

Photo: Grey seals in the Netherlands – S. Brasseur

EG-Seals grey seal surveys in the Wadden Sea and Helgoland in 2018-2019

Steady growth

Authors: Members of the Trilateral Expert Group Seals (EG-Seals): Jenny Cremer, Sophie Brasseur, Richard Czeck, Anders Galatius, Armin Jeß, Peter Körber, Ralf Pund, Ursula Siebert, Jonas Teilmann, Charlotte Bie Thøstesen, Julia A. Busch

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Introduction

The Wadden Sea is becoming an important area for grey seals (Halichoerus grypus) to breed and haul out. Over the last decades, increasing numbers have been counted in the three Wadden Sea countries Germany (including Helgoland), the Netherlands and later, Denmark. Coordinated aerial, boat and land-based surveys during moulting and breeding assure that the counted numbers show a reliable indication of the numbers present throughout the Wadden Sea. The grey seals in the Wadden Sea are part of a larger North Sea population, and animals that breed in the Wadden Sea might moult elsewhere and vice versa (Brasseur et. al. 2015). Interpreting the results of the Wadden Sea counts in isolation in terms of population size is therefore complicated and of limited value in terms of population status.

Results and interpretation

The counted numbers of pups represent indices of actual numbers of pups born, and trends should be considered over several years, as annual changes could be influenced by for example weather. In the winter of 2018/2019, 1,684 pups were counted in the Wadden Sea area. The general trend in the counted numbers of pups shows an increase of 22 % compared to the winter of 2017/2018 (Fig 1). In Denmark and in the Schleswig-Holstein Wadden Sea no pups were observed on the dates taken for calculating the pup counts, though in the latter area a few pups were seen during the reproduction period. In the Netherlands, 1,062 pups (+29 % compared to last year's counts) were counted, in Lower-Saxony and Hamburg, 235 (+3 %) and on Helgoland, 387 pups (+20 %). On Helgoland, daily land-based pup counts are also carried out, and, though our coordinated counts indicate a growth in numbers, the total numbers observed at the end of the season remained nearly identical to the last season's tally (2017/2018: 426 pups; 2018/2019: 425 pups). This illustrates differences in methods and the necessity to evaluate the counts on a longer term rather than from year to year.

It should also be noted that in the Netherlands, weather conditions prevented the survey during the expected pupping peak (mid-December), and results presented here were collected 10 days earlier. This possibly results in a slightly lower number of pups than would have been counted in mid-December. In Lower Saxony and on Helgoland, pup numbers were highest in mid-December compared to counts earlier that season, differences the consecutive counts amounted to >15 %.

The index for the total number of grey seals in the Wadden Sea area (including Helgoland) counted during the moult in early spring 2019 continues to show a general growth (Fig 2). A total of 6,538 seals were counted, representing an increase of 6 % compared to the numbers in 2018 (6,144). In most regions an increase was observed, especially in Denmark, where the numbers grew from 228 in 2018 to 408 in 2019, an increase of 79 %. In the Netherlands, 4,760 seals were counted (+4 %) and in Lower Saxony and Hamburg 451 (+18). For the first time, grey seals were observed more regularly in the Hamburg Wadden Sea. In Schleswig-Holstein however, numbers seem slightly decreased: on Helgoland 764 were counted (-2 %) and in the Schleswig-Holstein Wadden Sea there were 155 grey seals (-18 %).

Although the total number of grey seals is still increasing in the Wadden Sea area, the numbers show some variation between regions and in time. The increased numbers in Denmark indicate that the grey seals are spreading throughout the Wadden Sea area. For the moment, this holds for non-breeding animals or animals breeding elsewhere, in the future a new breeding colony could settle there as well.

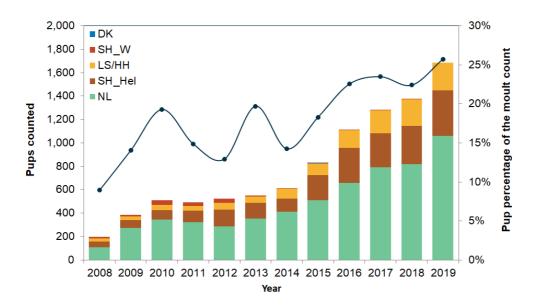


Figure 1. Numbers of grey seal pups counted in the Wadden Sea per region by coordinated surveys since 2008 (stacked bars; DK = Denmark, SH_W = Schleswig Holstein west-coast, LS/HH = Lower Saxony/ Hamburg, SH Hel = Schleswig Holstein/Helgoland, NL = Netherlands). The number of pups as a percentage of the total number during moult is given by the dark blue line (and right axis).

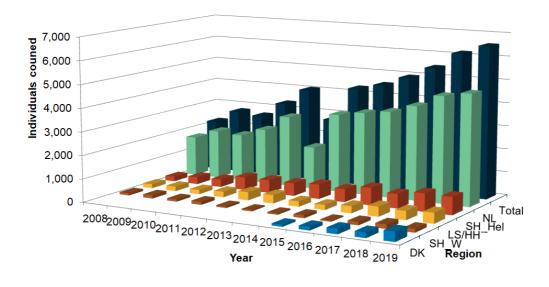


Figure 2. Numbers of grey seals counted during coordinated surveys in the Wadden Sea during the moult period from 2008-2019. The total number as well as the numbers counted per region are shown during coordinated surveys (DK = Denmark, SH_W = Schleswig Holstein west-coast, LS/HH = Lower Saxony/Hamburg, SH_Hel = Schleswig Holstein/Helgoland, NL = Netherlands).

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