



Typically, grey seal pups do not swim directly after birth. Breeding sites are therefore on higher grounds where pups may be concealed by the vegetation. Here, a young pup on the Island of Griend in the Dutch Wadden Sea. Sophie Brasseur, WMR.

## EG-Seals grey seal surveys in the Wadden Sea and Helgoland in 2019-2020

### Less disturbance?

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## Introduction

The Wadden Sea areas in Denmark, Germany and the Netherlands were surveyed for grey seals (*Halichoerus grypus*) during the pupping season (November 2019 –January 2020) and during the moulting period (March-April 2020) by means of coordinated aerial surveys and in the case of Helgoland, by land based counts. These surveys provide data on the changes in grey seal occupancy of the area and changes in the local breeding population. In part, the grey seals observed in the Wadden Sea during the moult may breed in the UK where the largest part of the greater North Sea population are observed (~100.000 individuals).

## Results and interpretation

The maximum number of grey seal pups counted in the Wadden Sea and on Helgoland in December 2019 amounted 1726: composed of 932 pups in the Netherlands, 295 pups in Lower Saxony/Hamburg, and 499 pups on Helgoland (figure 1). No pups were recorded in the Wadden Sea area of Schleswig-Holstein and in Denmark, one pup was observed in the beginning of January. Being so much later than the other counts, this pup was not included in the reported numbers which are aimed to be an index of pup population.

Compared to the pupping season of 2018/2019, pup numbers both on Helgoland and in Lower Saxony grew significantly (29% and 26%, respectively), but the total number of pups only grew by 2%. This is the result of the drop of 12% in pup numbers in the Netherlands this season. Counts were preceded by a period of severe winds in the Netherlands, which could have influenced the Dutch results.

The moult count in spring 2020 was dominated by the regulations around the COVID-19 pandemic. On one hand, the counts could be positively influenced by the lack of human activity in the Wadden Sea area, on the other, surveys were subjected to restrictions, but were fortunately mostly completed. Only Lower Saxony could not be surveyed completely and counts there were probably slight underestimated, likely 10-15% lower than actual occurrence. Counts show 267 grey seals in the Danish Wadden Sea, 890 animals on the island of Helgoland, 218 in the Wadden Sea area of Schleswig-Holstein, 587 (*incomplete count*) in Lower Saxony/ Hamburg and 5687 in the Netherlands. In total, 7649 grey seals were counted. Except for Denmark, where numbers of moulted seals dropped by around 35%, all areas showed higher counts than last year resulting in an increase of 17% (figure 1). In the past 5 years, the mean

annual growth has been approximately 9% per year. One reason for this year’s high count could be the relative absence of disturbance, positively influencing the number of grey seals on land. This potential effect of disturbance should be considered when evaluating management regulations with regard to the disturbance of the animals.

As it is clear from tracking studies and population analysis (Brasseur et al. 2015, 2017) that part of the grey seals counted in the Wadden Sea are “visitors” from the UK, the Wadden Sea cannot be regarded as a separate population. This is supported by genetic studies showing that the whole North Sea constitutes a mixed population (Fietz et al. 2016). However, the pup production is indicative of the size of the Wadden Sea breeding stock. It is not clear whether the 2% growth this year, compared to an average rate of about 23% in the five preceding years (figure 2) is indicative of the growth slowing down, or if it is an effect of interannual variation and local circumstances during the surveys.

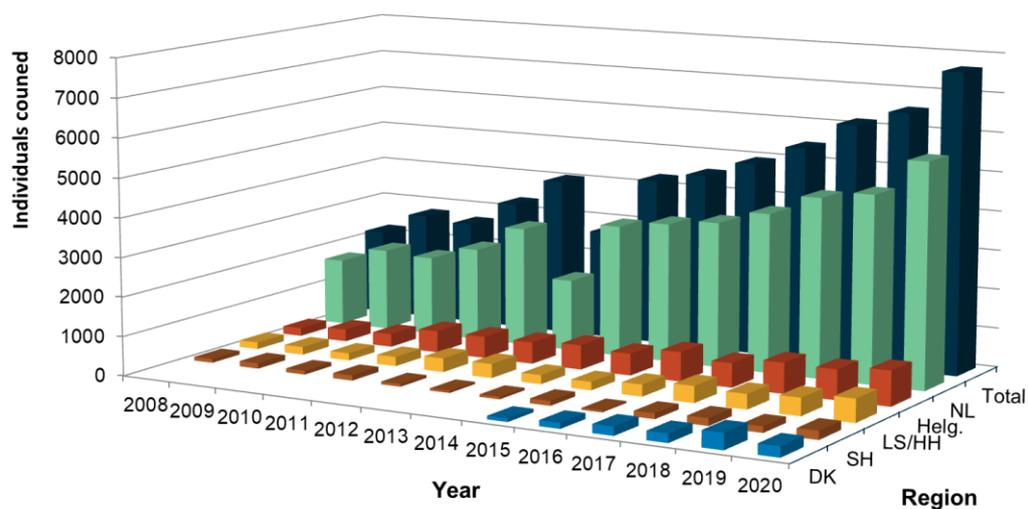


Figure 1: Total number of grey seals counted in the Wadden Sea during the moult, as well as numbers broken down by region, for 2008-2020.

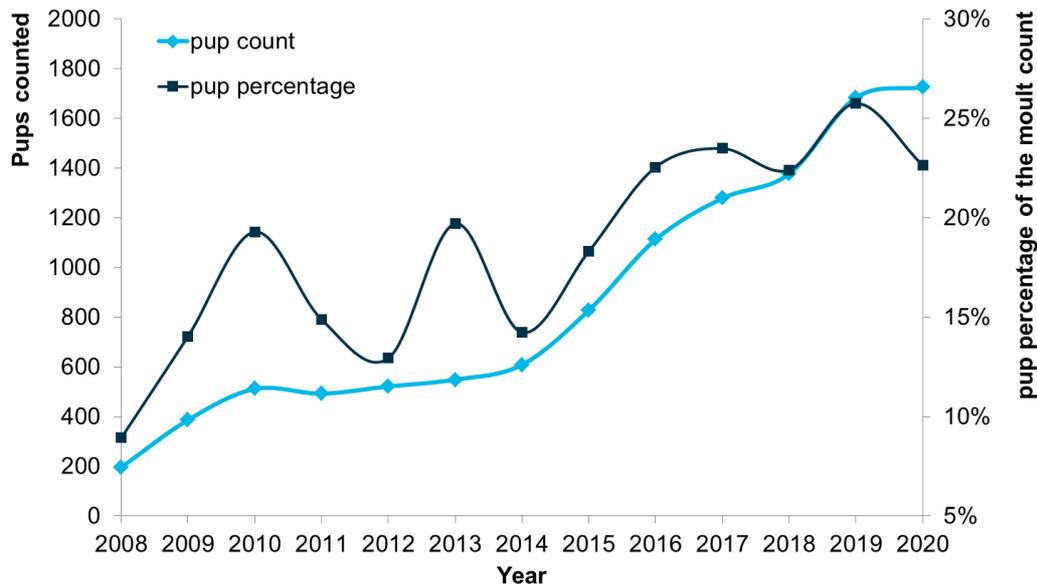


Figure 2: Number of pups counted in the Wadden Sea (light blue line, left vertical axis) in the years 2008-2020. The number of pups as a percentage of the total moult count if given by the dark blue line (right vertical axis).

## References

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