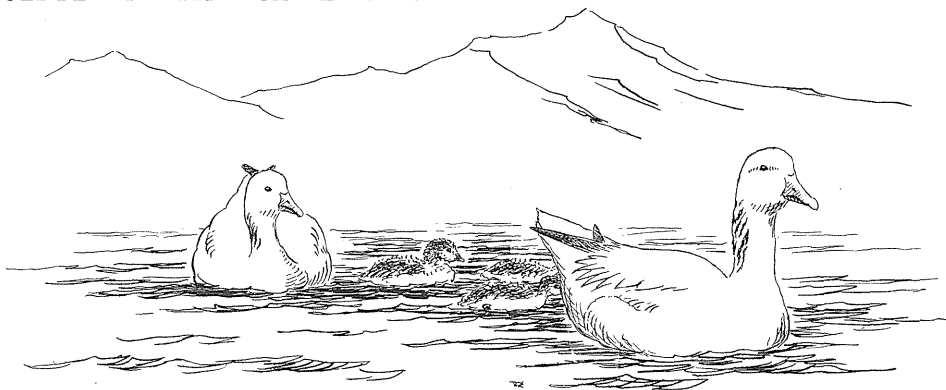


Bird observations in central North Greenland, 1984

OLE BENNIKE and MICHAEL KELLY



(Med et dansk resumé: Fugleobservationer i det centrale Nordgrønland 1984)

Introduction

The bird fauna of central North Greenland (Fig. 1) is almost unknown, even though the first observations were made as early as 1871-1873, during the United States North Polar Expedition (Davis 1876, Bessels 1879). Subsequent data include some scattered notes which are available from the British Arctic Expedition, 1875-1876 (Feilden 1877, Hart 1880), from the Second Thule Expedition which worked in the area in 1917 (Rasmussen 1927, Wulff 1934, Koch in Salomonsen 1950), and a few more recent observations recorded by Håkansson et al. (1981) and Dietz & Andersen (1984).

During geological mapping for the Geological Survey of Greenland from 20 June to 19 August 1984 we noted the birds which we came across. In the course of the short summer season we had 17 camps more or less scattered over the region. Camps were moved by helicopter, which was also used during more extensive reconnaissances.

The climate of the region is high-arctic, with short, cold summers. The southern part plus Nansen Land has the most sunny weather during the summer, whereas the north coast of

Hall Land and Nyeboe Land very often is covered by fog. Southern Nares Land and southern Freuchen Land seem to be the areas with the greatest precipitation.

The climate combined with the topography and the geology determines the vegetation, and thereby to a large part the bird life. By far the most luxuriant vegetation is found in the valleys of Nansen Land to the northeast, whereas Hall Land to the southwest has the most sparse vegetation. Wulff Land in the middle of the region is intermediate between these extremes. In spite of the relatively warm climate in the southern part of the area, the vegetation here is desert-like, because of unfavourable geology (limestone) and low precipitation.

Most birds are found in the lowland areas, of which a broad belt stretches from central Hall Land through Warming Land and central Wulff Land to southern Nares Land. In the rest of the region lowland areas are small and scattered, mostly restricted to valleys. Most of the region is characterized by dissected plateaus, but Nansen Land has alpine topography. Lakes are rare in North Greenland compared with West Greenland, but restricted areas with many lakes occur in southern Hall Land,

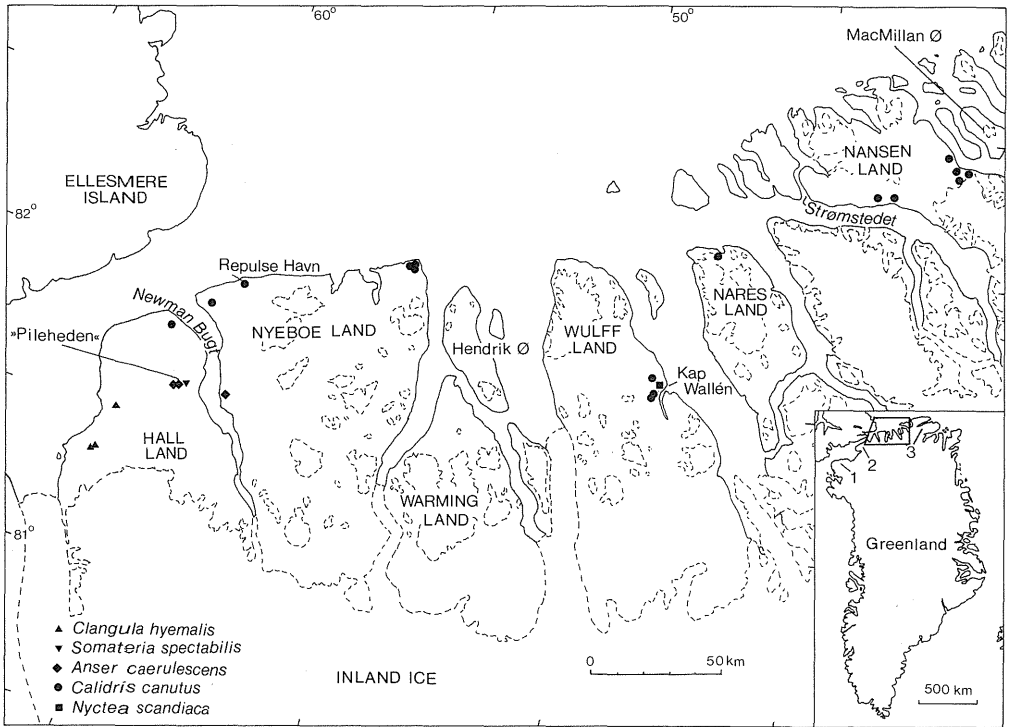


Fig. 1. Central North Greenland showing localities mentioned in the text. 1: Inglefield Land, 2: Washington Land, 3: Peary Land. The symbols indicate confirmed breeding records of Long-tailed Duck, King Eider, Snow Goose, Knot and Snowy Owl.
Lokalitetskort over det centrale Nordgrønland. 1: Inglefield Land, 2: Washington Land, 3: Peary Land. Symbolerne viser sikre ynglefremkomster af Havlit, Kongeederfugl, Snegås, Islandsk Ryle og Sneugle.

southwestern Nyeboe Land and in central Wulff Land.

The deep fjords in the region are covered by permanent ice. The only exceptions are small areas at outlets of rivers, inner Newman Bugt, and an isolated polynia, Strømstedet, at Nansen Land. Off the west coast of Hall Land is pack ice of varying coverage during the summer, and from year to year.

List of species

Red-throated Diver *Gavia stellata*

Three birds were seen in northernmost Wulff Land 26 June, one in northernmost Nares Land 28 June, three in Strømstedet 2 July and one near 'Pileheden', Hall Land, 11 August. Not previously recorded between Washington Land (Salomonsen 1950) and Peary Land (Johnsen 1953), but presumably a scarce breeding bird in the region.

Greater Snow Goose *Anser caerulescens atlanticus*

One pair with a single gosling was found in a lake in western Nyeboe Land 27 July, and two pairs, with three and five goslings respectively, were found near 'Pileheden', Hall Land, 11 August. Observations of four adult birds in northernmost Wulff Land 26 June and one adult at Kap Wallén, eastern Wulff Land, 11-12 July, may indicate breeding in this area as well.

Not previously recorded as a breeding bird in Greenland outside the Thule area, and probably not present in central North Greenland at the turn of the century. Over the last three quarters of this century the total number of Greater Snow Geese has increased drastically, from a few thousand to more than 200,000 individuals (Anon. 1981). We suggest that the species is spreading in North Greenland.

Brent Goose *Branta bernicla*

Three birds at Repulse Havn, Nyeboe Land, 19 July, were the only observed.

In 1871-1872 the species was quite common and breeding in Hall Land (Bessels 1879, Davis 1876), and it was common in the region and in eastern North Greenland at the beginning of this century (Wulff 1934, Salomonsen 1950, Johnsen 1953). In recent years it has only been observed a few times in eastern North Greenland (Meltofte 1976), and only a single record of breeding is known (Håkansson et al. 1981).

King Eider *Somateria spectabilis*

A female with four ducklings was found in a small lake near 'Pileheden', Hall Land, 11 August. Small flocks of four and two females were seen in western Hall Land 30-31 July, and down as well as tracks at several small lakes in this area indicated breeding.

During the North Polar Expedition 1871-73 the species was observed off western Hall Land, often together with Common Eider *S. mollissima*, but no proof of breeding was obtained (Bessels 1879). Koch (in Salomonsen 1950) saw the species at several localities in the region, for instance at Dragon Point on northernmost Hendrik Ø, in 1917.

Long-tailed Duck *Clangula hyemalis*

Females with ducklings were observed in three lakes in eastern and southwestern Hall Land 31 July-8 August. Single birds or small flocks were observed in Nyeboe Land and Hall Land. The species is a rather common breeding bird in the southwestern part of the region.

According to Bessels (1879) it was rare but breeding in western Hall Land 1872. Also found breeding here by Jeppe Möhl in 1965 (Dietz & Andersen 1984).

Rock Ptarmigan *Lagopus mutus*

Females with chicks were seen at three places in Nansen Land 3 July and 13 August, in one place in eastern Wulff Land 12 July, and in one place in eastern Nyeboe Land 16 July. Furthermore birds were seen in Nares Land and in Hall Land, with a total of 18 adults. The species is a common breeding bird in Nansen Land, scattered in the rest of the region.

Rock Ptarmigan were encountered very often in Nansen Land and in northern Wulff Land during the Second Thule Expedition in

1917 (Rasmussen 1927, Wulff 1934). Rather common in Hall Land during the North Polar Expedition 1871-73 (Bessels 1879).

Ringed Plover *Charadrius hiaticula*

Observations of single or paired birds were made in northern Nares Land and in Nansen Land, totalling only five birds. One pair in northern Nares Land 30 June showing song flight was the only indication of breeding.

The species has not previously been observed between Peary Land, where it breeds in the central parts (Håkansson et al. 1981) and Inglefield Land, where it probably breeds (Salomonsen 1950).

Knot *Calidris canutus*

Perhaps as common as the Turnstone, with a total of 116 adult birds seen. Nests with eggs (3, 13 and 19 July), newly hatched young (10 July) or birds performing distraction behaviour were observed on 16 occasions, in Hall Land, in Nyeboe Land, in Wulff Land, in Nares Land, and in Nansen Land. The species seems to be missing in the areas near the inland ice, and it is most common in the northeastern part of the region. The birds were often breeding in areas with a very scanty vegetation, and at high altitudes.

Wulff (1934) found downy young in Wulff Land and on Hendrik Ø, and the species was found to breed in Hall Land 1876 (Hart 1880).

Sanderling *Calidris alba*

35 adult and 2 juvenile birds were seen. In Nyeboe Land and Hall Land newly hatched young (30 July) and birds showing distraction behaviour were observed at four occasions. Birds in song flight were seen in Wulff Land, whereas no indication of breeding was obtained in Nansen Land, where only a few birds were seen.

In 1872 two nests were found in Hall Land (Bessels 1879).

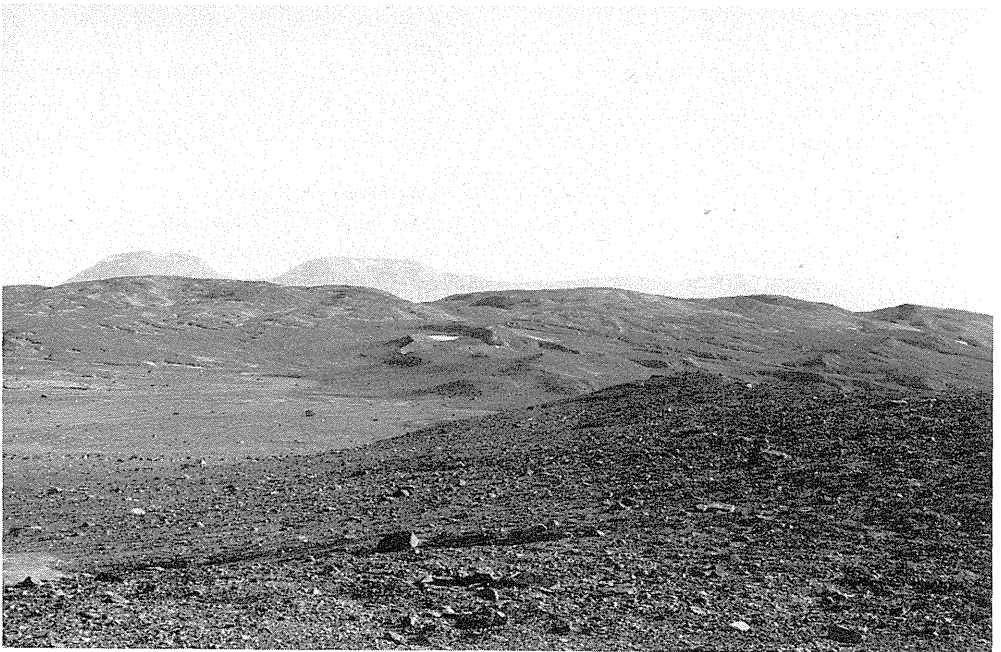
Turnstone *Arenaria interpres*

The Turnstone was probably the most common wader with a total of 141 adult and 15 juvenile birds seen. Only one nest with eggs was seen (Nansen Land 9 July), but the birds often behaved aggressively, chasing us as well as Long-tailed Skuas *Stercorarius longicaudus* and Snowy Owls *Nyctea scandiaca*.



Sverdrup Ø 13 August. Due to favourable geology and climate the valleys in Nansen Land are relatively luxuriant.

Sverdrup Ø 13. august. På grund af gunstig geologi og klima er dalene i Nansen Land relativt frodige.



Northwestern Hall Land 4 August. The very poor vegetation and birdlife in Hall Land is perhaps caused by almost constant windy to stormy weather, such as we experienced in the summer of 1984.

Nordvestlige Hall Land 4. august. Den særdeles fattige vegetation og det dermed sparsomme fugleliv i Hall Land skyldes måske et næsten konstant blæsende til stormende vejr, således som vi oplevede det i sommeren 1984.

The species is common in Nansen Land and in Wulff Land, and more scattered in other parts of the region.

Long-tailed Skua *Stercorarius longicaudus*

A total of 91 adult birds were seen. Pairs mobbing us were very common in Nansen Land 2-10 July. On two occasions, in Nansen Land and in Wulff Land, a single bird was seen mobbing Snowy Owls, and distraction behaviour was observed on one occasion in eastern Wulff Land 11 July. One not yet fledged young was seen in western Nyeboe Land 26 July, and two newly fledged young attended by an adult were seen in southeastern Nyeboe Land 14 August. The species is common in Nansen Land and Wulff Land, rather common in Nyeboe Land and rare in the rest of the region.

According to Hart (1880) a few pairs were breeding in western Hall Land 1876. Wulff (1934) found a nest with eggs in Nansen Land 2 July 1917.

Glaucous Gull *Larus hyperboreus*

One in southeastern Warming Land 20 June and one in southwestern Hall Land 9 August were the only observations.

Bessels (1879) records the species as a breeding bird in Hall Land 1872, but at present it is probably not breeding between Washington Land (Salomonsen 1950) and Peary Land (Håkansson et al. 1981).

Ivory Gull *Pagophila eburnea*

The remains (connected wings and one leg) of a dead bird was found in southwestern Hall Land. In 1980 a colony numbering c. 20 birds was found on steep cliffs at Kap Kane, just east of the region (Bennike, unpublished).

In 1917 Wulff (1934) encountered the species rather frequently in the fjords of the region, and Bessels (1879) regards it as a breeding bird in Hall Land, where it was also observed in 1876 (Hart 1880). West of the region breeding Ivory Gulls have been found in Washington Land (Salomonsen 1950).

Arctic Tern *Sterna paradisaea*

Single birds or small flocks were seen all over the region, including five in western Nyeboe Land 26 July and six in western Hall Land 30 July. A total of 28 birds were seen.

An Arctic Tern nest has previously been found in southeastern Wulff Land (Håkansson et al. 1981). In western Hall Land the species was breeding in 1872 (Bessels 1879), and in 1876 one nest was found (Hart 1880).

Black Guillemot *Cephus grylle*

Two adult birds were lying in the middle reaches of Newman Bugt 2 August. The fjord is bordered by lowlands in this area, and no potential nesting places were seen.

The Black Guillemot was the most frequently observed bird along the west coast of Hall Land in 1872, but apparently no proof of breeding was obtained (Davis 1876, Bessels 1879). A few were also seen here in 1876 (Hart 1880).

Snowy Owl *Nyctea scandiaca*

Four birds were seen in Nansen Land 6-8 July and about eleven, including three downy young in a nest, were seen in Wulff Land 11-14 July. Furthermore two birds were seen in Warming Land 14 July and 17 August, and one bird was seen in Hall Land 31 July.

During the Second Thule Expedition two nests were found in Nansen Land 4 and 8 June 1917 (Rasmussen 1927), and the species was also found to breed in Warming Land (Salomonsen 1950). A.K. Higgins (in Dietz & Andersen 1984) reports on a breeding owl on Macmillan Ø in eastern Nansen Land in 1980.

Snow Bunting *Plectrophenax nivalis*

Snow Buntings were met with almost everywhere, though in some larger lowland areas they were rare because of lack of nesting places. Breeding was proved in Nyeboe Land and in Hall Land. One brood in Nyeboe Land fledged between 15 and 16 July, and from this date onwards many family flocks were observed. A flock of 42 birds, mostly juveniles, was seen in western Warming Land 17 August. The Snow Bunting was found to be the most common breeding bird in the region.

Additional species previously recorded from the region

Fulmar *Fulmarus glacialis*

A single bird was seen off western Hall Land 1872 (Bessels 1879).

Common Eider *Somateria mollissima*

Quite common and breeding in western Hall Land 1872 (Bessels 1879), and also seen here in 1876 (Hart 1880).

Gyr Falcon *Falco rusticolus*

A few birds were seen in Hall Land 1871-1872 (Bessels 1879), and one bird has been observed in Nansen Land by SIRIUS (Dietz & Andersen 1984).

Purple Sandpiper *Calidris maritima*

A record from Hall Land September 1871 (Bessels 1879) is questioned by Salomonsen (1950).

Arctic Skua *Stercorarius parasiticus*

Quite common and probably breeding in Hall Land 1872-73 according to Bessels (1879). Rejected by Salomonsen (1950).

Sabine's Gull *Larus sabini*

A male and a female, of which the female had an egg in the oviduct, were shot in Hall Land 1872 (Bessels 1879).

Kittiwake *Rissa tridactyla*

Visitor in Newman Bugt and off western Hall Land 1871-1872 (Bessels 1879).

Brünnich's Guillemot *Uria lomvia*

Bessels (1879) quotes this species to be rather common and breeding in western Hall Land. The record is rejected by Salomonsen (1950).

Little Auk *Alle alle*

Two birds were seen in Newman Bugt 1872 (Bessels 1879).

Raven *Corvus corax*

In western Hall Land one bird was observed in 1872 (Bessels 1879), and one pair was breeding here in 1876 (Feilden 1871, Hart 1880).

Acknowledgments

The paper is published with the permission of the Director of the Geological Survey of Greenland.

Resumé**Fugleobservationer i det centrale Nordgrønland 1984**

Det centrale Nordgrønland har aldrig været besøgt af zoologer endsige ornitologer, og kendskabet til regionens fugleliv er derfor særdeles sparsomt. De mest fyldige oplysninger blev indsamlet allerede i 1870'erne, senere er der kun gjort spredte iagttagelser. Under kortlægning for Grønlands Geologiske Un-

dersøgelse i sommeren 1984 havde vi lejlighed til at gennemføre et regionalt studium af regionens fugleliv.

Klimaet er højarktisk, og vegetationen er sparsom, dog er Nansen Land mod nordøst karakteriseret af relativt frodige dale. De fleste fugle er knyttet til lavlandsområder, der generelt er af ringe udstrækning. Sører er kun lokalt almindelige.

Følgende arter yngler i regionen: Snegås (tre ynglefund i Nyeboe Land og Hall Land), Kongeederfugl, Havlit, Fjeldrype, Islandsk Ryle, Sandløber, Stenvender, Lille Kjove, Havterne, Sneugle og Snespurv. Af de øvrige observerede arter er Rødstrubet Lom og Stor Præstekrave sandsynlige ynglefugle, mens Knortegås, Gråmåge og Tejst næppe yngler i området mere. Desuden fandtes en død Ismåge i Hall Land; en lille koloni opdagedes 1980 umiddelbart øst for regionen.

References

- Anonymous 1981: A Greater Snow Goose management plan. - Can. Wildl. Serv., US Fish and Wildl. Serv., and Atlantic Flyway Council.
- Bessels, E. 1879: Die amerikanische Nordpol-Expedition. - Leipzig.
- Davis, C.H. 1876: Narrative of the North Pole Expedition, U.S.S. *Polaris*, C.F. Hall Commanding. - Washington.
- Dietz, R. & O.G.N. Andersen 1984: Status over dyre- og plantelivet i Nordgrønland (Humboldt Gletscher - Independence Fjord). Del 1: Pattedyr og fugle. - Rapport, Råstofforvaltningen for Grønland og Grønlands Fiskeri- og Miljøundersøgelser.
- Feilden, H.W. 1877: List of Birds observed in Smith Sound and in the Polar Basin during the Arctic Expedition 1875-76. - *Ibis* 4. ser., 1: 401-412.
- Hart, H.C. 1880: Notes on the ornithology of the British Polar Expedition, 1875-76. - *The Zoologist* 3. ser., 4: 121-129 & 204-214.
- Håkansson, E., O. Bennike, P. Mølgård & P. Frykman 1981: Nordgrønlandske fugleobservationer - Sommerne 1976 og 1978. - *Dansk Orn. Foren. Tidsskr.* 75: 51-67.
- Johnsen, P. 1953: Birds and Mammals of Peary Land in North Greenland. - *Meddr Grønland* 128(6).
- Meltofte, H. 1976: Ornithological observations in southern Peary Land, North Greenland, 1973. - *Meddr Grønland* 205(1).
- Rasmussen, K. 1927: Report of the II. Thule-Expedition for the exploration of Greenland from Melville Bay to de Long Fjord, 1916-18. - *Meddr Grønland* 65(1).
- Salomonsen, F. 1950: The Birds of Greenland. - København.
- Wulff, T. 1934: Grönländska dagböcker, utgivna av A. Elvin. - Stockholm.

Received 7 June 1985

Ole Bennike, Geologisk Museum, Øster Voldgade 5-7, 1350 København K, Danmark
Michael Kelly, Department of Environmental Science, University of Lancaster, Lancaster LA1 4YQ, U. K.