Satellite Tracking of Rehabilitated Grey Seal Pups (*Halichoerus grypus*) in the Baltic Sea: Determination of Survival and Adaptation

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Introduction

Research object

Rehabilitated Grey seal pups

Research aim

to evaluate rehabilitated Baltic grey seal pups survival and adaptation in their natural environment and provide recommendations for the protection of the species in the Baltic sea.

Research objectives

- to analyse the horizontal and vertical movement patterns
- to define the habitat use and habitat preferences
- to identify the foraging behaviour and determine important foraging areas
- to analyse the haul-out behaviour and determine important haul-out areas

Methods

Study animals

Research goal	Current situation
30 individuals	8 individuals

Tags deployment

locations, time, dive depth and water temperature

ARGOS satelite system

SPLASH10-F-297

Manufactured by Wildlife Computers

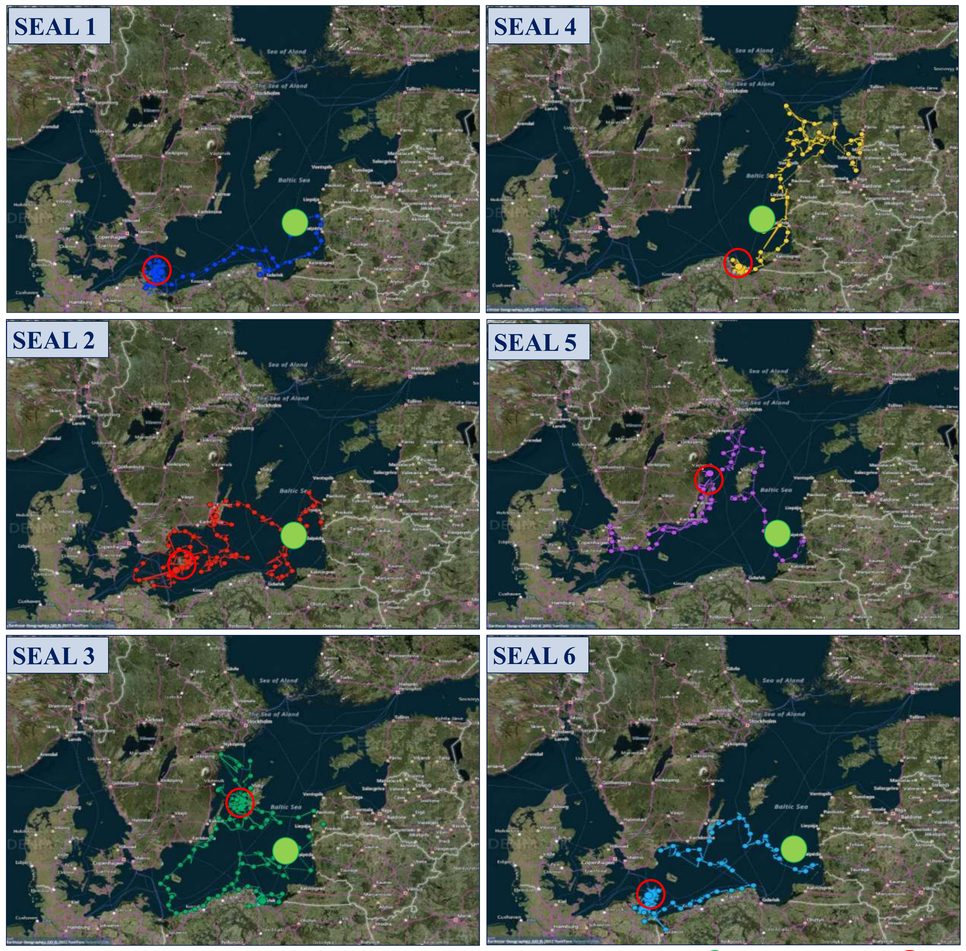
Survival
foraging, traveling and hauling-out behaviour for at least one month

Adaptation
development of diving and foraging abilities

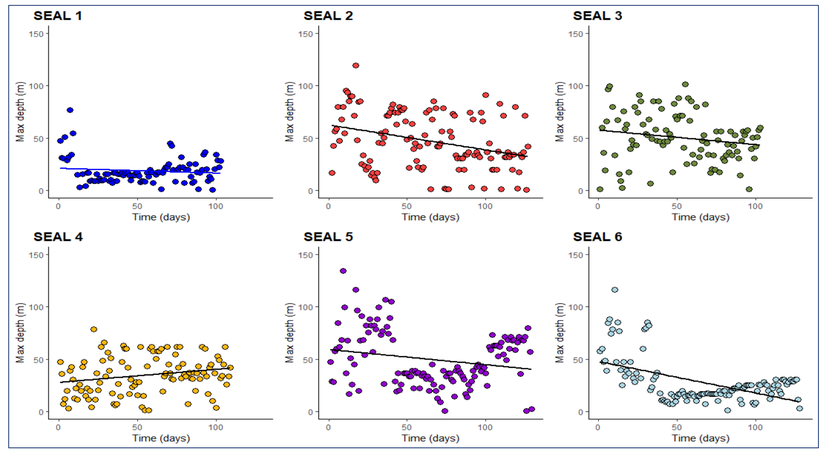
Mortality
1) Continuous transmission of high-quality location data.
2) Percentage of dry time and temperature histogram data analysis.

Tag failure
A tag had reported normally and then stopped all transmissions.

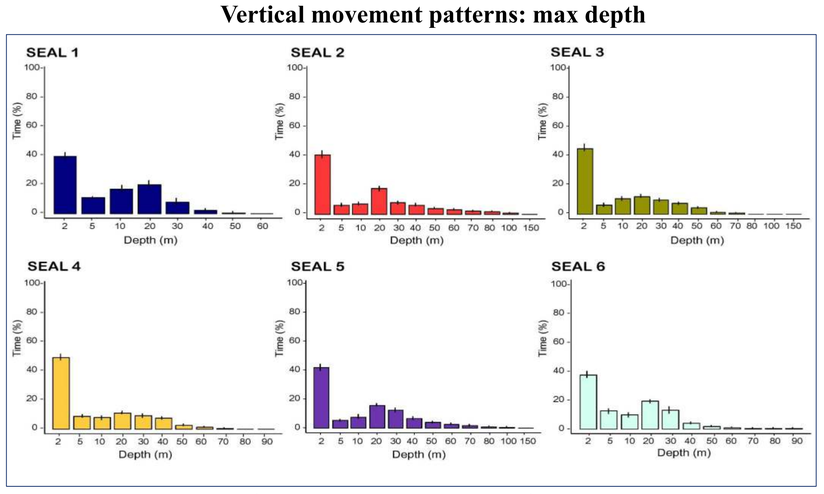
Intermediate results



Horizontal movement patterns (>137 days) Release site Last locations



Vertical movement patterns: max depth



Vertical movement patterns: time at depth

Intermediate conclusions

1) 6 survivors; 1 death; 1 tag failure

2) Two pups have settled down in the bay of Greifswald, two – in the bay of Gdansk, one - near the shores of Bornholm‘s island, one – in the eastern shore of Sweden

3) The maximum depth reached by four seals tended to decrease, while the rest ones remained relatively constant. The maximum depth varied in the range of 0-135 meters.

4) Most of the time seals spent at the depth of 2-40 meters.

Acknowledgments

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