



Meeting notes - EGMP Monitoring Workshop

Dates:	22-23 November 2023
Venue:	Dragør Badehotel, Denmark
Chaired by:	Jesper Madsen, Head of the AEWA EGMP Data Centre



Day 1 - Wednesday 22 November

Jesper Madsen welcomed all participants and introduced the purposes of the workshop as well as the mandate and goals for the EGMP. As this workshop was the first gathering of the national goose monitoring coordinators under the EGMP, it was particularly important for the EGMP Data Centre to create connections to and within the coordinator network, and to compile an overview of the ongoing national monitoring activities.

Furthermore, the workshop was planned to make sure that all coordinators are aware of the history, structure and goals of the EGMP, including the monitoring needs, and the annual wheel that drives the need for data deliveries at certain times of the year. Finally, the workshop served to identify knowledge gaps and issues related to data flow, and provided an opportunity to discuss how the national coordinators can collaborate with the EGMP Data Centre to improve these.

An introduction to the monitoring initiatives under the IUCN Goose Specialist Group was given by Tony Fox from Aarhus University, and representatives from each of the 12 participating range states presented an overview of the counts carried out nationally, including details on species, timing, and coverage. These presentations can be found on the EGMP website and formed the basis of the discussions on Day 2.

Day 2 – Thursday 23 November

The morning session included several presentations on specific topics related to goose monitoring and the work of the EGMP. Fred Johnson from the EGMP Data Centre gave three different presentations, on "Monitoring and Decision Making in Adaptive Management", "Addressing Inferential Discrepancies in Monitoring Data using IPMs", and "Estimating Abundance by Combining GPS and Counts" respectively.

Andreas Lindén and Tuomas Seimola from LUKE presented a Finnish study on the use of GPS-tagging to estimate population size from incomplete counts and detect biases in monitoring protocols. Morten Frederiksen from Aarhus University presented the use of ringing to estimate survival rates through capture-mark-recapture programmes, and Kees Koffijberg from SOVON addressed the possible pitfalls encountered when assessing age ratios of goose flocks.

These presentations were followed by a thorough discussion on the current knowledge gaps and information needs that should be addressed to improve future goose monitoring efforts. Tony Fox introduced the topic, and the workshop participants then split into two groups to discuss further at population level. Whereas one group focused specifically on the Greenland Barnacle Goose population, the second group dealt with all the other EGMP populations.

On the agenda for the afternoon was an excursion to Kalvebod Fælled, followed by a wrap-up session with reports from the two break-out groups.

The conclusions are summarized below:

For the **Russian/Baltic/North Sea population of Barnacle Goose**, summer counts (targeted the two temperate Management Units) are lacking from Sweden, and age counts from the Baltic area. Using spring counts from the Baltic area was proposed to estimate the size of the Russian Arctic breeding population. Choosing the right method for population counts is important, and **it was recommended to develop a set of recommendations** – for example under which conditions to use roost counts versus field counts, best time of day for counting etc.

For the NW/SW European Greylag Goose population, the summer counts of national breeding populations for each MU had good coverage in 2022, but a summary at MU-level is still lacking, and it was proposed to prepare this for EGM IWG9. It was also proposed to write a synthesis of the migration patterns, updated with GPS-tracks from relevant range states. A working group will be established to work on these documents (including recommendations for future counts). Related to these tasks, it was recommended that GPS-tagging is used to analyse detection probability in Sweden during the September count, and that an agreement is reached on the translation of the summer population size to number of breeding pairs. Finally, it is necessary to follow up on the winter counts in Spain.

For the **East Greenland/Iceland/Scotland/Ireland Barnacle Goose population**, a population size of 61-62,000 individuals is estimated, which is still above the FRV, although the population has been heavily impacted by Avian Influenza. Data from Ireland are currently being analyzed. The monitoring plan for Iceland now includes monitoring of the breeding population, which should be entered into the IPM. A proposal for catching and GPS-tagging geese in N Iceland was raised. The **Task Force could discuss whether there is a need for a metapopulation modeling approach** (keeping in mind that currently the data does not allow such an approach). Some existing demographic data from ringing projects is currently not available; it is of high priority to get access to this data.

For **Taiga Bean Goose and the Svalbard Population of Pink-footed Goose**, the main tasks in the coming years are related to the **evaluation and revision of the Action and Management Plans**. The monitoring programs for both species are well-established, but certain challenges are still posed by changing migration routes, short-stopping of wintering birds, and the change of the Taiga Bean Goose Management Units to

population status following decisions at MOP8. One particular challenge is the lack of progress on **monitoring of the Eastern population of Taiga Bean Goose**. An existing project in Germany may help to solve this issue.

A number of general topics were also discussed. **The use of GPS tags to inform monitoring and assessments** has shown promising results concerning Greylag Goose in Finland, and might also be useful in terms of assessing bias in counts of Taiga Bean Goose, Greylag Goose and Pink-footed Goose. It was proposed to **set up an online meeting to exchange knowledge and ideas**, and to develop this methodology further.

Using an app to record geese in the field may also be useful, certainly for getting date, time and position for all observations. An app may also stimulate young goose counters to participate more. A proposal to **set up an online meeting to exchange experiences, platforms and ideas** was brought up.

It was also discussed whether communication material to recruit observers might help attract new goose counters. The EGMP Data Centre and/or Secretariat could develop a prototype.

Finally, a wish for an initiative encompassing EGMP, Goose Specialist Group, and IWC was expressed, dealing with EGMP species as well as others. To exchange experience, as a first step, the EGM IWG could consider **establishing a Forum (or Task Force) for monitoring**.