Published on paper: 1988. Published online: 2024-10-22.
ISSN 1502-4873 (paper). ISSN 1891-5396 (electronic).
doi: https://doi.org/10.5324/fn.v9i0.6082.

The Grey Seal *Halichoerus grypus* (Fabricius) and the Common Seal *Phoca vitulina* L. in Troms, northern Norway

ØYSTEIN WIIG

Wiig, Ø. 1988. The Grey Seal *Halichoerus grypus* (Fabricius) and the Common Seal *Phoca vitulina* L. in Troms, northern Norway. *Fauna norv. Ser. A 9:* 43—46.

Grey and Common Seals in Troms county, northern Norway, were surveyed by boat during the summer 1987. A total of 419 Common Seals were recorded of which 63 or 14% were pups. The breeding season was dated to the second half of June. Twentyfive of the pups were tagged. Onehundredandsixty Grey Seals were counted. As Grey Seals are not usually found at the breeding site throughout the year, those counted might be migratory animals.

Øystein Wiig, Institute of Marine Research, P.O. Box 1870 Nordnes, N-5024 Bergen, Norway*.

INTRODUCTION

Øynes (1964, 1966) reviewed the regional distribution of Grey Seals and Common Seals along the Norwegian coast. He estimated the number of Common Seals in Troms as 698, while recording no Grey Seals as breeding in the county. Since then little new information has been gathered except from Wiig (1986), who gave 150 Grey Seals as a rough estimate of the population in the county. The present paper review information on the distribution of Grey Seals and Common Seals collected during a survey in summer 1987 (Bergfløtdt *et al.* 1987).

METHODS

Information on coastal seal localities in Troms was collected from Soot-Ryen (1939), Øynes (1964) and local sources. The areas surveyed were Kvænangen and the outer coast from Vanna to Gapøy.

The survey was performed by the use of 12'— 15'Zodiac inflatable boats, which are well suited for landing on rocky shores and skerries.

According to Venables & Venables (1960) the highest numbers of Common Seals are hauled out at low tide. Summers *et al.* (1980) presumed that the extent to which the haul-out site is exposed at high tide is important in determining the validity of counts. In the areas covered by this survey the difference between high and low tide in June/July is about 1.5 — 2.0 m. It was considered desirable to visit all sites at low tide, and every attempt was made to work as close to low tide as possible.

In addition to the counting, Common Seal pups were caught in the water and tagged with a yellow PVC «Dalton Jumbo Rototag» in the web of one of the hind flippers. Each tag has a serial number and the text «HAVFORSKNING BERGEN NORW» imprinted.

RESULTS

The number of Common Seals and Grey Seals observed at each locality are given in Table 1, and the localities are shown in Fig. 1. The minimum estimate of seals at a locality is the maximum count of seals observed. The number of Common Seal pups included in the total count is given in parentheses. The total minimum estimate of Common Seals in the surveyed area is 419. This included 63 (14%) pups. The total minimum estimate of Grey Seals is 160.

Twenty-five Common Seal pups were tagged.

* Present address: Norwegian Polar Research Institute, P.O. Box 158, N-1330 Oslo lufthavn, Norway.

Table 1. Maximum total counts of Common Seals (pup counts in brackets) and Grey Seals in Troms, northern Norway, based on a ground survey in the summer 1987.

Date	Locality	Common Seals	Grey Seals
21.6	Grimshl., Karlsøy	15	
22.6	Rundskj., "	22(7)	
"	Flesan, "	7	
"	Lyngøy, "	28(2)	30
23.6	Flatvær, "	2(1)	
24.6	Kjærringskj.,"		2
"	Hersøy, "	9	1
25.6	Måsvær, "	70(11)	6
"	Fagervær/Kvitvær, Karlsøy	7	20
26.6	S. Fugløy, Tromsø	5	
"	Sandøy, "		10
26-28.6	Risøy, "	80(18)	15
"	Treingan, "	11(4)	5
29.6	Vengsøy, "	5	10
30.6	Auvær, "		30
1.-2.7	Bergsøyan, Berg	55(12)	15
4.7	Holmenvær, Torsken	20	
"	Steinevær, Bjarkøy		15
5.7	Froholman, "	3	
6.7	Gapøyvær, Kvefjord	80(8)	
Mimimum total estimate		419(63)	160

DISCUSSION

The number of Grey Seals in Troms county is poorly known. The number observed during the present survey corresponds to the rough estimate given by Wiig (1986). None of these estimates was performed during the breeding season. As Grey Seals are not usually found at the breeding site throughout the year, those counted might be migratory animals. According to local sources, breeding does occur at several of the localities where Grey Seals were observed during the survey. This relates in particular to Risøy and Auvær, which are among the localities also noted by Øynes (1964).

Soot-Ryen (1939) reviewed information on seal rookeries in Troms county and gave 600 as an estimate for the number of seals, mostly Common, hunted each year. It seems reasonable to assume that the areas having the largest hunt also had the highest abundance of Common Seals. The hunt, which was economically important, led to a decrease in the Common Seal population. The seals in the county are now protected in parts of the year (see Wiig 1987 for a review) and the number of seals hunted each year is probably low.

According to Soot-Ryen (1939) the Helgøy district outside Ringvassøy was one of the best sealing districts in the county with an annual catch of about 75 seals. Twenty-five years later this area was still one of the best Common Seal districts (Øynes 1964). This is also a conclusion to be drawn from the present survey.

In the Hillesøy district in the outer part of Kvaløya and northern part of Senja more than 100 seals were hunted each year in the 1930's (Soot-Ryen 1939). Øynes (1964) recorded 25 Common Seals in the district, but during the present survey no seals were seen.

Øynes (1964) recorded 160 Common Seals on the outern part of Senja. This was the second best Common Seal district in the county, according to his survey. Soot-Ryen (1939), however, recorded very little sealing here, whereas about 75 Common Seals were recorded during the present survey.

The Bjarkøy district was recorded as a good Common Seal district by Soot-Ryen (1939), about 100 seals a year were hunted here in the 1930's. Øynes (1964) recorded 60 Common Seals in the area, but during the present survey only a few seals were seen.

In Kvæfjord west of Harstad about 50 seals were hunted annually (Soot-Ryen 1939). Øynes (1964) recorded only few seals here, whereas, during the present survey a large colony was found at Gapøyholmane.

As pointed out by Øynes (1964), there was a decrease in the Common Seal population in Troms county from the end of the 1930's to the beginning of the 1960's. This was probably due to heavy hunting. The counts from the present survey, which represent a minimum estimate, indicate that the stock today is lower than it was during the survey of Øynes (1964). Today the most abundant Common Seal areas in Troms county are the outer coast from Vanna in Karlsøy to Risøy in Tromsø, at Bergsøyan in Berg and at Gapøy in Kvæfjord.

According to local sources, the breeding season at some of the localities is in the midsummer week. Judging from the effort spent in catching and tagging pups, most pups seem to have been born within this period. 22 June six out of seven observed pups were tagged at a locality, whereas at the end of June and in the beginning of July, we only managed to

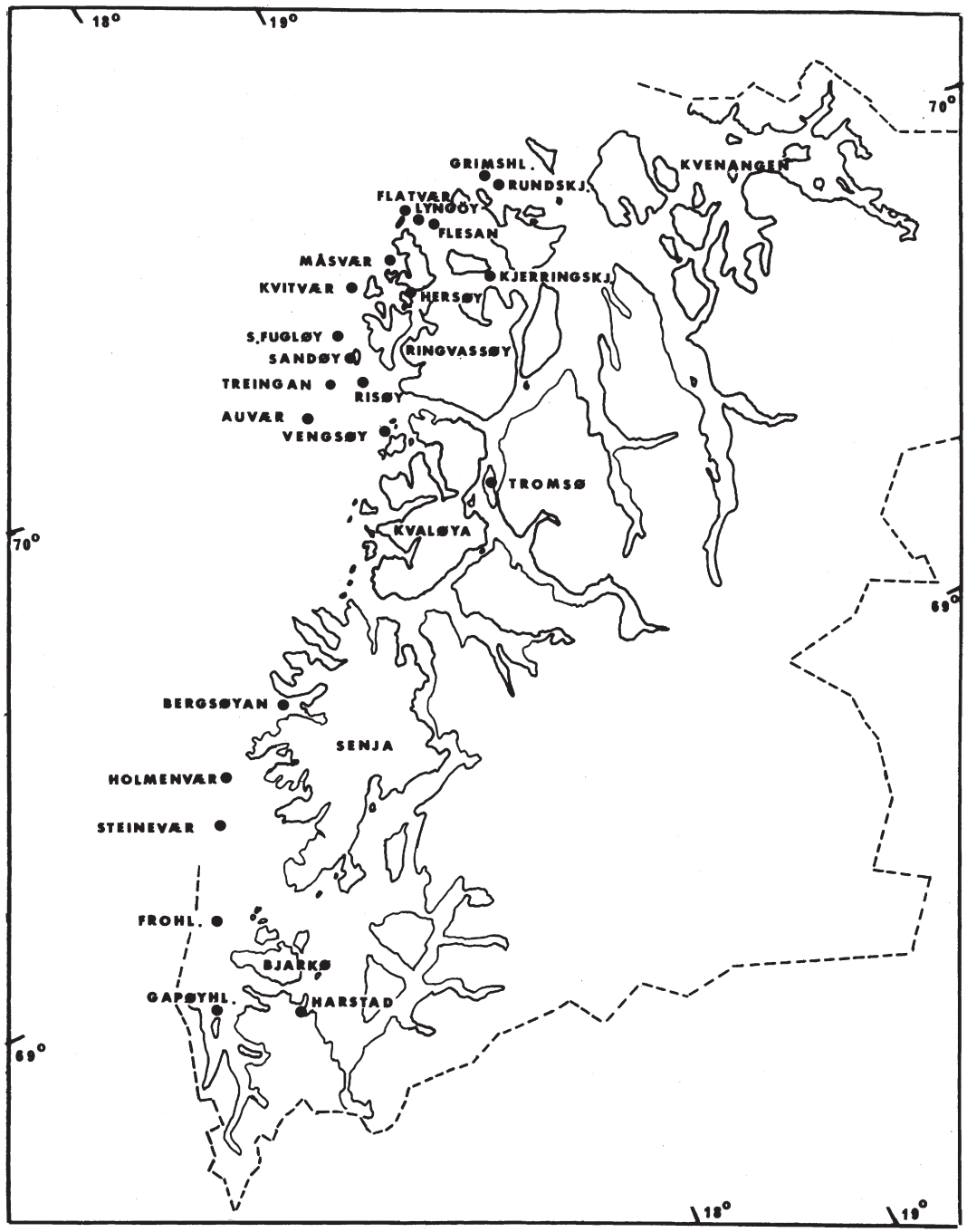

Fig. 1. Coastal seal localities in Troms county.

catch a few of the observed pups. They were too good swimmers at that time. The second half of June is also the breeding season recorded along other parts of the Norwegian coast (Wiig & Øritsland 1987).

Percentages of Common Seal pups in relation to the total counts at the end of the breeding season have been found to be between 16 and 21% for stocks in Great Britain (Vaughan 1977, Summers *et al.* 1980) and about 30% in the Wadden sea (Reijnders *et al.* 1982). The low percentage recorded in the present survey (15%) corresponds to the percentage recorded in Sogn og Fjordane county (14%) in a comparable survey (Wiig & Øritsland 1987). If it is assumed that the breeding season for Common Seals can last for one month, then surveys performed within two weeks will surely underestimate the production.

There is little available information on the hunting in the tagging area, the tagging experiment can therefore not be used to estimate the pup production. However, any recovered seal gives information on migration, and their teeth can be used to verify age determinations from the growth annuli in the cementum of the canine teeth.

ACKNOWLEDGEMENTS

I am grateful to K. Tellnes for drawing the map and to K. Foote for correcting the English text.

REFERENCES

Bergfløt, B., Fagerheim, K.A., Sæverud, A. & Wiig, Ø. 1987. Kystselundersøkelser i Troms og Vesterålen 19. juni—10. juli 1987. *Rapp. Fiskdir. Havforsk.Inst., SPS 8712:* 1—7.

Reijnders, P.J.H., Drescher, H.E., Haaften, J.L. van, Hansen, E.B. & Taugaard, S. 1982. Population dynamics of the harbour seal in the Wadden Sea. Pp. 19—32 in Reijnders, P.J.H. and Wolf, W.J. (eds.). *Marine mammals of the Wadden Sea.* A.A. Balkema, Rotterdam.

Soot-Ryen, T. 1941. Egg- og dunvær i Troms fylke med tillegg om kobbeveider. *Tromsø Mus. Årsb. 62 (1):* 1—112.

Summers, C.F., Warner, P.J., Nairn, R.G.W., Curry, M.G. & Flynn, J. 1980. An assessment of the status of the common seal *Phoca vitulina* in Irland. *Biol.Conserv. 17:* 11—123.

Vaughan, R.W. 1977. A review of the status of the common seal, *Phoca vitulina,* in Scotland. *Counc. Meet. int.Coun.Explor. Sea, 1977, No. 18.*

Wiig, Ø. 1986. The status of the grey seal *Halichoerus grypus* in Norway. *Biol. Conserv. 38:* 339—349.

Wiig, Ø. 1987. Existing laws and regulations for the management of coastal seals in Norway. *International workshop on coastal seals, Oslo.*

Wiig, Ø. & Øien, N. 1987. Recoveries of Grey Seals *Halichoerus grypus* (Fabricius) tagged along the Norwegian coast. *Fauna norv. Ser. A8:* 39—42.

Wiig, Ø. & Øritsland, T. 1987. The Grey Seal *Halichoerus grypus* (Fabricius) and the Common Seal *Phoca vitulina* L. in Sogn og Fjordane, western Norway. *Fauna norv. Ser. A8:* 21—24.

Øynes, P. 1964. Sel på norskekysten fra Finnmark til Møre. *Fiskets Gang 50:* 694—707.

Øynes, P. 1966. Sel i Sør-Norge. *Fiskets Gang 52:* 834—839.

Received 5 June 1988