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Seals using the Area of Horns Rev Satellite Tracking of Seals

The studies started by the beginning of January 2002 and are expected to be finalised by the beginning of June 2002.

1. Introduction

As part of a joint project between the Netherlands, Germany and Denmark concerning the occurrence of the common seal in the international Wadden Sea, the Fisheries and Maritime Museum in Esbjerg marked 40 seals with VHF radio transmitters during 1990-1995. The studies accomplished in this connection showed that the seals made forage expeditions to the North Sea, but owing to the limited transmission distance of the VHF transmitters it could only be demonstrated that the seals from the Wadden Sea passed north towards the area of Horns Rev, where contact to the transmitters was lost.

2. Purpose

In continuation of these studies, the satellite programme has been set with the purpose of:

- mapping the common seal's use of the area of Horns Rev
- studying the seals' forage strategies accordingly

3. Study Concept

Ten seals have been provided with a satellite transmitter, type SDR-ST16, Wildlife Computers. Further to registration of time and position, these transmitters register time-depth, which will provide information on the seals' diving behaviour and possible forage.

3.1 Status

The time schedule set for the project includes an observation period during the first six months of 2002.

With Elsam's acceptance of the project on November 8, 2001 and the delivery of the transmitters in December 2001, the first seals were marked just after New Year - on January 4, 2002 - when four common seals were provided with transmitters.

3.2 Studies in 2002

Owing to the large energy consumption of the transmitters with daily registration of the seals' behaviour, the battery lifetime of the transmitters is limited to approx. 2 months and the plan is therefore to mark another three seals by mid February and by beginning April. This will ensure a spread of the total observation period over the time available until June when the seals begin to shed and the transmitters can no longer be expected to stay in the fur of the seals.

Further, the period of April - May is important as there is a concentrated fishing for sand eels in the area of Horns Rev at this time.

The studies are accomplished in a close co-operation with the Danish National Environmental Research Institute, AM, who are in charge of a similar project for SEAS at Rødsand. Thus - to reduce costs - the data transmission from Argos, who administrates the satellite communication, is a joint subscription.

Further, the co-operation includes University of Southern Denmark in Odense, where a student working on an extended essay has been connected to the project. This essay will among other things include the studies from Rødsand and Horns Rev.

4. Finance