



SWEDISH
ENVIRONMENTAL
PROTECTION
AGENCY



Nordic workshop on harvest and culling models for large mammals

What?

The Swedish Environmental Protection Agency (SEPA) and the Swedish University of Agricultural Science (SLU) invites you to a workshop on harvest and culling models for large mammals. The agenda is given below.

Where?

The WS will take place in Sollentuna (close to Stockholm).

<https://maps.app.goo.gl/iueZdHoo49PYD2W8>

Public transports from both Arlanda and Stockholm Railway station

When?

10-12 June 2025

Why?

The goal is:

- to compile experiences and pros and cons of the different kinds of harvest models.
- to point out the kind of data needed in different harvest models and to compare it with the data that is collected.
- to suggest how communication of the results of the harvest model to inform wildlife management is best performed.

Who?

The workshop is limited to 30 participants. However, we aim to give digital access to the talks through Teams/Zoom. We also aim to have a general digital attendance day three which is focused on the managers' need.

Of special interest for the WS are participation of young scientists and managers from all the Nordic countries, but anyone interested can apply for participation.

How much?

The WS is partly funded by the Nordic Board for Wildlife Research (NKV) which means that the stay, including meals, are funded by NKV but participants need to cover travel expenses by themselves. However, to a limited extent there might be opportunities to support travel costs for junior scientists and PhD:s under certain conditions.

How to?

Send an application to jens.andersson@naturvardsverket.se

Last date to apply is 1 May 2025.

The application should contain following:

Name:

Employer:

E-mail:

Phone number:

Special diet request:

Professional background: (short description as a scientist or manager)

Wished attendance: (physical or digital)

Travel support: (If you need travel support)

The workshop is organized by Henrik Andrén (SLU) och Jens Andersson (SEPA). If you have any questions, please contact:

henrik.andren@slu.se (Scientific questions)

jens.andersson@naturvardsverket.se (Managers and practical questions)

Agenda:

Day 1 (Tuesday June 10)

10:00 Welcome

10:15 Background

The need for harvest and culling models in the management of large mammals
(Jens Andersson)

The development of harvest and culling models (Erlend Nilsen)

11:00- 12:00 Large Carnivore models in Norway (Matt Grainger)

12:00 – 13:00 Lunch

13:00 - 14:00 Large Carnivore models in Finland (Samu Mäntyniemi)

14:00 - 15:00 Large Carnivore models in Sweden (Henrik Andrén)

15:00 – 15:30 Coffee

15:30 – 17:30 Discussion, pros and cons of different models used for large
carnivores.

17:30-18:00 Red deer model in Denmark (Peter Sunde)

19:00 Dinner

Day 2 Wednesday (June 11)

08:00 – 08:30 Reindeer model in Iceland (Hálfván Helgason)

08:30 – 09:00 Moose model in Sweden (Kjell Leonardsson/Magali Frauendorf).

09:00 – 10:00 Whitetail deer and Moose model in Finland (Sami Aikio & Leena
Ruha)

10:00 – 10:15 Coffee

10:15 – 10:45 Reindeer model in Norway (Erlend Nilsen)

10:45 – 11:15 Ringed seal model in Norway (Chloé Nater)

11:15 – 11:45 Grey seal model in the Baltic Sea (Daire Carroll)

11:45 – 12:15 Ringed seal model in the Baltic Sea (Jarno Vanhatalo/Inari Helle)

12:15 – 13:00 Lunch

13:00 – 16:00 Discussion in smaller groups.

An introduction to the work (Henrik Andrén)

What conceptually different harvest models do we use at the moment and in the near future (state space models, individual based models, age-based models, integrated population models, deterministic or stochastic models)?

What are the assumptions for the different models?

What data is needed to collect for each type of model?

What data do we collect today?

How is uncertainty presented?

Are there rules of thumbs? What model should be used for different species groups with different life history traits?

16:00-18:30 Common discussion. Feedback from the different groups.

19:00 Dinner.

Day 3 Thursday (June 12)

08:00 – 08:45 The managers' needs.

A description from a manager's perspective on the use of harvest models in wildlife management.

08:45 – 09:30 The scientific delivery

Examples of how the models/results are made available to the managers.

- *Sweden*
- *Norway*
- *Finland*
- *Danmark*
- *Island*

09:45 – 10:00 Coffee

10:00 – 12:00 Working groups

Introduction (Jens Andersson)

Are there risks when results from the scientist is used by the managers?

How to avoid incorrect use of the models in the management?

How to guide management in risk assessment using the models?

12:00 – 13:00 Lunch

13:00 – 15:00 Common session (Including coffee)

Discussion on the foreseen needs.

Where do we want to go?

What are the most important models to be developed?

Are there opportunities/needs for cooperation between different countries?

15:00 – 16:00 Conclusions.

What recommendations do this WS wants to give to the scientific community, to managers at different agencies and to research funding authorities?

16:00 End of WS