

THE GREY SEAL, *HALICHOERUS GRYPUS* (FABRICIUS), IN FINNMARK, NORWAY

By

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ABSTRACT

WIIG, Ø. 1987. The grey seal, *Halichoerus grypus* (Fabricius), in Finnmark, Norway. *FiskDir. Skr. Ser. HavUnders.*, 18: 241-246.

The distribution, abundance and breeding season of grey seals in Finnmark, Norway are reviewed. The seals are divided into eight hypothetical stocks: Sørøya, Magerøya, Laksfjord, Tanafjord, Kongsfjord, Syltefjord, Vardø and Varangerfjord. Breeding has been verified for five of these stocks. The total minimum observed stock size is 353 grey seals, but the real number is probably much higher. The breeding season seems to be in October-November west of Nordkapp and in December in the eastern part of the county.

INTRODUCTION

The grey seal, *Halichoerus grypus*, and the common seal, *Phoca vitulina*, are the only resident seals on the coast of the Norwegian mainland. The grey seals seem to prefer the outlying skerries for their breeding while the common seals select more sheltered areas.

ØYNES (1964) recorded 660 pups of grey seals in 1963 from Møre to Finnmark, but no pup production was recorded from southern Norway, although the grey seal has been observed at several localities also in that part of the country. Based on the figures of ØYNES (1964, 1966), SUMMERS *et al.* (1978) estimated the total population in Norway to 2000-3000 grey seals.

A study of coastal seals and their interactions with inshore fisheries along the Norwegian coast from Stad (about 62°N) to Lofoten (about 68°N) was initiated by the Institute of Marine Research in 1974. The study has later been extended to the entire Norwegian coast. One result of this study is new information on the distribution and abundance of grey seals along the Norwegian coast which has been reviewed by WIIG (1986). The surveys indicate a minimum total stock of 3100 grey seals on the coast of Norway.

ØYNES (1964) reported two known colonies of grey seals in Finnmark county and estimated the number of breeding females to be three. Recent surveys show that the stock of grey seals in Finnmark is much higher.

METHODS

The number of seals has been estimated from aerial and ground surveys.

The aerial surveys were made from a high-wing, twin-engined Islander aircraft. In addition to direct counting, the seals were photographed by 35 mm hand-held reflex-cameras, using colour reversal film as recommended by VAUGHAN (1971). By this method large areas could be surveyed during short periods of time.

The ground surveys were made from 12'–15' Zodiac inflatable boats which are well suited for fast landings on rocky shores and skerries. The seals were counted by sight. By this method only a restricted area could be surveyed each day.

RESULTS

Seal counts by aerial and ground surveys on the coast of Finnmark are shown in Table 1 and the localities are shown on Fig. 1.

Two ground surveys lasted for several days, which could allow double observations of the same seals. However, distances between the localities are so large that such effect is not believed to have biased the results.

In addition to the observations given in Table 1, single seals have been observed at different localities along the coast between Grense-Jacobselv and Sørøya.

Proof of breeding has been reported from five areas. At Sørøya seven pups were tagged at Store- and Lille-Kamøya in 1982 (ØRITSLAND, 1982). At Skarholmen in Tanafjord two white pups were observed in January 1979. In Kongsfjord one white pup and five pregnant females were observed on 16 December 1982, and two pups (2–3 weeks old) were observed on 5 January 1984. At Syltefjorden one pup (about 2 weeks old) was observed on the eastern shores of Makkaurfjord on 5 January 1985. In addition, local hunters have reported taking pups in this area in previous years. The fifth locality is at Vardø, where one pup (about 4 weeks old) was tagged and another pup was observed in the sea on 10 January 1985.

It is worth noting from Table 1 that in the western part of the county pups have been observed in late October to early November, while the pups observed in the eastern part seem to have been born in December. Such late pupping in this area has also been reported from local sources (BERGFLØDT *et al.* 1985). Two white pups were observed on Skarholmen in Tanafjord on 15 January 1979 and two pups (2–3 weeks old) were observed on Skarholmen in Kongsfjord on 5 January 1984.

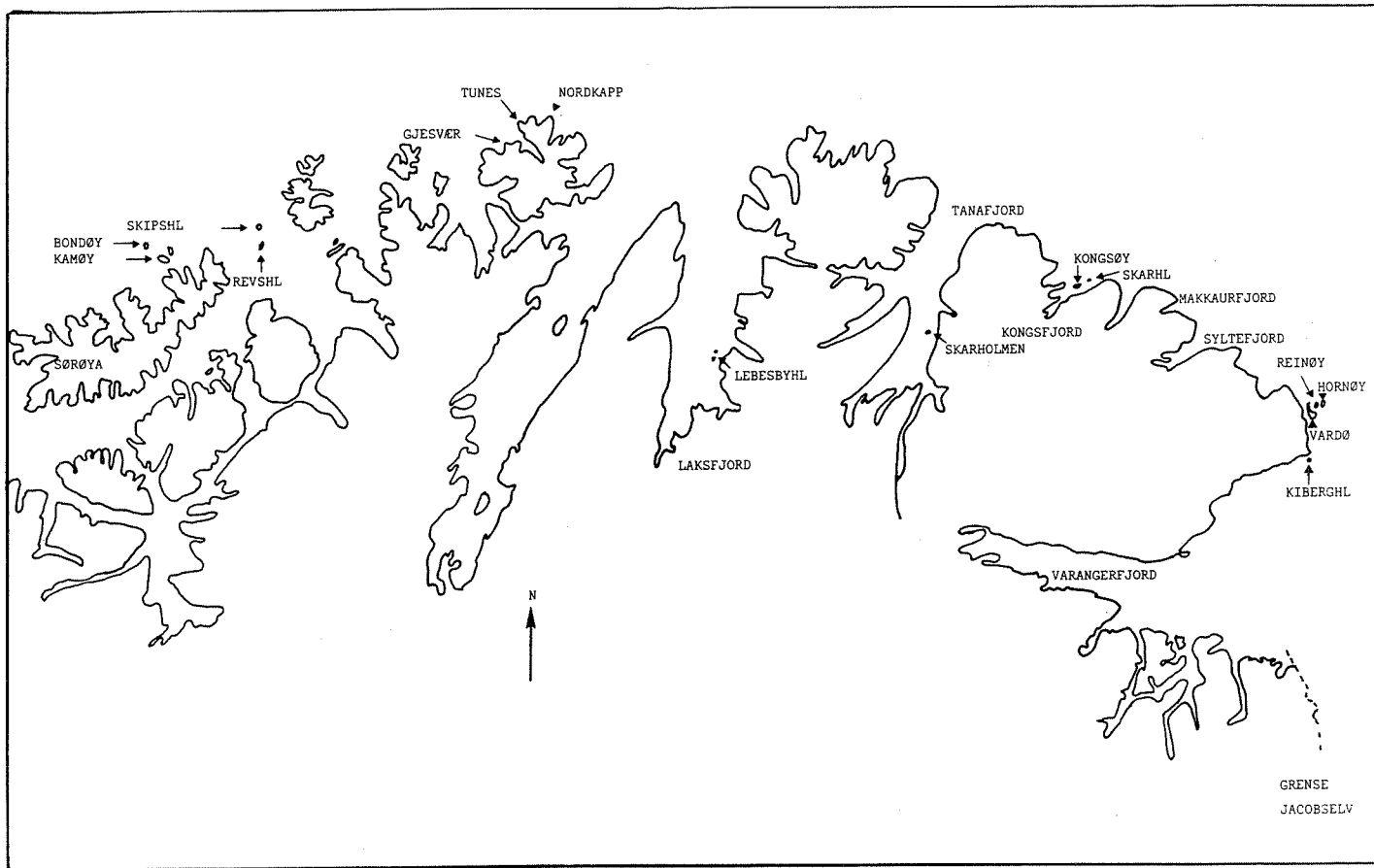


Table 1. Observations of grey seals in Finnmark and minimum local stock sizes.

Localities	Recorded numbers								Minimum stock size	
	June-July 1981 (Björge <i>et al.</i> 1982)	November 1981 (Bergflødt and Fagerheim 1981)	October 1982 (Øritsland 1982)	November 1982 (Øritsland 1982)	December 1982 (Fagerheim and Bergflødt 1982)	June-July 1983 (Øritsland 1983)	April 1984 (Øien 1984)	January 1985 (Bergflødt <i>et al.</i> 1985)		March 1985 (Bergflødt and Wiig 1985)
Bondøy S.-and L.-Kamøy Revsholmen Skipsholmen	70		1 ¹	6 ²		2 8	125			125
Gjesvær Tunes	5 3						40			40
Lebesbyholmene							50			50
Skarholmen in Tana								× ⁴		50
Kongsøy Skarholmen				10 ³		20		11	29	29
Syltefjord Makkaurfjord	40	30						5 ⁵	3	40
Reinøy/Hornøy Kibergsholmene		2				4	7 1	15 16 ⁷	3 ⁶	19
Total										353

¹ White pup and many adults² Newborn pups and many adults³ One white up, five pregnant females and four males⁴ Tracks from 50–75 seals⁵ One pup about 2 weeks old⁶ Two pups about 3 weeks old⁷ One pup about 3 weeks old

DISCUSSION

Our knowledge of grey seals in Finnmark is relatively limited. The main reason for this is the extreme weather conditions in this area during early winter from October to January when the seals are expected to breed.

ØYNES (1964) reported two breeding sites of grey seals in Finnmark. The northernmost site was situated just west of Nordkapp, where three pups were born in October 1962. The other breeding site reported by Øynes was at Bondøya outside Sørøya. However, the number of pups born at this site was unknown because no one had visited the island at that time of the year. According to the observations reported here, five more breeding localities of grey seals in Finnmark can be added to the two reported by ØYNES (1964). As a hypothesis it thus seems convenient to separate the grey seals in Finnmark into eight local stocks. These are those of Sørøya, Magerøya, Laksfjord, Tanafjord, Kongsfjord, Syltefjord, Vardø and Varangerfjord. Breeding has been verified for five of these stocks.

In order to get a rough estimate of the number of grey seals in these local stocks, a minimum size is estimated from the largest number of seals observed in each area (table 1). These numbers add up to a minimum stock size of 353 grey seals in Finnmark. There are many inaccuracies attached to these figures and the actual number of grey seals in the county is probably much higher. BJØRGE (unpubl.) estimated the number of grey seals in Finnmark in 1983 to be about 400.

The breeding season in Finnmark seems to differ between areas west and east of Nordkapp. At Sørøya pups have been observed in October and November, whereas on the coast from Tana to Vardø pups have been observed from December to January. Further south, between 62°N and 68°N where most of the Norwegian stock of grey seals is found, the breeding season is in September and October (BENJAMINSEN *et al.* 1977). Thus, there seems to be a cline in the date of breeding of grey seals along the Norwegian coast from 62°N to Vardø. The breeding season in Rogaland county is, however, also late, occurring in November–December (WIIG 1986), so that the cline does not extend to the southern part of the coast. The breeding season in eastern Finnmark also appears to be later than on the Murman coast which is in November (KARPOVICH *et al.* 1968). The reason for such late breeding in eastern Finnmark is not clear.

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