

A note on the harbour seal (*Phoca vitulina*) in the Faroe Islands

Bjarni Mikkelsen

Museum of Natural History, Fútalág 40, FO-100 Tórshavn, Faroe Islands

ABSTRACT

The harbour seal was exterminated as a breeding species in the Faroe Islands in the mid-19th Century. Historical sources document that the harbour seal used to be a common inhabitant of the sheltered fjords where breeding occurred. It was reported to be more common than the grey seal, the other pinniped specie resident around the Faroes. But the number of harbour seals seemingly decreased as human settlements and other anthropogenic activities increased. Seal hunting was apparently already introduced by the Norse that arrived on the islands in the 7th century, a hunt that finally lead to the extermination of the harbour seal. For the last 40 years the harbour seal has only been positively identified twice in the Faroe Islands, in 2001 and 2005.

Mikkelsen, B. 2010. A note on the harbour seal (*Phoca vitulina*) in the Faroe Islands. *NAMMCO Sci. Publ.* 8: 143-146

INTRODUCTION

The harbour seal (*Phoca vitulina*) is a medium-sized coastal seal widely distributed in temperate and arctic waters of the North Atlantic (King 1983, Bonner 1994). In the eastern Atlantic *Phoca vitulina vitulina* is breeding from Svalbard in the north to France in the south and around the UK and Iceland (King 1983, Bonner 1994). The species is typically found in congregations of up to several hundred animals around favourable haulout sites (King 1983). They are philopatric to their natal area and are rarely moving longer distances away from these locations (Stanley *et al.* 1996, Härkönen and Harding 2001). In the Faroe Islands the harbour seal was a common species, breeding in the fjords in early summer (Svabo 1783, Landt 1800), but the species became exterminated by the islanders around 1845 (Degerbøl 1940, Dánjalsson 1960, Reinert 1982). The species has not re-colonised the

Faroes, and has more or less been absent from these waters for 150 years (Bloch 1998). The present note gives a brief summary of the very limited information, mainly from anecdotal sources, available on the harbour seal in the Faroes Islands.

HISTORICAL INFORMATION

The Faroe Islands were settled by the Norse in the 7th century (Jóhansen 1985). The existence of the inhabitants on these isolated islands was very much dependent on natural resources. Cultivation of the land could fail and fish could also be absent from shallow waters in unfavourable years, so the use of whale resources in the traditional drive hunt, using wooden boats, became important at an early stage (Bloch 1998). Seal hunting was also an important food supplement which in addition provided oil for indoor lighting. Seals were

Fig. 1.
Men hunting
harbour seals
near the vil-
lage of
Gásadalur in
Vágoy ab.
1792, with the
traditional
seal hunting
equipment, the
wooden club.
(Drawing:
Christian L.U.
von Born
(1744-1805)).



hunted at their haulout and breeding sites, and killed with a wooden club (Svabo 1783, Landt 1800, see Fig. 1). Anecdotal sources indicate that both the harbour seal and the grey seal (*Halichoerus grypus*) may have been numerous in the Faroes in former times (Svabo 1783). The main behavioural differences between the

two species are documented. The smaller harbour seal was mainly distributed in sheltered fjord areas, where breeding occurred in May, while the larger grey seal was common in open waters and was breeding mainly in caves in October (Landt 1800). The seal hunt was mainly taking place, at least in more recent years,

Fig. 2.
A harbour
seal in the
harbour in
Nólsoy in
January 2001
(Photo: Jens-
Kjeld Jensen).



during the breeding season (Landt 1800, Dánjalsson 1960). The harbour seal was much easier to hunt because it was breeding in summer, in easily accessible areas, while the grey seal on the contrary was hiding away in caves in autumn. The number of breeding sites decreased with increasing human activities, and from the 17th century seal hunt was limited to only a few villages where seals were still available at accessible haul-out places (Degerbøl 1940). The last harbour seal was taken around 1845 (Dánjalsson 1960). The traditional grey seal hunt lasted until the early 19th century (Degerbøl 1940).

RECENT OBSERVATIONS

Few documented sightings exist of harbour seal in the Faroes since they were exterminated in the mid-18th century. During a grey seal bounty hunt in 1889-91, about 40 years after the last harbour seal was hunted, only 1 harbour seal was reported in the catch (Bloch 1998). In a grey seal bounty hunt in 1963-67, 970 lower jaws were delivered to the Faroese government (Reinert 1982). An examination of this material showed that four harbour seals' jaws were collected, all from Suðuroy, the southernmost island of Faroes (Prime 1978). During the bounty, hunting pressure on the valuable seals was certainly high, so the take of four harbour seals demonstrated that the species was present in Faroese waters, but probably not in high numbers. The only documented harbour seal observations in more recent years are from the island of Nólsoy where solitary animals on two occasions, in January 2001 and January 2005, have resided in the local harbour for a few days (Fig. 2). An elder man from the village of Eiði on the island of Eysturoy reported in 1998 having observed a small seal with a distinctive round head. This demonstrated that the man had observed a seal that was different from the commonly observed grey seal, although he was unable to identify the species. It may be that he had observed a harbour seal, which typically can be distinguished from grey seals by size and the round head. Perhaps the species is more frequent in Faroese waters than indicated from the few documented observations?

Nevertheless, the fact that the species was positively identified on land only on two occasions in the last forty years, confirmed that harbour seal is not a frequent visitor in Faroese waters.

CONCLUDING REMARKS

The harbour seal most likely suffered the fate of extermination from the hand of the Faroese because the species was vulnerable to the high hunting pressure during the breeding season forced by an ever increasing number of inhabitants on the islands. The harbour seals did not breed in the more protected caves, most likely since this habitat was already occupied by the grey seals, also in summer. Outside the breeding season the harbour seals may not have been so vulnerable to hunting since they moved around and were distributed in more open waters and were not so accessible to the hunters. It could also be that the entire population, or the remainder of an already reduced population, was wiped out during an epidemic outbreak. However this is not documented in available literature. The harbour seal has not been able to re-colonise the Faroes since it was exterminated from the area 150 years ago. Anthropogenic activities are important in this small group of islands, resulting in a lot of potential disturbances to a coastal philopatric specie like harbour seals. However the most likely reason for the failure to re-colonise might lie in the behaviour of this specie. The resident nature of these animals could possibly prevent them from invading new distant areas in sufficient numbers to establish a new colony. Their strong natal site fidelity and philopatric nature could also prevent them from settling in new areas permanently. However the harbour seal was able to colonise the eastern Atlantic after the last glaciation (Stanley *et al.* 1996), which could indicate that in theory re-colonisation of the Faroes is possible. But the likelihood that breeding partners meet and start a new colony in these remote islands may be so small that it could take hundreds of years before it happened. Had the harbour seal survived for another 50 years or so, when the Faroese community went through a major change from agriculture to a fishing society, it may well have survived.

In 2006 the NAMMCO Scientific Working Group on harbour seal recommended that if a re-colonisation of harbour seals were to occur in the Faroes this event should be monitored closely and actions should be taken to protect the animals from hunting and disturbances (NAMMCO 2006). Only time will tell if this will ever happen.

ACKNOWLEDGEMENT

We thank Christina Lockyer and an anonymous referee who provided valuable comments and linguistic corrections to the manuscript.

REFERENCES

- Bloch, D. 1998. A review of marine mammals observed, caught or stranded over the last two centuries in Faroese waters. *Shetland Sea Mammal Report*. The Shetland Sea Mammal Group, Lerwick:15-37.
- Bonner, W.N. 1994. *Seals and sea lions of the world*. Blanford, U.K. 224 pp.
- Dánjalsson á Ryggi, M. 1960. *Hvalur og kópur (Whales and Seals)*. Føroya Náttúra – Føroya Skúli. Tórshavn, Føroyar:23-30. In Faroese.
- Degerbøl, M. 1940. Mammalia. In: Jensen, Ad.S., Lundbeck, W., Mortensen, Th. and Spärck, R. (eds.). 1935-1942. *The Zoology of the Faroes III(II): LXV*. 133 pp.
- Härkönen, T and Harding, K.C. 2001. Spatial structure of harbour seal populations and the implications thereof. *Can. J. Zool.* 79(12):2115-2127.
- Jóhansen, J. 1985. *Studies in the vegetational history of the Faroe and Shetland Islands*. Annales Societatis Scientiarum Færoensis Supplementum XI. Tórshavn. 117 pp.
- King, J.E. 1983. *Seals of the world*. Oxford University Press. London, U.K. 240 pp.
- Landt, J. 1800. Om Sælhunde-Fangst (About seal hunting). In: *Forsøg til en beskrivelse over Færøerne*. Tidsjob Forlag, København:214-216. In Danish
- [NAMMCO] North Atlantic Marine Mammal Commission. 2006. Report of the NAMMCO Scientific Committee Working Group on Harbour Seals, Annex 1. In: *NAMMCO Annual Report 2006*, NAMMCO, Tromsø:358-408.
- Prime, J.H. 1978. Analysis of a sample of grey seal teeth from the Faroe Islands. *ICES C.M.* 1978/N:5.7 pp.
- Reinert, A. 1982. Havet omkring Færøerne. Sæler (The ocean around the Faroes. Seals). In: Nørrevang, A. and Lundø, J. (eds.); *Danmarks Natur*. Færøerne. 12:55-58. In Danish.
- Stanley, H.F., Casey, S., Carnahan, J.M., Goodman, S., Harwood, J., Wayne, R.K. 1996. Worldwide patterns of mitochondrial DNA differentiation in the harbour seal (*Phoca vitulina*). *Mol. Biol. Evol.* 13(2):368-382.
- Svabo, J.C. 1783 (1959). *Indberetninger indhentede paa en, Allernaadiget befalet, Reise I Færøe I Aarene 1781 og 1782* (Narratives from a journey to the Faroes in 1781 and 1782). Selskabet til Udgivelse af Færøske Kildeskrifter og Studier. C.A. Reitzel Boghandel. Copenhagen. 497 pp. In Danish.