

SPRING MIGRATION OF THE SIBERIAN KNOT *Calidris canutus* : ADDITIONAL INFORMATION

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Introduction

The increased interest in wader breeding biology and migration in recent years has, amongst other things, resulted in the international project on the migration system and strategy of the Knot *Calidris canutus*.

Dick (1979) reported a preliminary analysis of the results obtained during the 1979 spring migration of Siberian Knots. One of his conclusions was that northern Germany is the last important fattening site within the migration system.

In their analysis of Knots ringed in Norway, Andreassen and Råd (1977) indicated that spring migration of Siberian Knots also involved northern Norway. In a small fjord in eastern Finnmark, maximum numbers of 2500 individuals were counted.

In this note we present new information on the importance of northern Norway in the spring migration system of the Knot and it should be read with close reference to the preliminary results given by Dick (1979).

Results

The information was obtained mainly from literature and contact with amateur ornithologists.

Many of the fjords in the county of Finnmark have extensive mudflats suitable for foraging waders, but until the last few years little information on the occurrence of waders has been published. In the early 1970s Knots were counted in some of the fjords, and the results published by Randa (1976); see Table 1. The results indicate that Knots use these areas during the last two weeks of May. More important are numbers censused in the Porsanger fjord area in 1979, numbers which add considerably to the information presented by Dick (1979). Mr Tore Berg made three excursions to the Porsanger area (Fig.1) in May and June 1979. His results are presented in Fig.2, together with the results from France and Germany given by Dick (1979). These large numbers, more than 30 000 birds, were censused in two neighbouring areas after the birds came in from the mudflats in small flocks, to roost at high tide. One of the roosting flocks contained 22 000 - 25 000 individual, the other one 5 000 - 6 000.

These numbers are from the western part of the fjord; observations in previous years from the eastern parts indicate good numbers of Knot there as well. Knots have also been observed in small numbers in other parts of northern Norway. Andreassen and Råd (1977) mention Knots from the county of Troms, but no dates and numbers are given.

On Vega island, county of Nordland, three and two individuals were seen on the 15 and 19 of May 1977 respectively (Antonsen 1979). Knots are not mentioned on spring migration from the most important sites in the well known flyway over the eastern parts of southern Norway (Sonerud 1973). In the southwestern parts of Norway, in the Jaeren area, Knots are seen each May, but in small numbers (e.g. Bakke 1972).

Discussion

The results show, in comparison to the data presented by Dick, that the Porsanger area is of major importance in the spring migration system of the Knot. Different persons have suggested a likely total of more than 50 000 birds. Only detailed censuses can give a more exact number.

The Porsanger area is situated about 2000 kilometres NE of the important site in Germany, well within the non-stop flight range of the Knot. The distance between Vendée, France, and Porsanger is approx. 3000km. and this is also well within the maximum flight range given by Dick.

The low weights of Knots in France do not support the idea that the Knot from there overflowed Germany, as about 55 gms. of fat are needed to fly this distance. On the other hand, the departure of about 15 000 birds from Vendée on 13-15 May did not correlate with the arrival of similar numbers in German few days later. However, the birds could of course have arrived at other sites than the Scharnhorn Bay which was almost continuously censused. Thus, the Porsanger birds probably came from the Schleswig-Holstein area.

The results from 1979 and previous years show that the Knots start to arrive in northern Norway from mid-May, and have left for their breeding areas by early June.

A roosting site between Germany and the breeding sites should not be surprising. It must be a bad strategy to arrive at Taimyr almost completely exhausted, after a long flight from Germany. Assuming the departure weights from Porsanger to be about the same as those from Germany, the Knots could reach the breeding grounds of Taimyr in much better condition by using northern Norway as the last roosting site in their northward migration system.

Observations on the departure dates from Germany, and of the great numbers passing Finland, indicate that the entire Siberian population was not using roosting sites in northern Norway. Also we cannot assume that the picture for 1979 is generally the same for all years. Spring was late in 1979, and this may have influenced the migration pattern in northern areas.

Knots may possibly use other roosting sites between NE Norway and Taimyr, e.g. the estuaries of the great Russian rivers.

Finally we must mention that the Porsanger area is listed as one of the most important wetland areas in Finnmark, and therefore will probably be protected in the near future.

Acknowledgements

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(William Dick has also received information on this subject from Ole Wiggo Røstad (Zool. inst. P.O. Box 1050, Blindern, Oslo, Norway) who, as well as citing Randa (1976) and Berg (1979), notes that there are also unpublished records from Finnmark and comments that the areas concerned are large sandy flats, either delta areas or beaches. The vast areas of Finnmark are sparsely populated and only a few ornithologists live there. We do not yet know the full importance of Finnmark as a regular resting place for Siberian Knots on spring migration. - Eds.)

TABLE 1. Number of Knots *C.canutus* in some localities in eastern Finnmark, 1970-1972. From Randa (1976).

Locality	Date	Numbers
Munkefjord	30.5.70	250
"	24-26.5.71	2500
"	20.5.72	410
"	21.5.72	330
"	22.5.72	400
Skjåholmen	16.5.72	450

Figure 1. Map showing the most important staging posts of the Siberian Knot population during spring migration (stars). Stippled areas show breeding areas of Knot.

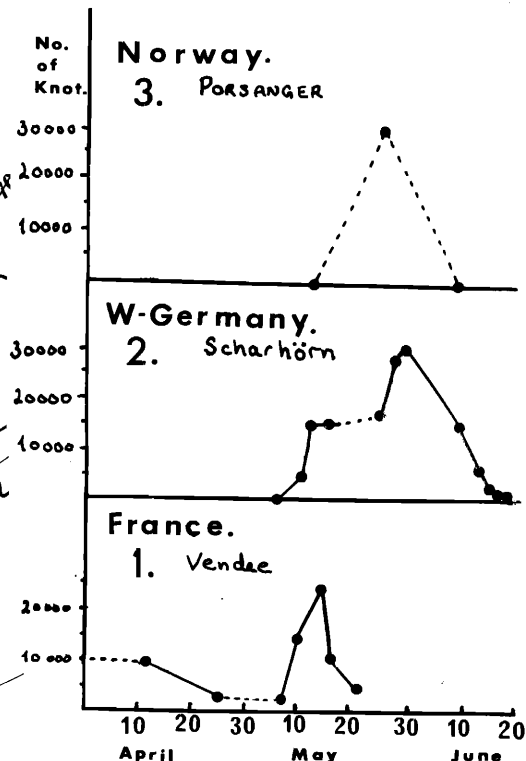
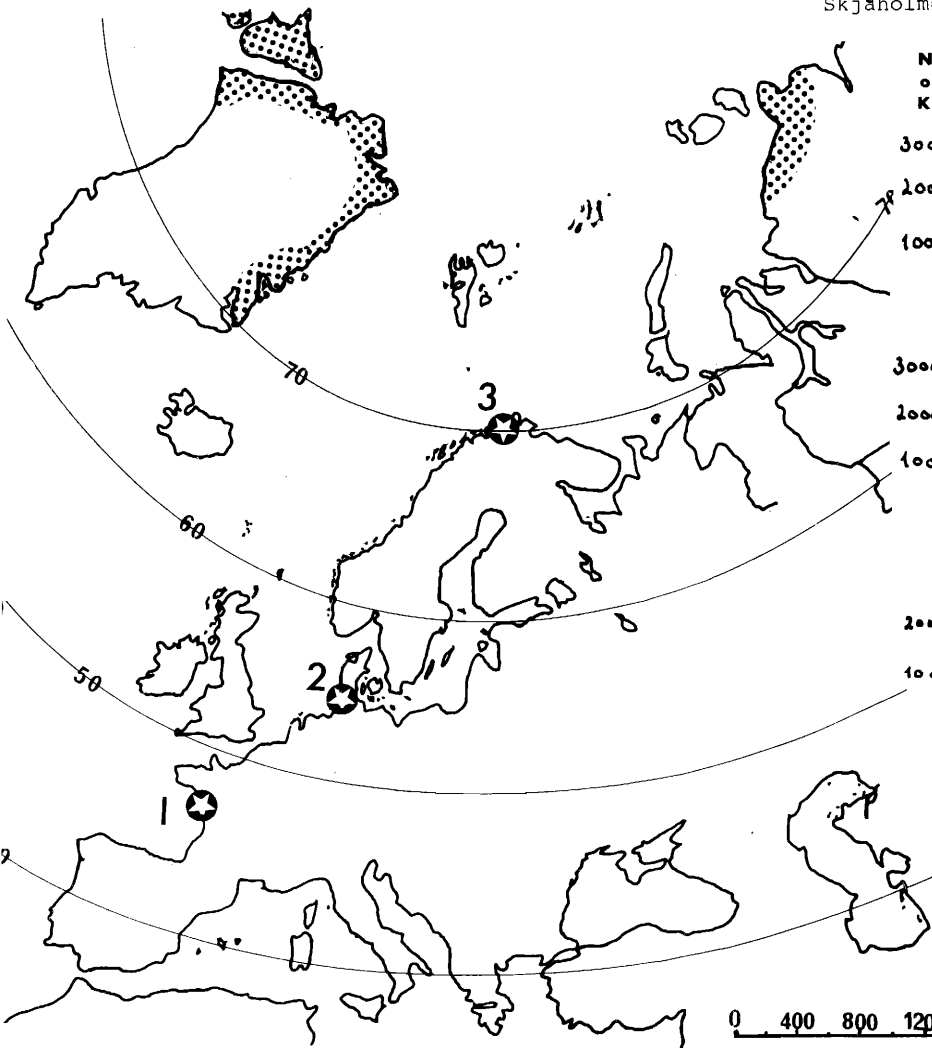


Figure 2. Timing of the migration of Knots, spring 1979. Numbers in France and Germany taken from Dick (1979). Locality numbers referring to map Fig.1.