The common seal (Phoca vitulina) in the Eems-Dollard estuary (Wadden Sea)

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Introduction

During the pupping season of the common seal in the summer of 2007, the distribution and abundance of this species were studied. Special attention was given to the level of disturbance and the bond between mother and pup. The seals had been observed in the Eems-Dollard estuary (Wadden Sea) during low tide. Seals give birth in this area on sandbanks near the dike.

Distribution

For this study, five sandbanks were identified. Every 15 minutes, the banks were scanned and the distribution and abundance of seals were recorded. Disturbance and the interactions between mother and pup were recorded continuously. The highest number of seals recorded in the area was 242 animals, including pups. The seals mainly hauled out on the sandbank which had the greatest distance to the coast. The average distance between mother and pup was also larger on the banks further away from the coast. Preference is thought to be related to the submersion time of the sandbanks. Preference also exists for sandbanks where the seals can stay close to the waterline during the whole low tide period.

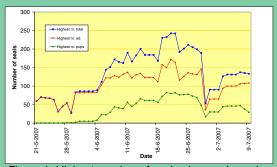
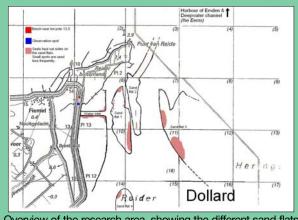


Figure 1: Highest number of seals observed per day



Overview of the research area, showing the different sand flats



Disturbance

Disturbance of seals was often caused by persons recreating in the area. This concerned mainly people who walk or cycle on the dike. Agricultural vehicles, aeroplanes, boats and cars also caused disturbance, but less frequent.

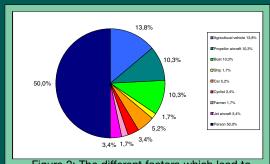


Figure 2: The different factors which lead to disturbances of seals (n=58)

Mother-pup bond

A very strong bond had been observed between mothers and pups. This bond was carefully maintained by regular physical contact and focal display by the pup. Usually mother seals will follow their pups in and out of the water. However, in case of disturbance pups follow their mothers. On several occasions pups were found without their mothers. None of these pups reunited with their mother. These orphaned pups were therefore admitted to the SRRC for rehabilitation.



Mother and pup, on the left an orphaned pup



Group of orphaned pups

