# Observations of walruses along the Norwegian coast 1967–1992

IAN GJERTZ, GUNNAR HENRIKSEN, TORGER ØRITSLAND and ØYSTEIN WIIG



Gjertz, I., Henriksen, G., Øritsland, T. & Wiig, Ø. 1993: Observations of walruses along the Norwegian coast 1967-1992. *Polar Research 12(1)*, 27-31.

Extralimital observations of walruses are known to be quite common in Norway. The present review covers observations of walruses along the Norwegian coast between 1967 and 1992. A total of 34 different walruses have been recorded observed since 1967. These observations indicate a significant increase in the number of walrus observations in recent years, most likely due to an increase in the walrus population in the Barents Sea area. Most of the walruses observed are assumed to be subadult males.

I. Gjertz and Ø. Wiig, Norwegian Polar Institute, P.O. Box 5072 Majorstua, N-0301 Oslo, Norway; G. Henriksen, Office of the Finnmark County Governor, Department of Environmental Affairs, N-9800 Vadsø, Norway; T. Øritsland, Institute of Marine Research, P.O. Box 1870 Nordnes, N-5024 Bergen, Norway.

#### Introduction

Atlantic walruses (Odobenus rosmarus rosmarus L.) are occasionally observed along the coasts of northern and western Europe (see Born 1988, 1992 for review) and even as far south as Spain (Nores & Perez 1988). Collett (1912), Lund (1954) and Brun et al. (1968) summarized known observations along the Norwegian coast for the period 1900–1967. They suggested that the majority of walruses observed were from the closest habitats in the Barents Sea, i.e. Svalbard and the coast of Russia, and that the apparent increase in walrus observations after 1950 (18 of a total of 31 recorded observations) may partially be due to the walrus protection laws passed in Norway in 1952 and in the Soviet Union in 1956.

When Norway passed the total protection law in 1952, the walrus population was on the verge of extinction in Svalbard (Norderhaug 1969). Today the population has increased significantly and is believed to number at least one thousand animals (Gjertz & Wiig 1992). There are also strong indications that the Svalbard walruses belong to a common Svalbard-Frans Josef Land stock (Gjertz & Wiig 1992). Little is presently known about the current status of walruses along the Russian coast, but Timoshenko & Popov (1990) believe the population has remained stable since the protection law was passed in 1956.

A quarter of a century has passed since Brun et al. (1968) published their review of walrus observations from the coast of Norway. The aim

of the present paper is to document observations of walruses along the Norwegian coast in the period 1967–1992 and to discuss whether the recent increase of the walrus population in the Barents Sea has led to an increase in observations.

#### Methods

The Institute of Marine Research in Bergen, Norway, is often notified when walruses are observed along the Norwegian coast and elsewhere. The press also receives similar information. Most of this information is stored in a fauna database at the Sea Mammal Section of the institute. This database has provided the basis for this paper. Archives of national and local Norwegian newspapers were also searched for records of past walrus observations along the Norwegian coast. Little information could be collected for the period prior to 1980, however, because newspapers which had suitable archives had switched to electronic archives in the early and middle 1980s. Some details of information from the northern county of Finnmark were gathered from personal interviews.

When the source of reported information was known, relevant data were gathered such as the date, locality and exact position of the observation, and any details which would help determine the age and sex of the animals (Table 1). When the source was unknown, the Institute of

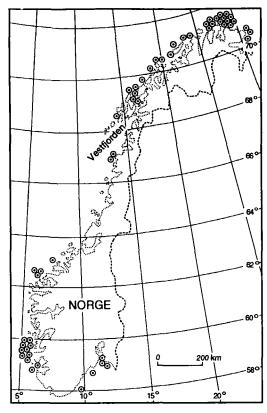


Fig. 1. Location of 53 observations of walruses (including 18 possible resightings and 1 dead walrus) along the Norwegian coast 1967–1992.

Marine Research was given as the source. If the observation dates were unknown, the dates of the published sources were given. In cases where the exact month could not be confirmed, a span in months is indicated, for example 03–04 indicates

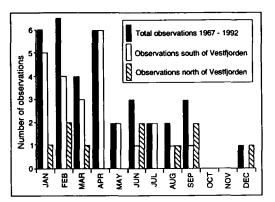


Fig. 2. Seasonal and geographic distribution of 34 observations of different walruses along the Norwegian coast 1967–1992.

an unknown day in March or April. When the month was known but not the exact day, question marks have been inserted, for example 8007?? indicates an unknown day in July 1980.

### Results

No walrus observations were recorded in the years 1967 and 1968. Of the total 53 walrus observations recorded (Fig. 1, Table 1), eighteen were possible resightings and one was of a dead walrus. Thus 34 observations of different walruses were recorded in the period 1967–1992. Most of the observations occurred in late winter (January-April) in the area north of Vestfjorden (Fig. 2).

The majority (21) of the observed walruses were classified as subadults on the basis of estimated tusk length, either from photography or

Table 1. List of recorded observations of walruses along the Norwegian coast 1969-1992.

Date	Locality	Position	Comments	Source
690225	Krampenes, Vadsø	70°06′N 30°10′E	Adult	Aftenposten 690228
6903-04	Vardø (city)	70°23′N 31°05′E	Adult, possibly same as 690225	Tor Døvle pers. comm.
711220	Gjøsundholmen, Vigra	60°34'N 6°07'E	18 months old calf	Sunnmørsposten 720117
720131	Flakstadvåga, Troms	69°12′N 17°22′E	Adult	Aftenposten 720201
720220	Valderøy, Ålesund	62°30'N 6°07'E		Øritsland (1973)
730324	Storsand, Hammerfest	70°47′N 23°25′E	Young, tusks 10-15 cm, shot dead	Frank Nilsen pers. comm.
7304–05	Kiberg, Vardø	70°18′N 31°E	Cow, calf and possibly one other animal	Line Kettunen pers. comm. Fritz Johansen pers. comm.
73 spring	Hjelmsøya, Måsøy	71°04′N 24°45′E	3 swimming walrus, possibly same as 7304-05	Bjørn Klausen pers. comm.
770623	Gulgofjord, Tana	70°40'N 28°36'E	Found dead	Rekstad (1977)

Table 1. Continued

Date	Locality	Position	Comments	Source
790816	Hammerfest (city)	70°40′N 23°39′E	Adult male	Bergens Tidende 790830
8007??	Bondøyskjær, Lebesby	70°30'N 26°45'E	Only one 20 cm tusk	Olav O. Olsen pers. comm.
810119	Bokkøy, Meløy	66°50'N 13°30'E	•	Nordlands Framtid 810119
8103-04	Ifjord, Lebesby	70°30'N 27°E	Two 20 cm tusks	Roald Erlandsen pers. comm.
810320	Førlandsfjd. Haugesund	59°25'N 5°15'E	Tusks 15-20 cm	Haugesund Avis 810321
			1 usks 15-20 cm	
810501	Sigerfjord, Hinnøy	68°37′N 15°23′E	6 1 1 1 i	Institute of Marine Research
810623	Lyngstad, Nordmøre	62°55′N 7°20′E	Subadult	Lofotposten 810630
				VG 810625
810626	Hvaler, Oslofjorden	59°N 11°E		VG 810626
810703	Oslofjorden	59°10′N 10°40′E	Subadult, possibly same	VG 810703
			as 810626	
8108??	Træna	66°30'N 12°E	Subadult	Institute of Marine Research
820214	Eigerøy, Rogaland	59°N 5°30'E	Subadult male	Stavanger Aftenblad 820304
820310-13	Oslofjorden	59°10'N 10°40'E	Possibly same as 820214	Mathiasson (1983)
	Sandøy, Langesundsfjd.	59°N 9°40'E	Subadult, tusks 10 cm,	Institute of Marine Research
820323	Sandøy, Langesundstju.	39 IN 9 40 E		mistrute of Marine Research
			possibly same as 820214	
820401	Brekkestrand, Tromøy	58°27'N 8°51'E	Subadult, possibly same	Agderposten 820401
			as 820214	Dagbladet 820403
820412	Lavvonjarg, Tana	70°30′N 28°30′E	Tusks aprx. 20 cm	Per Aleksandersen pers. comr
820417	Karlsøy, Troms	70°01′N 19°34′		VG 820417
820428	Bøvåg, Rennesøy	59°06'N 5°43'E	Subadult, possibly same	Stavanger Aftenblad 820428
			as 820214	<b></b>
820704	Grunnfjorden, Ringvassoy	70°02'N 18°57'E	Tusks 10-15 cm	Nordlys 820708
	Sletta NØ of Røver			Institute of Marine Research
820807		59°26′E 5°05′E	Possibly same as 820906	
820808	Møkstravåg, Hordaland	59°33′N 5°30′E	Possibly same as 820906	Institute of Marine Research
820810	Eltravåg, Sveio	59°40′N 5°23′E	Tusks 20 cm, possibly same as 820906	Institute of Marine Research
820814	Ølve, Hardangerfjorden	59°59'N 5°46'E	Possibly same as 820906	Bergens Tidende 820816
820819	Søre Øyane, Os	60°08'N 5°25'E	Possibly same as 820906	Bergens Tidende 820820
820822	•	60°15′N 15′E	Possibly same as 820906	Bergens Tidende 820824
	Hjellstad, Raunefjorden		•	
820824	Dolvik, Hordaland	60°19′N 5°15′E	Possibly same as 820906	Bergens Tidende 820825
820906	Hegvik, Lysefjorden	59°N 6°23'E	Subadult male, shot	Bergens Tidende 820906
830920	Ekofisk, Nordsjøen	56°N 2°40′E	Subadult male, tusks 20 cm	Stavanger Aftenblad 830920 Sunmørsposten 830920
8403??	Skarsvåg, Nordkapp	71°07'N 25°46'E	Two year old calf	Alfon Slettvold pers. comm.
8404??	Skarsvåg, Nordkapp	71°07′N 25°46′E	Possibly cow and two	Dagbladet 840829
0101:1	Skarsvag, Nordkapp	71 07 IN 23 40 L	year old calf. Same as	Dagorader 04002)
			8403??	<b>5</b>
840829	Skarsvåg, Nordkapp	71°07′N 25°46′E	Two year old calf, same	Dagbladet 840829
			as 8403??	VG 840829
			This calf stayed in the	Alfon Slettvold pers. comm.
			area until 860428	
850216	Grunnfarnes, Torsken	69°18'N 16°58'E	Tusks present	Nordlys 850216
850920	Rolvsøya, Måsoy	70°58'N 24°E	Tusks 10-12 cm	Rolf Hesjevik pers. comm.
8701-02	Breiviklandet, Hasvik	70°30′N 22°11′E	Tusks 10-20 cm	Håkon Holst-Olsen pers.
0701-02	Dicivikianuct, Hasvik	70 30 11 22 11 2	rusks to 20 cm	•
0005 07	Ciarram Na 41	71004/81 25021/5	Tuelse 50 over	comm.
8905-07	Gjessvær, Nordkapp	71°06′N 25°21′E	Tusks 50 cm	Dagfinn Jensen pers. comm.
900220	Sifjord, Senja	69°15′N 17°05′E	Adult male	Nordlys 900220
				Dagbladet 900220
910103	Nervei, Gamvik	70°40′N 27°52′E		Institute of Marine Research
910103	Myre, Vesterålen	68°55'N 15°03'E	Tusks 30 cm, on shore	Institute of Marine Research
10108	Andenes, Andøya	69°19'N 16°18'E	Adult male, possibly	Andøyposten 910110
	,		same as 910103	••
910207	Nervei, Gamvik	70°40'N 27°52'	Tusks 15-20 cm	Finnmarken 910207
910218	Torhop, Tana	70°30′N 28°E	Possibly same as 910207	Eivind Pettersen pers. comm.
910418	Simavåg, Skjervøy	70°N 21°E	Adult male	Nordlys 910418
920118	Smalfjord, Tana	70°26′N 28°03′E	Subadult	Finnmarken 920121
920401	Lyngen	69°50'N 30°E	Two animals	Norwegian Radio (NRK) loca transmission
	Eidkjosen, Tromsø	69°40'N 18°45'E	Subadult	VG 920502
920430				

personal comments from the observers. Nine walruses were classified as adults, two of which were females with calves. The remaining four were unclassified due to insufficient information.

### Discussion

According to Brun et al. (1968) at least 31 walrus observations were recorded along the Norwegian coast in the period 1900–1967. Eighteen of these were observed after 1950, and it was suggested that this increase was due to the ban on walrus hunting which was passed in the 1950s by both Norway and the USSR. These 18 observations plus the 34 observations of our study for the period after 1967 give a total of 52 (approximately 80%) of the 65 walrus observations along the coast of mainland Norway after 1950. Born (1988) hypothesized that this increase has been caused by a combination of climatic changes and a population increase in the Western Soviet Arctic and the Svalbard region.

In the years since 1967 human living patterns, particularly along the coastal areas of northern Norway, have changed. Large tracts of the northern coasts are now more or less uninhabited. The once large coastal fishing fleet has also been significantly reduced in size. This implies that fewer people frequent the more isolated parts of the coasts. The increasing number of walrus observations in recent years, possibly through lesser effort, i.e. fewer observers, therefore suggests that the number of walruses is increasing. It is also important, however, to remember that an increased public interest in conservation and wild-life may have been responsible for a higher incidence of walrus observations reaching the media.

According to Brun et al. (1968) the months with most sightings of walruses on the Norwegian coast were July and October. We, however, found that most of the observations were recorded in late winter. The reason for this apparent seasonal shifting is not clear. Most of the observations from our review for the period from January-April are from northern Norway. The nearest known walrus habitats are found in the area from the White Sea to Kolguev in northern Russia and the Svalbard coastal areas. According to Boloborodov & Timoshenko (1974) the walruses are found at Kolguev in January and February, implying that this is a wintering area. Some walruses could easily swim the relatively short

distance to northern Norway, which would explain the large number of observations from January to April. It is known that walruses often make swift long journeys in autumn and winter from Svalbard to the neighboring Frans Josef Land (Wiig & Gjertz 1991). They should therefore have little difficulty in swimming to mainland Norway. The apparent increase in the number of walruses, at least in the Svalbard regions (Gjertz & Wiig 1992), may be responsible for the increase in the number of walruses visiting the coast of mainland Norway at this time of the year.

Several authors have discussed the possible origin of extralimital walruses sighted in European waters (Ritchie 1921; Jensen 1927; Brun et al. 1968; Born 1988). Ritchie (1921) and Jensen (1927) hold that walruses observed in the U.K. and northern Europe come originally from Greenland. As most of the observations in Norway are from the northern coasts, it is most likely that these animals come from northern Russia or Svalbard (Brun et al. 1968; Born 1988).

We have used information on tusk lengths to indicate the sex and age of the animals (see Fay 1982). Based on this criterion, 21 of the 34 different walruses observed were considered to be subadults; nine adults of which four were males. Only two adult females had been observed. The difficulty in distinguishing between females and subadult males may bias these results. However, Mercer (1967) found no females among the extralimital walruses recorded in Newfoundland. Similarly Ritchie (1921) and Brun et al. (1968) found a predominance of males among the walruses recorded in their reviews. It is therefore possible that extralimital migrations are affected by sexual differences in behaviour (see Greenwood 1983). By comparison we seem to have recorded fewer adult males and more sub-adult animals than Brun et al. (1968). This may be due to inaccuracies in the estimations of tusk lengths.

Due to the increasing numbers of walruses in the Barents Sea area and an increased awareness and interest among the public, we expect the number of extralimital sightings of walruses visiting the Norwegian coast to increase in coming years.

## References

Beloborodov, A. G. & Timoshenko, L. K. 1974: In defence of the Atlantic walrus. *Priroda 3*, 97-99 (Transl. Ser. Mar. Serv. Can. 3812 (1976)).

- Born, E. W. 1988: Hvalrosstrejfere i Europa. Flora og Fauna (Århus) 94, 9-14.
- Born, E. W. 1992: Odobenus rosmarus Linnaeus, 1758 -Walross. Pp. 268-299 in Duguy, R. & Robineau, D. (eds.): Handbuch der Säugetiere Europas. Band 6: Meersäuger, Teil II: Robben - Pinnipedia. AULA-Verlag, Wiesbaden.
- Brun, E., Lid, G. & Lund, H. M. K. 1968: Hvalross, Odobenus rosmarus, på norskekysten. Fauna (Oslo) 21, 7-20.
- Collett, R. 1912: Norges pattedyr. H. Aschehoug & Co., Kristiania.
- Fay, F. H. 1982: Ecology and biology of the Pacific walrus, Odobenus rosmarus divergens Illiger. U.S. Fish. Wildl. Ser. North Am. Fauna 74, 1-279.
- Gjertz, I. & Wiig, Ø. 1992: Feeding of walrus Odobenus rosmarus in Svalbard. Polar Rec. 28, 57-59.
- Greenwood, P. J. 1983: Mating systems and the evolutionary consequences of mating. Pp. 116-131 in Swingland, I. R. & Greenwood, P. J. (eds.): The ecology of animal movement. Claredon Press, Oxford.
- Jenson, A. S. 1927: Hvalrossen ved Skagen og dens vandringsveje. Naturens Verden (Juni-Juli), 1-5.
- Lund, H. M. K. 1954: The walrus (Odobenus rosmarus (L.)) off the coast of Norway in the past and after the year 1900, together with some observations on its migrations and "cruising speed". Astarte 8, 1-12.
- Mathiasson, S. 1983: Valrossen-sällsynt, kulturhistoriskt inter-

- essant arktisk gäst vid Västkusten. Fauna och flora (Stock.) 78, 253-261.
- Mercer, M. C. 1967: Records of the Atlantic walrus, Odobenus rosmarus rosmarus, from Newfoundland. J. Fish. Res. Bd. Canada 24, 2361-2634.
- Norderhaug, M. 1969: Hvalrossens (Odobenus rosmarus) forekomst i Svalbardområdet 1960-1967. Norsk Polarinst. Årbok 1967, 146-150.
- Nores, C. & Perez, C. 1988: The occurrence of walrus (Odobenus rosmarus) in southern Europe. J. Zool. (Lond.) 216,
- Øritsland, T. 1973: Walrus in the Svalbard area. IUCN Publications New Series Supplementary Paper 39, 59-68.
- Rekstad, A. 1977: Død hvalross i Gulgofjorden, Finnmark. Fauna 30, 238.
- Ritchie, J. 1921: The walrus in British waters. Scottish Naturalist (1921), 5-9, 77-86.
- Timoshenko, Yu. & Popov, L. A. 1990. On predatory habits of Atlantic walrus. Pp. 177-178 in Fay, F. H., Kelly, B. P. and Fay, B. A. (eds.): The ecology and management of walrus populations. Marine Mammal Commission Report PB91-100479, Washington.
- Wiig, Ø. & Gjertz, I. 1991: Satellite telemetry of walrus at Svalbard. Abstract, Ninth Biennial Conference on the Biology of Marine Mammals, December 5-9, 1991, Chicago.