshuk between 19th and 26th September, 1955.
Anslået antal rovfugle set på træk ved Blåvandshuk mellem 19. og 26. september 1955.

	September							
Date (*Dato*)	19	20	21	22	23	24	25	26
Wind at 1200 hours G.M.T. (*Vinden kl. 12 G.M.T.*) ...	WNW 3	WSW 2	SE 3	SE 2	ESE 3	SE 4	SW 3	W 4
Pernis apivorus	..	..	..	..	5	..	..	..
Accipiter nisus.....	..	5	20	25	40	9	3	2
Buteo buteo.....	..	..	..	..	1	1	..	..
Circus cyaneus.....	..	..	..	..	1	2	..	..
C. aeruginosus	..	..	..	..	1	..	..	..
Falco peregrinus ...	..	..	1	..	..	3	..	..
F. subbuteo	1	..	..	3	..	..	..	..
F. columbarius.....	3	1	6	9	15	20	4	..
F tinnunculus.....	1	1	..	12	15	15	1	..

movement as well as the numbers on other days, which illustrate the usual size of the migration. The table also shows the correlation of the larger migration with south-east winds: evidently in other conditions there is no concentration of the movement along the coast, and most of the birds fly further inland.

The normal direction of departure for most species was E.S.E. along the coast, but with westerly wind many of the smaller species (*Accipiter nisus* and *Falco spp.*) left to S.W. or S.S.W. over the sea, and other species often made "false starts" in these directions. The peak of the migration was usually between 1000 and 1300 hours.

Identification of the rarer species.

In the report on the 1954 observations, accounts were given of the identification of a number of the rarer species. The following three species, described fully there, were seen again in 1955, and were identified by similar characters:

Tawny Pipit (*Anthus campestris*). 1 on 23. september.
Red-throated Pipit (*A. cervinus*). 1 on 23. september and 10. october.
Lapland Bunting (*Calcarius lapponicus*). 15 seen during the periods 21.–24. september and 4.–7. october.

The following species are especially rare in Denmark, and the evidence for their identification is therefore given in full:

Gyr Falcon (*Falco rusticolus*). One seen near the lighthouse on 7. october was considerably larger than a Hen Harrier (*Circus cyaneus*) which it was attacking. In shape it was noticeably less compact than a Peregrine Falcon (*F. peregrinus*), with a longer and less tapering tail, very long wings from the body to the carpal joint, and at times it appeared to have a long neck also. The upper-parts were a medium greyish-brown, unstreaked, with the tail greyer; the under-parts were lighter and somewhat streaked; the face was very light, but with only a faint moustachial stripe. It was watched for about 3 minutes, at one time as close as 50 metres, and eventually flew southwards out to sea. I.C.T.N.

A similar bird had been seen over the marsh at Skallingen, 12 kilometres away, on 4. october. M.B., I.C.T.N.

Siberian Stonechat (*Saxicola torquata maura*). One was seen on 28. september and a full account of its identification has been published separately (Burton and Nisbet, 1956).

Yellow-browed Warbler (*Phylloscopus inornatus*). One was present on 8. and 9. october, and was watched feeding with Goldcrests (*Regulus regulus*) and Chiffchaffs (*Ph. collybita*). It was perhaps slightly larger than the former, but much smaller than the Chiffchaffs; slimmer than the Chiffchaffs and in shape typical of *Phylloscopi*, though it was even more restless and active than other members of this genus. The upper-parts were a fairly bright green; under-parts were white, tinged yellow-buff. A very conspicuous yellowish-white superciliary stripe was bordered above and below by thin dark lines. The tips of the greater coverts formed a broad and conspicuous yellowish-white wing-bar, contrasting with the darker green bases to these feathers, while a second, but much less conspicuous wing-bar was produced by light tips to the median-coverts. The secondaries were broadly edged

whitish, a prominent feature of the closed wing. The call-note was an extremely loud "s-weet", faintly disyllabic, and much shriller and sharper than that of a Chiffchaff.

M.B., P.J.K.B., I.C.T.N., R.S., E.T.

Scarlet Grosbeak (*Carpodacus erythrinus*). Two females were watched at close range in pines near the lighthouse on 23. september. They somewhat resembled female House Sparrows (*Passer domesticus*), but the following distinctive points were noted. Head dark chestnut-brown, clearly demarcated from the rest of the body-plumage. Pale buff breast and underparts, finely streaked darker. Upper back prominently striated with black and buff in longitudinal directions; secondaries similar. A prominent buff stripe led backwards from the eye, and a dark line below the eye joined the dark nape. Two pale wing-bars were noted, the distal one crossing the wing, the proximal one somewhat crescentic; they were sometimes obscured by the loose flank-feathers. The bill was stout and conical, almost pink in colour, the legs were rich dark brown. M.B., D.J., I.C.T.N.

DANSK RESUMÉ

Træk af landfugle ved Blåvandshuk i september og oktober 1955.

Trækket af småfugle og rovfugle blev studeret ved Blåvandshuk, det vestligste punkt i Jylland, fra 5. til 11. september og fra 18. september til 10. oktober 1955 i fortsættelse af observationerne i september 1954 (Jenkins og Nisbet 1955). Man havde særlig opmærksomheden henvendt på vejrets indflydelse på småfugletrækket, men trækket af hav- og kystfugle blev også studeret og er beskrevet særskilt (Nisbet 1956).

Dagtrækket blev studeret, idet man talte alle fugle, der sås flyve forbi udvalgte observationspunkter i to timer hver morgen (tabel 1). Trækmønsteret i dette område adskilte sig fra det, man havde iagttaget i 1954. Fuglene var ikke så villige til at krydse over havet, og de var mere påvirket af ledelinier, hvilket medførte uregelmæssige træk, som det ses på fig. 1. De fleste arter kom 10–15 dage senere end i 1954, og trækkets forhold til vejret var også forskelligt. Disse forskelle vil blive nærmere diskuteret andetsteds (Nisbet, i trykken).

Nattrækket blev fastslået ved hjælp af daglig tælling af alle fugle, der rastede inden for 1 km fra Blåvand Fyr (tabel 2). De nattrækkende fugles bevægelser ved Blåvandshuk i 1954 og 1955 kan inddeles i tre kategorier:

1. I lige linie over Skagerak fra Norge. I dette træk deltog store antal fugle, og det fandt altid sted under et lavtryk, der bevægede sig mod øst fra Sydnorge (se fig. 2).

2. Små lokale træk af *Sylvia*-arter og andre arter, der sandsynligvis stammede fra det nordlige Danmark eller fra Sverige.

3. Træk fra det sydlige Sverige eller Nordøsttyskland gennem afdrift (jfr. WILLIAMSON 1955) i skyet vejr eller tåge. Et typisk tilfælde ses på fig. 3.

Der er ofte set østlige og sydøstlige fugle ved Blåvandshuk efter vejrforhold, der var gunstige for en vestlig bevægelse til det sydlige Skandinavien. I to tilfælde (6. september 1954 og 23. september 1955) synes dette afdriftstræk at være gået direkte til Danmark; i andre tilfælde nåede fuglene sandsynligvis Blåvandshuk efter først at være drevet ind i det sydvestlige Norge (se fig. 4).

Rovfugle passerede som regel Blåvandshuk i meget små antal, men et større træk observeredes mellem 21. og 24. september, i en periode med sydøstlig vind (tabel 3).

Der gives enkeltheder ang. bestemmelsen af to Jagtfalke (*Falco rusticolus*), en Hvidbrynet Løvsanger (*Phylloscopus inornatus*) og to Karmindompapper (*Carpodacus erythrinus*). Blandt andre observerede usædvanlige fugle kan nævnes Sibirisk Sortstrubet Bynkefugl (*Saxicola torquata maura*) (BURTON og NISBET 1956), to Blåhalse (*Luscinia suecica*), to Høgesangere (*Sylvia nisoria*), en Lille Fluesnapper (*Siphia parva*), en Markpiber (*Anthus campestris*), to Rødstrubede Pibere (*Anthus cervinus*) og 15 Laplandsværlinger (*Calcarius lapponicus*).

Det vigtigste, endnu uløste problem vedrørende trækket ved Blåvandshuk er forholdet mellem antallet af dagtrækkende fugle observeret ved kysten og trækintensiteten over et større område. Dette kunne muligvis løses ved hjælp af samtidige observationer ved Blåvandshuk og på sydspidsen af Skallingen.

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