



Master Thesis in Wildlife Ecology and Management

Movement ecology of an apex marine predator and implications for management: Grey Seal in the Baltic

Arbetsbeskrivning

All animals move and their movements have consequences on the ecosystems they dwell in. The consequences of movements range from, the impacts on population dynamics and distribution of predators and prey as well as the ecosystems services. Apex predators play a crucial role in the structure and functioning of the ecosystems and hence their movements are of utmost importance for understanding the ecosystem functioning as well as interactions with natural resource management. Grey Seal is an apex marine predator and its populations are now on the increase in the Baltic sea after experiencing a near extinction in the 1970s. The last 40 year period has been a period of rapid transitions in the seascape in terms of the changes in marine ecosystem as well as its use, especially in terms of establishment of marine protected areas and commercial fishery. The grey seal case hence provides an exciting opportunity to study the ecosystem impact of an apex predator whose populations are on the rise again and conflict with fishery is intensifying. Seal movements are important to study in this case to identify the hotspots of their distribution, intensively used areas, behavioural strategies at multiple scales and their role in a multi-use landscape where ecosystem services derived by the industry are influenced. A large amount of data is currently available on seal diets, population monitoring, seal and prey distribution and management areas as well as no take zones.

This project is aimed at studying seal movements using tracking data and relating the movement patterns (extents, timings and duration) to estimated seal density, prey distribution and density, and overlap with management. The project will use the existing data collected by the seal project to address the aims. This is purely a desk based project with almost no fieldwork. We seek a candidate who is skilled in spatial statistics and R. We strongly seek one or two resulting peer reviewed publications from the project. Interested candidates should write to:

The project will be supervised by Dr. Navinder Singh (SLU), navinder.singh@slu.se; Dr. Karl Lundström (SLU) and Dr. Olle Karlsson (Swedish

Museum of Natural History). Interested candidates should write to navinder.singh@slu.se or call +46706760103.

Kort om jobbet

Varaktighet/Arbets tid:	[Anytime December 2013 onwards]
Tillträde:	
Lön:	
Sista ansökningsdag:	
Ansökan:	navinder.singh@slu.se
Fackliga kontaktpersoner:	Navinder Singh, Karl Lundström, Olle Karlsson
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