

Common Seals 1999

Trilateral Seal Expert
Group (TSEG)

Common Seals in the Wadden Sea in 1999

The coordinated surveys of common seals in the international Wadden Sea in 1999 revealed the following results. The rounded off total number of seals counted in 1999 amounted to 15 200 (2 150 in DK, 5 850 in SH, 4 800 in Nds and 2 400 in NL), and of those 3110 were pups. Though the percentage of pups per total number is of the same order as the years before, the increase of 5.5% of the total population is lower.

It would be premature to conclude anything about a change in population trend from this, because more years' data is needed to establish whether the 1999 result is the start of a downward trend or just a one-off event. Nevertheless, it is worthwhile to speculate about possible reasons for the lower population growth between 1998-1999.

A lower annual increase could have been caused, in principle, by either a lower recruitment between 1998-1999 (lower pup production in 1998 and/or higher mortality), or by less optimal survey conditions in 1999, or even a combination of both. Because the survey conditions in 1999 are considered to be similar to other years, this factor cannot explain the lower population growth.

Concerning a possible lower pup production in 1998: the total pup count in 1998 was lower than in 1997, despite an increase in total population between 1997-1998. Survey conditions were indeed sub-optimal (bad weather) in most areas in the Wadden Sea and could have influenced the low pup count in that year. Still, though unlikely, these ob-

servations could be a true reflection of a lower pup production.

Pup survival is difficult to measure. There seems to be an increase in sick and animals found dead (pups born in 1998), in the season 1998-1999. The lacking of data expressing both the searching effort for dead or sick animals and the environmental circumstances, which could influence the observed increase, hampers the assessment of the meaning of this increase. However, this change in animals found dead could be in fact a reflection of an increased mortality potentially leading to a lowered recruitment. The increase in animals found dead or moribund should therefore be investigated as it could help in assessing a lower pup survival and the consequences thereof for the population growth.

In conclusion: it is too early to conclude about a possible change in population trend. Further modeling studies are ongoing to predict population trends assuming fluctuations in pup production as well as varying mortality rates. Surveys in the years to come will show whether the strong population growth in the last decennium is retarded, and if so, which population parameter is affected.

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Svend Tougaard, Fiskeri-og Søfartsmuseet, Esbjerg, DK
Ursula Siebert, FTZ Büsum der Univ. Kiel, SH,
Ekkehard Vareschi, Universität Oldenburg, Nds.,
Peter H. Reijnders, IBN-DLO Inst. for Forestry and Nature Research, Texel, NL.

Figure 1
Number of counted seals
in the Wadden Sea since
1975

