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REPORT AND RECOMMENDATIONS OF THE EGMP PINK-FOOTED GOOSE TASK FORCE AND DRAFT WORKPLAN FOR 2019/2020

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and members of the Task Force

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Introduction

According to Rule 29 of the European Goose Management International Working Group (EGM IWG) Modus Operandi, the EGM IWG may establish species and/or thematic Task Forces as necessary to deal with the preparation and coordination of decision papers and background documents, as well as to deal with other specific tasks.

The Pink-footed Goose Task Force (PFG TF) was established in early 2017, following the recommendations of the 2nd Meeting of the EGM IWG (EGM IWG2) in June 2017, in Copenhagen. Prof. Jesper Madsen was identified as the Coordinator for the PFG TF. The current membership of the PFG TF is indicated in Annex 1 to this document. In line with the Terms of Reference, the nomination of additional members to the TF is at the discretion of the National Government Representative of each Range State and the Coordinator of the TF.

At the 3rd Meeting of the EGM IWG (EGM IWG3) in June 2018, in Leeuwarden, the Netherlands, the PFG TF presented on the work progress since the establishment of the TF and presented recommendations to the EGM IWG, referring to document AEWA/EGMIWG/3.10/Rev.1.

This document provides an overview of the work that has taken place since the EGM IWG3 and the recommendations and workplan for the implementation of the AEWA International Species Management Plan (ISSMP) for the Svalbard Population of the Pink-footed Goose for 2019/2020, pending the incorporation of the outcomes of the 2nd face-to-face meeting of the EGMP Task Forces taking place on 17 June 2019, in Perth, Scotland, UK.

1. Meetings

Since no funding has specifically been allocated for the work of the TBG TF, communication and information exchange has been conducted mainly either via email or through online meetings.

The 4th meeting (virtual) was held on 15 March 2019.

The 5th meeting (face-to-face) will be held in Perth, Scotland, UK on 17 June 2019.

2. Key Activities

In June 2018, the EGM IWG approved the PFG TF workplan for 2018/2019, which encompassed the following tasks:

1. PFG TF acts as internal EGMP review panel for annual monitoring reports and harvest assessments;
2. PFG TF provides internal EGMP review of new Integrated Population Model framework;
3. PFG TF produces a proposal for an ecosystem services assessment;
4. PFG TF produces a status fort the habitat restoration activities in Vlaanders;
5. PFG TF produces a note on possible options for improving harvest organisation in Denmark and Norway;
6. PFG TF prepares a note on the status of monitoring of tundra degradation in Svalbard;
7. PFG TF proposes that the EGM IWG discusses process and criteria for evaluation of the current ISSMP and needs for information in support of the evaluation.

3. Outcomes and Recommendations

3.1. Internal Review of Annual Reports

It has been agreed that the PFG TF acts as internal EGMP review panel for the annual monitoring and harvest assessment reports (early June 2019). The timeline for review has been agreed and will be implemented in advance of EGM IWG4.

3.2. Internal Review of Integrated Population Model (IPM)

Led by Dr Fred A. Johnson, the EGMP Data Centre, has built an IPM framework for the Pink-footed Goose, which will be used for assessments from 2019 onwards. The IPM is described in a scientific manuscript submitted to a scientific journal for review. The PFG TF has also been asked to review the manuscript, with a deadline by the end of April 2019.

3.3. Proposal for Ecosystem Services Assessment (note prepared by Dr Ingunn Tombre)

Dr Ingunn Tombre, Norwegian Institute for Nature Research (NINA) has led an international consortium to prepare an application to the Norwegian Research Council regarding ecosystem services provided by migratory geese, using Pink-footed Geese as a case study. Unfortunately, the project was not funded, but parts of the proposal can be used for other relevant funding opportunities. The main idea behind this initiative was to synthesize the value of the farmland ecosystem where geese are one of the actors, in the context of different countries' cultures and policies. The perceived value of services will vary depending on the culture, traditions and relative strength of stakeholder groups. Goose hunting for instance is a popular recreational activity in Nordic countries, whereas there is no goose hunting in the Netherlands and Belgium. Moreover, the focus and impact of conservation groups differ between these countries. Management across countries at the flyway level will presumably have much to gain from including cultural perspectives in a socio-ecological context, e.g. to predict how management actions in one country may have consequences in another country. Four relevant questions in this context will be:

(I) *What values do the geese represent in each country?*

(II) *Are there differences between these values?*

(III) *Can the positive values outweigh the disservices they cause in the farmland ecosystem, and if they do, to what degree?*

(IV) *How can these assessments be used constructively in the management of the wild goose populations, and how can management of species at the flyway level be improved by an ecosystem approach?*

3.4. Status of Habitat Restoration Activities in Flanders, Belgium (Eckhart Kuijken, Christine Verscheure)

In order to compensate the ongoing loss of high nature value grasslands due to intensification of agriculture, the NGO Natuurpunt is finalising the 'LIFE+project Oostkustpolders' (2013-2019). Within five project areas of ca 5,000 ha (including 1,200 ha nature reserves) the restoration of grasslands covers at present 253 ha. This includes digging of former micro relief and ditch or creek patterns of equalised intensive grasslands and recently ploughed fields. Such newly created grasslands are already used by geese after one to three seasons.

Also, the Nature and Forest Agency (ANB) is managing an increasing number of polder sites in core wintering grounds of Pink-footed Geese and White-fronted Geese. In close cooperation both conservation organisations are safeguarding significant surface areas of the Natura 2000 SPAs in the Polders. Hopefully this sound grassland habitat management will help to ensure the future wintering of Pink-footed Geese in Flanders and turn the decreasing trends in numbers. How far the grassland restoration program will counteract the striking behavioural changes of this species with recent preference for maize stubble will be carefully monitored.

3.5. Possible Options for Improving Harvest Organisation in Denmark and Norway (note prepared by Ove Martin Gundersen and Iben Hove Sørensen)

Background

In response to the growing European goose populations and an increased awareness of the potential for goose hunting to be used as a management tool, several initiatives related to securing the sustainability of this activity have been launched by researchers, hunters and farmers. Hunters in Norway and Denmark became subjects in the focus of the adoption and implementation of the International Single Species Management Plan for the Svalbard Population of the Pink-footed Goose in 2012 and several research and management projects have been carried out in the two countries.

The following issues were important drivers of research and management efforts, since they are directly addressed in the management plan:

1. Hunting pressure must be adjustable between and during hunting seasons, thus managers should be able to regulate hunting seasons or quotas according to recent estimates of population size, breeding success etc;
2. All hunting must be sustainable;
3. Crippling rates must be reduced or kept at minimum levels.

What has been done in Denmark and Norway?

Denmark and Norway have implemented two different ways of adjusting hunting pressure to reach the agreed quota on Pink-footed Goose. In Denmark the length of the hunting season is evaluated each year and can be changed yearly whereas hunting seasons for other species are generally only evaluated every four years. In Norway the quota has been used directly to adjust the hunting pressure and trials with a mobile application for reporting bagged geese have been carried out.

Goose hunting courses have been offered to hunters in both countries. Courses were mainly aimed at teaching hunters how to use decoys and goose calls to attract geese in order to reduce shooting distance and minimize crippling risk, but they also dealt with identification of goose species and the benefits of cooperation between neighbouring landowners and hunters.

A Danish research project lead by Aarhus University aimed at improving the effectiveness of the local goose hunters (leading to less disturbance and lower crippling ratio) also included a study of the motivation of goose hunters and landowners for engaging in coordinated goose management across property borders. The project showed that hunters generally benefit from coordinating hunts across a larger area and letting the geese gather and rest during the days between hunting events. At least two days “rest” between hunting events were recommended in order to increase harvest on a day of hunting.

Current Situation

In Denmark most of the cooperation established during the research project years 2012-2016 has now ended. Despite targeted dissemination, the finalisation of the project and lack of contact to a central coordinator led to a collapse of the communication between local hunters – and also, the landowners seem to have forgotten about the positive results of organised hunts on their properties.

In Norway, about half of the area where Pink-footed Geese are hunted in the autumn in Trøndelag is organised by the farmers in accordance with hunting regulations. It remains challenging to convince the landowners to cooperate. One main challenge is that some who have goose-related issues in the autumn, may not have any issues with the Pink-footed Geese in the spring.

The Norwegian Farmers' Union runs a national project financed by the Norwegian Environment Agency. The main tasks of the project are to:

A. Facilitate the local organisation of goose hunting;

B. Arrange goose hunting courses;

C. Implement and disseminate the knowledge and updates from the international management plans;

D. Contribute to local and regional management plans for geese;

E. Stimulate and facilitate geese as "added values" in terms of a resource and food; and

F. Produce a TV-series about geese as a resource and food.

In some areas organising hunting is a process that takes time because landowners/farmers and hunters have to accept and get used to collaborate. The main goal of the Farmers' Associations goose project is to have all "hotspots" for goose hunting organised in 2021 in Trøndelag.

Without a continued focus on better organisation of goose hunting and wider distribution of the positive lessons learned to other areas it is questionable that the harvest of Pink-footed Geese can be maintained at the high levels which are necessary in order to maintain a stable population.

Recommendations from the Pink-footed Goose Task Force to the IWG

Based on the experiences described above, the PFG TF recommends the following:

1. Strongly encouraging landowners to make hunters work together and coordinate their hunting activities on their land. This will enable hunters to shoot more geese in areas where conflicts between geese and agriculture are large, and it will also enable hunters to learn from each other and agree on when/how to secure days and areas where the birds can rest.
2. Offer goose hunting courses with a focus on goose identification, hunting techniques and the need for cooperation between hunters and other stakeholders. This is a very good way of getting in contact with important stakeholders.
3. Arrange an international workshop or symposium for hunters, landowners and managers. There is a lot of inspiring work going on that hunters and managers in neighbouring countries are unaware of.
4. Consider how the roles of researchers and coordinators can be filled in the future to avoid losing any momentum that has built up around cooperation trials/scientific experiments.

3.6. Status of Monitoring of Tundra Degradation caused by Geese in Svalbard (note prepared by Prof. Jesper Madsen)

A Norwegian-led and funded long-term integrated monitoring program called 'Climate-ecological Observatory for Arctic Tundra (COAT)' has been launched in Svalbard. It includes modules focussing on goose-vegetation interaction, with special attention paid to the impacts by Pink-footed Geese in a warming Arctic. Field study sites have been established on Nordenskiöld Land (Sassendalen, Adventdalen, Semmeldalen) with permanent plots being monitored on an annual basis, using a combination of detailed field plots and remote sensing using drone and satellite imageries. The goose module is led by Dr. Jesper Madsen, Aarhus University and the vegetation module by Dr Virve Ravolainen, Norwegian Polar Institute. The program plans to produce an assessment of the status of tundra degradation in 2021, i.e. prior to the revision of the ISSMP for the Pink-footed Goose. See: https://www.coat.no/en/.

3.7. Indicators to be used for the Evaluation of the ISSMP for the Pink-footed goose (note prepared by Prof. Jesper Madsen)

The ISSMP for the Pink-footed Goose shall be revised in 2022. The evaluation indicators have to be decided by the EGM IWG. The PFG TF proposes to use the fundamental objectives of the ISSMP as the background against which to make the evaluation (see Figure 1).

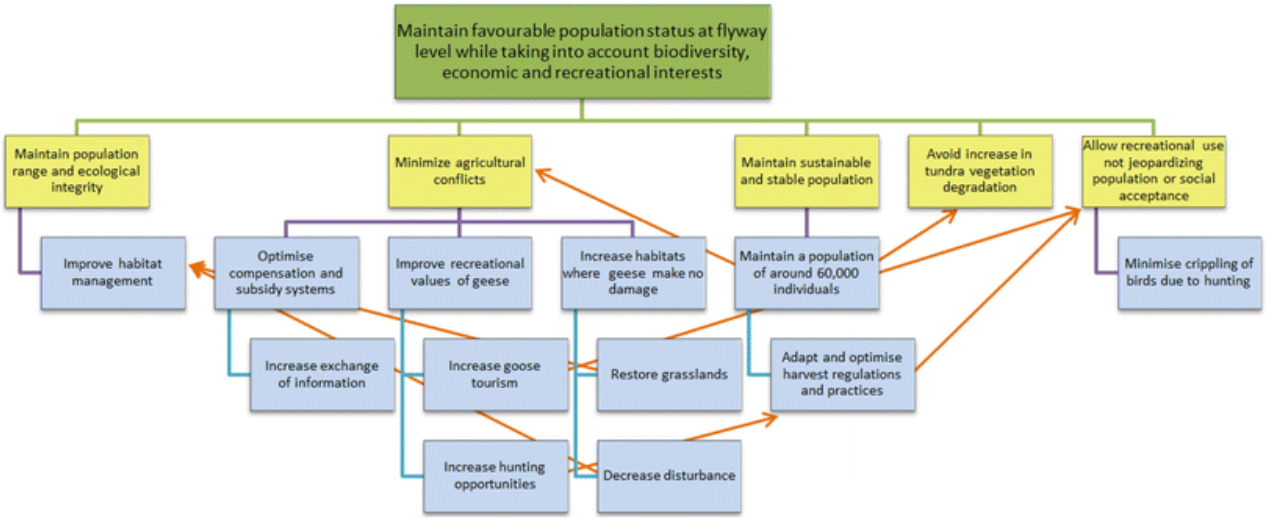

Figure 1. *Hierarchy of objectives for the International Single Species Management Plan for the Pink-footed Goose* *Top level* goal (or strategic objective); *second level* fundamental objectives (which are supposed to be SMART, i.e. Specific, Measurable, Achievable, Results-oriented and Time-fixed); *lower levels* means objectives (or alternative key actions) to reach the fundamental objectives. *Red arrows* show positive feedbacks between objectives. Source: Madsen et al. 2017; Ambio 46 (Suppl. 2): 275-289.

Firstly, how well has the ISSMP delivered with regards to the fundamental objectives:

- Minimise agricultural conflicts?
- Avoid increase in tundra vegetation degradation?
- Maintain sustainable and stable population at around 60,000 individuals?
- Allow recreational use not jeopardising population or social acceptance with focus on crippling caused by shotgun shooting?
- Maintain population range and ecological integrity?

Secondly, which means objectives/alternative actions have been implemented to support the fulfilment of these objectives (see Figure 1)?

Thirdly, the population target of 60,000 individuals was the product of a compromise among social values and hypotheses about a relationship between population size and socio-economic and biodiversity impacts. It is proposed to examine the evidence for the relationships, in order to inform a discussion about the need to revise the population target.

The current monitoring activities include almost all indicators which are needed to support the evaluation, such as population estimates, range of population, extent of agricultural conflicts, extent of tundra degradation as well as crippling rates due to shotgun shooting.

Based on the evaluation in 2022, the EGM IWG can decide whether or not to revisit the objectives, apply other alternative actions to achieve the objectives, as well as adjust the population target (a so-called double-loop learning process). That process can be supported by a Multi-criteria Decision Analysis (MCDA).

Recommendations from the Pink-footed Goose Task Force to the IWG

The EGM IWG is invited to discuss and agree on the criteria for evaluation of the ISSMP for the Pink-footed Goose.

Draft workplan for the implementation of non-AHM related actions (2019/2020)

To be discussed during the PFG TF meeting on 17 June 2019, in Perth, Scotland. A revised version will be prepared by the Coordinator of the PFG TF and circulated to the EGM IWG, following the EGM IWG4.

Annex 1

Membership of the Pink-footed Goose Task Force

Table 1 below shows the current membership of the Pink-footed Goose Task Force per Range State.

Table 1 Membership of Pink-footed Goose Task Force as of May 2019

Country	Representative	Affiliation
Belgium	Mr Floris Verhaeghe	Species policy expert, Agentschap voor Natuur en Bos
	Dr Frank Huysentruyt	Institute for Nature and Forest Research
	Dr Eckhart Kuijken	Research Institute for Nature and Forest, Flemish Government of Belgium
Denmark	Prof. Jesper Madsen (Coordinator)	Aarhus University
	Ms Iben Hove Sørensen	Danish Hunters' Association
	Mr Niels-Erik Jørgensen	Danish Hunters' Association
	Mr Knud Flensted	BirdLife Denmark
	Mr Boris Schønfeldt	BirdLife Denmark
Finland	Mr Jorma Pessa	Centre for Economic Development
Netherlands	Mr Fred Cottaar	Dutch Goose and Swan Working Group
	Mr Kees Koffijberg	Sovon Vogelonderzoek Nederland
Norway	Dr Ingunn Tombre	Norwegian Institute for Nature Research, Department of Arctic Ecology
	Mr Ove Martin Gundersen (member of the TF until further notice)	Norwegian Farmer's Union
Sweden	Mr Urban Johannson	Swedish Environmental Protection Agency
EGMP Data Centre	Dr Fred A. Johnson	Wetlands & Aquatic Research Center U.S. Geological Survey (USGS)
EGMP Data Centre	Dr Henning Heldbjerg	Aarhus University
AEWA Secretariat	Ms Eva Meyers	UNEP/AEWA