

Monitoring marine animal strandings as a part of health and disease surveillance in Sweden

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ASCOBANS workshop Scoping development of a marine strandings database. ECS meeting, O Grove, Spain, April 17th, 2023.



Foto: Niklas Karlsson

In close collaboration with the Swedish Museum of Natural History



Marine mammal health and disease surveillance

- New joint program delivered by the National Veterinary Institute (SVA) and the Swedish Museum of Natural History (NRM)
- Financed by the Swedish Agency for Marine and Water Management as part of Sweden's environmental monitoring
- Includes cetaceans (primarily harbour porpoises) and pinnipeds (grey seals, harbour seals and ringed seals)
- SVA brings in suitable stranded animals for necropsy examination
- NRM hosts the stranding reports database (both institutes have access)



Types of data collected

Reporting

- Species
- Alive or dead
- Observation location and date
- Number of animals found
- Approximate length
- Carcass condition
- Photographs (and permission to publish on reporting website)
- Open field for comments

Necropsy examination

- If animal brought in, extensive suite of data and tissues collected



Not just cetacean and phocid stranding data collected

- SVA's instruction: Follow the health and disease status of wildlife
 - Seabirds
 - Fish
 - Marine invertebrates
 - Marine turtle
- All stranding data opportunistically collected
- Extensive outreach to promote reporting
- Stranding network of individuals, organizations and freezers



Photos: Anonymous




Rapportera dött djur

Vi är glada och tacksamma för att du vill hjälpa oss genom att berätta om de döda djur du hittar när du är ute. Börja med att välja vilken typ av djur du vill rapportera, sedan fyller du i formuläret du kommer till.

Längre ner på denna sida berättar vi lite mer om vad vi gör med informationen.

Vilket djur har du hittat?

 En fisk



En säl



En tumlare

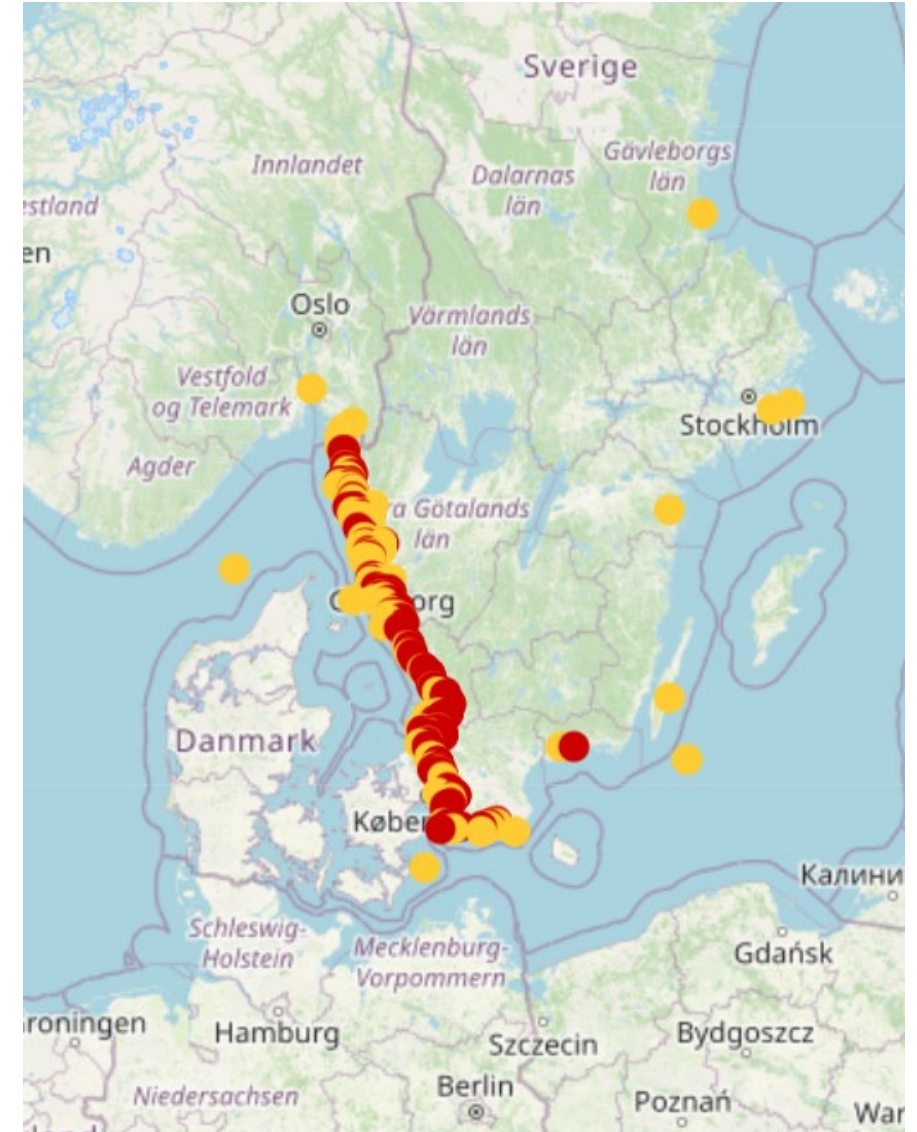


Fågel eller ett annat
djur



Who maintains the datasets?

- NRM (stranding reports). Map function and figure of strandings per month on reporting site. Raw data available on request. External consultant built and manages technical aspects of database.
- Validation: limited number of trained validators, cell phone location option, photographs wherever possible, screening for and linking of double reports. Classification of reports with no photos available?
- SVA (data from stranded animals examined by necropsy). Openly available in English (excel and csv files). Internal development and technical management of database-under development
- Works but requires close, continuous collaboration and development
 - Different database systems (automated data transfer?)
 - Future: link basic necropsy data with stranding report so both displayed on stranding report website



Users/beneficiaries of stranding data

Users	Why?	Data asked for
General public	-general interest, follow their own report	-species, cause of stranding/death and associated information from necropsy if available
SVA/NRM	-important source of animals for wildlife health surveillance -follow trends and help prioritize carcass collection efforts	-species, number, date and location, reporter contact information, photographs -results from necropsy examinations
Wildlife and marine resource management authorities	-inform wildlife management -reporting obligations to international conventions	-species, total number stranded, date and location, cause of stranding/death, data generated/collected from necropsy
Health authorities	-can be relevant for human and domestic animal health	-disease surveillance data
Municipalities/regional governmental authorities	-responsible for management of public shoreline, beaches	-species, cause of stranding/death
Researchers	-various	-various
NGOs	-wildlife/habitat conservation	-various (species, numbers, cause of stranding/death if available)

How might a European database be of use?

- Researchers, health surveillance programmes, marine resource managers and policy makers get a more complete picture of stranding events at a population level across borders. Better understanding of populations (shifts?), threats, more informed management
- Facilitate collaborations between health surveillance programs
- Helps us further develop and improve our own program