

Project information

Keywords

geese management

Project title

Geese Beyond Borders

Year

2015

Project leader

Ingunn Tombre

Participants

Einar Eythorsson, NIKU

Camilla Brattland, NIKU

Siri Søreng, Norut

Jesper Madsen, Aarhus Universitet (AU)

James Henty Williams (AU)

Christopher John Topping (AU)

Lars Dalby (AU)

Flagship

Terrestrial

Funding Source

The Fram Centre

The Research Council of Norway

Summary of Results

The progress of the project is in accordance to the plan.

Each activity is listed below, following the workpackages of the project.

WP 1. Stakeholder involvement

The stakeholders have been involved in the projects via emails and direct communications when doing fieldwork and in other informal face-to-face meetings. Some landowners have also contributed actively to the data collection; being a source of detailed agricultural practice and management. This has been very useful, and invaluable, for the baseline data needed for the simulation models in Workpackage 2.

The landowners' knowledge of, and attitude towards, the international management plan for pink-footed geese has been mapped via a survey distributed to 1034 landowners in the study area (covering the central goose areas in four municipalities). 31 % responded (323 landowners). The survey gives an overview of land-owners' engagement in facilitated goose hunting, their experiences and attitudes towards hunters and hunting practices. Almost 60 % of the landowners either already had or wanted to be involved in organised hunting arrangements across property boundaries. Larger hunting areas and fewer contact points are an advantage when locally implementing international initiatives, as communication is vital for success.

Similarly, landowner and hunters surveys have been conducted in Denmark. 962 Danish goose hunters completed an online survey (48% response rate) questioning them about their goose hunting behaviour, motivations and attitudes towards increasing goose populations. An online survey was also conducted amongst landowners in two key wintering areas for geese in Vestjylland, Denmark. 261 responded (25% response rate) answering questions about geese on their land, any goose hunting arrangements as well as their attitudes to rising goose populations. Both surveys are in the final stages of analysis. The sharing of these results will enable pertinent comparisons to be made between the Danish and Norwegian situations, as well as further contributing the inclusion of stakeholders (their actions, knowledge and values, etc.) as an integral part in the international management of goose populations.

An open meeting was organised in the study area in September 2015 where landowners, local managers and hunters were invited. Thirty persons attended the evening meeting. Project results were presented and after food and coffee, we had an open discussion where many stakeholders gave enthusiastic contributions. One farmer argued that *"more have happened during these last two hours than in summary over the last five years"*.

A joint popular publication has been co-authored and published by a representative of landowners in Egge (Odd Jerpstad Steinkjer) and Einar Eythórsson, on land-owners' experiences from facilitating hunting on cultivated land (publication 1). A feature article has also been published in a regional newspaper co-authored by several project partners and the Norwegian Farmers Association. Main theme was the goose population development towards the population target and perspectives on the future consequences and management.

WP 2. Predictive simulations

As part of Geese Beyond Borders, an agent-based simulation model framework, is currently being set up and tested to address the socio-ecological coupling in goose hunting and management. A first test trial is run on the basis of Danish information. This will be extended to cover the Nord-Trøndelag region in the course of 2015/16. Input variables have been derived from field work carried out prior to GBB (goose ecological data) or as part of GBB (hunter and landowner surveys, individual stakeholders – see above).

WP 3. Scientific and lay knowledge

A database is established, and a collection giving an overview of relevant data is established. Relevant data in this context are the weather data, georeferenced files created for goose management purposes, and spatial information on the Trøndelag landscape from “Norge Digitalt”. These data will be used in the agent agent-based model in WP2. Metadata has been shared with Aarhus University, and a detailed map with soil type and agricultural practice is under development. For these maps, the County Governor of Nord-Trøndelag has been extremely helpful.

Harvest data, like the number of adults/juveniles pink-footed geese shot at which location, are useful information for the international harvest modelling predicting the current harvest quota. We have established an agreement with a landowner association of more than 80 farmers. During the hunting season in 2015, we receive continuing harvest data from the goose hunting in this area, an area that is organized in five hunting parties with specific hunting zones. We also receive data from a smaller organisation (7 farmers), and all will be data input for the models. We will evaluate the value of such information gathered by non-scientific sources in the study area.

Regular and systematic goose counts have been conducted in Nord-Trøndelag in autumn 2014 and 2015. The counts demonstrate how the geese are distributed and linked to the mapping of goose hunting organisations in the area, it appears that the most advanced hunting arrangements among landowners are found in the areas with highest densities of geese.

WP 4. Governance interactions

The role of environmental subsidies to farmers, in relation to the International Species Management Plan for Pink-footed goose has been evaluated (see publication list).

The lessons from facilitation of goose hunting by landowners' associations in relation to the International Species Management Plan for Pink-footed goose has also been analysed in a paper summing up results is in progress.

A survey was conducted at the previous meeting in the working group for the plan (Sneek, The Netherlands). The analysis of the results are in progress and will be distributed at the next working group meeting in December, in Ghent, Belgium.

Because of an initiative by the Farmers' Association in Iceland, information about the project was presented at a conference in Iceland. Collaboration with Icelandic researchers and stakeholders for a comparative study has been discussed with research group in Iceland.

WP 5 - Governance arenas: communication, feedback and iterative learning

In the Geese Beyond Borders project, stakeholders are included by definition. Open meetings and common publications are results of this. Feedback received from stakeholders improves our understanding of the processes and will also open for new ways of planning the next steps. At present, the stakeholder involvement have so far been extremely useful and vital for both projects results and the accomplishment for the project in itself.

For the Management

See above

Published Results/Planned Publications

RAPPORT:

Søreng, S.U., Eythórsson, E., & Tombre, I. M. 2015. Jakt på kortnebbgås i Nord-Trøndelag. Grunneieres erfaring med høstjakt og synspunkter på gåseforvaltningen. Norut Alta RAPPORT: 2015:3. ISBN: 978-82-7571-249-1. 70 s.

KRONIKKER

Jerpstad, O. & Eythórsson, E. 2014. *Gåsejakt etter elgjaktmodellen?* Kronikk, Trønder-Avisa, fredag 3. oktober 2014.

Tombre, I.M., Gundersen, O.M., Eythórsson, E. & Madsen, J. 2015. *Bestandsmålet for kortnebbgås er nådd, hva nå?* Kroniikk, Tønder-Avisa, tirsdag 22.september 2015

PEER REVIEW

Clausen, K. K., Madsen, J. & Tombre, I. M. 2014. Carry-over or compensation? The impact of winter harshness on spring-fattening in a migratory goose species. *PLoS ONE*

<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0132312>

Eythórsson, E., Sørensen S.U. and Waade, L. Adaptive Co-governance of Pink-footed Goose: the Skogn case (Manuscript in progress)

Eythórsson, E., Tombre I.M. and Madsen, J. In-between wildlife management and agricultural policy: The subsidy scheme for goose refugees on farmland in Norway. (Manuscript in progress, to be submitted to AMBIO)

Jensen, G. H., Madsen, J. & Tombre, I. 2015. Hunting migratory geese: Is there an optimal practice? *In review Wildlife Biology*

Jensen, G. H., Tombre, I. & Madsen, J. 2015. Ecology of Pink-footed Geese during autumn stopover in mid-Norway. *Submitted Wildlife Biology*

Jensen, G. H., Pellissier, L., Madsen, J. & Tombre, I. M. 2015. Landscape selection by migratory geese: Implications for hunting. *In review Wildlife Biology*

Madsen, J., Christensen, T.K., Balsby, T.J.S. & Tombre, I. M. 2014. Could have gone wrong: Effects of abrupt changes in migratory behavior on harvest in a waterbird population. *PLoS ONE* DOI:10.1371/journal.pone. 0135100
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0135100>

Madsen, J., Tombre, I. M., Linnebjerg, J. F., Rigét, F. & Fællø, C. 2014. Squeezed out: interspecific competition between spring-staging geese. *Manuscript in prep.*

Simonsen, C. E., Madsen, J., Tombre, I. M. & Nabe-Nielsen, J. 2015. Is it worthwhile scaring geese to alleviate damage to Crops? – An experimental study. *Accepted Journal of Applied Ecology.*

Populærvitenskapelig:

Madsen, J. 2015. «Gæs i de riktige mængder». *Interview «Fugle og Natur» 2015/1:9-11.*

Webbaserte medier

Madsen, J. 2015. Breakthrough for European nature management. Partnership for European Environmental Research

http://www.peer.eu/news-events/detail/?tx_frontendlist_pi1%5Buid%5D=717&cHash=bf9a5280673e5a3abfa24a60ba23ad98

Communicated Results

Foredrag:

1. Tombre, I. M. 2014. Kortnebbgåsa død eller levende – ja takk, begge deler! FRAMDAGEN 2014, Framsenteret Tromsø 13. november 2014.
2. Tombre, I. M. 2014. Kunnskapsdeling og samarbeid lang kortnebbgåsas trekkroute. NINA-dagan 2014: Åpent fagseminar; Lokal deltakelse i prosjekter i NINA – der lokal deltakelse og erfaringsbasert kunnskap gjør en forskjell. NINA-huset, Trondheim 21.oktober 2014.
3. Tombre, I. M. 2014. Geese Beyond Borders; a progress report. Yearly meeting in the Terrestrial Flagship, The Fram Centre, University of Tromsø, 18 December 2014.
4. Tombre, I. M. 2015. At the interface between research, management and geese; from international agreements to local implementation. Seminar series, Norwegian Polar Institute, 7. January 2015.
5. Eythórsson, E. 2015. Environmental subsidies to agriculture; related to harvest loss caused by Pink-footed Goose and Barnacle Goose in Norway. Presented at a Seminar

on damage caused by swans and geese on farmland, arranged by Institute for Environment (Umhverfisstofnun) and the Farmers' Union (Bændasamtök Islands), at Gunnarsholt, 10. April 2015.

6. Tombre, I. M. 2015. Multi-species multi-stakeholder multi-scale management of geese from the perspectives of an interdisciplinary co-operation between natural and social sciences (Norway case). "Goose Management Summit", University of Kristianstad 13-15. April 2015.
7. Tombre, I. M. 2015. Gåseforvaltning i Vestfold; nye initiativer og forskningsprosjekter basert på tidligere prosjekter? Møte om gåseforvaltning/prosjekt i Vestfold. Fylkesmannen i Vestfold, 17. april 2015.
8. Tombre, I. M. 2015. Gåsejakt og gåsejegere; fra internasjonale til lokale tiltak. Småviltseminar 2015; Norges Jeger- og Fiskerforbund. Jakt- og fiskesenteret, Flå, 28-29. April 2015.
9. Tombre, I. M. Kortnebbgås i Nord-Trøndelag i et lokalt og internasjonalt perspektiv. Lunsjseminar Fylkesmannen i Nord-Trøndelag, 12. Mai 2015.
<http://www.fylkesmannen.no/Nord-Trondelag/Miljo-og-klima/Naturmangfold/Lunsjseminar---kortnebbgas/>
10. Tombre, I.M. 2015. International Management of Pink-footed Geese; consequences for Svalbard? Seminar at UNIS, Svalbard, 7. September 2015
11. Tombre, I.M. 2015. Kortnebbgås i Nord-Trøndelag; fra forskning til forvaltning, jaktpraksis og lokale tiltak. Åpent kveldsmøte for grunneiere, jegere og forvaltere. Backlund Thon hotel, Levanger 23. september 2015.
12. Madsen, J. 2015. Adaptive management needed: the case of migratory geese. 13. februar 2015
13. Madsen, J. 2015. Grænseoverskridende viltforvaltning: Adaptiv viltforvaltning i praksis – utfordringer og perspektiver i project kortnæbbet gås. 22. september 2015.
14. Tombre, I, M. & Eythórsson, E. 2015. Management schemes in Norway, practises and effects. International Conference; "Goose management: Challenges 2015". Denmark, 27-29 October 2015
15. Madsen, J. & Tombre, I.M. 2015. Interspecific competition in geese; Exemplified with a case study from Norway. International Conference; "Goose management: Challenges 2015". Denmark, 27-29 October 2015

Oppslag massemedia (aviser, radio, TV)

Jakt og Fiske august 2015: «*Forvaltningssuksess; Effektiv jakt på kortnebbgås*

«Fanger 150 gjess i ett smell» Adresseavisa 8. mai 2015 <http://www.adressa.no/tv/?id=30324http://www.adressa.no/nyheter/nordtrondelag/article10937173.ece>

«Kortnebbgås som forskningsobjekt» Inderøyningen 8. mai 2015.

NRK, Midt nytt Nord-Trøndelag – “Kortnebbgåsbestanden skal reduseres”, 6. mai 2015
http://tv.nrk.no/serie/distriktsnyheter-midtnytt/DKTL99050615/06-05-2015#t=3m43s_

«Gås er prøveklud for ny naturforvaltning” Jyllands-posten 25. januar 2015

Nyhetssaker

New release, landowner survey – County Governor Nord-Trøndelag:

<http://www.fylkesmannen.no/Nord-Trondelag/Miljo-og-klima/Nyheter-fra-Miljo-og-klima/Sporreundersokelse-til-grunneiere-i-kommunene-Levanger-Verdal-Inderoy-Steinkjer-og-Overhalla---Organisering-tilrettelegging-og-jakt-pa-kortnebbgas-i-Nord-Trondelag--/>

Norut Altas webpage:

«Grenseløse gjess og jaktundersøkelse». Nyhetssak på Norut Altas hjemmeside 19. november 2014 <http://norut.no/nb/news/grenselose-gjess-og-jaktundersokelse-1>

NINAs webpage; “Jaktundersøkelse om kortnebbgås” Nyhetssak på NINAs hjemmeside 19. november 2014

<http://www.nina.no/Aktuelt/Artikkel/tabid/945/ArticleId/3694/Jaktundersokelse-om-kortnebbgas.aspx>

ÅPENT MØTE MED BRUKERE OG ANDRE INTERESSETER

Åpent kveldsmøte for grunneiere, jegere og forvaltere. Backlund Thon hotel, Levanger 23. september 2015. 30 deltakere, foredrag (Tombre, I.M. 2015. Kortnebbgås i Nord-Trøndelag; fra forskning til forvaltning, jaktpraksis og lokale tiltak.), servering og åpen diskusjon og forslag til tiltak fra brukerne.

DELTAKELSE I PANELDEBATT UNIVERSITETET

1. Tombre, I.M. "Adaptive management and adaptive monitoring", panel debate, University of Tromsø, 26 March 2015
2. Brattland, C. "Change and adaptation in socio-ecological systems (SES) in the Arctic" Panel debate, UiT – The Arctic University of Norway, 4th of May 2015.

Interdisciplinary Cooperation

Four project partners are social scientists, four partners are natural scientists.

Budget in accordance to results

The budget follows the planned schedule

Could results from the project be subject for any commercial utilization

No

Conclusions

The projects is following the planned progress.