AEWA EUROPEAN GOOSE MANAGEMENT PLATFORM

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AEWA European Goose Management Platform

#### 5<sup>th</sup> MEETING OF THE AEWA EUROPEAN GOOSE MANAGEMENT INTERNATIONAL WORKING GROUP



15-18 June 2020, Online conference format

## REPORT AND RECOMMENDATIONS FROM THE EGMP PINK-FOOTED GOOSE TASK FORCE AND DRAFT WORKPLAN FOR 2020/2021

Prepared by the members of the Task Force

#### 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 2017, following the recommendations of the 2<sup>nd</sup> Meeting of the EGM IWG (EGM IWG2) in June 2017. 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 4<sup>th</sup> Meeting of the EGM IWG (EGM IWG4) in June 2019, in Perth, UK, 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/4.8.

This document provides an overview of the work that has taken place since the EGM IWG4 and the recommendations and workplan for the implementation of the AEWA International Single Species Management Plan (ISSMP) for the Svalbard Population of the Pink-footed Goose for 2020/2021, pending the incorporation of the outcomes of the virtual meeting of the EGMP Task Force taking place on the 11 June 2020.

## 1. Meetings

Since no funding has specifically been allocated for the work of the PFG TF, communication and information exchange has been conducted through online meetings.

The 6th meeting (virtual) was held on 26 March 2020.

The 7th meeting (virtual) will be held on 11<sup>th</sup> of June 2020.

## 2. Activities

In June 2019, the EGM IWG approved the PFG TF workplan for 2019/2020, which encompassed the following tasks:

1. Continued internal EGMP review role;

The 5<sup>th</sup> Meeting of the AEWA European Goose Management International Working Group is taking place remotely in an online conference format.

- 2. Fund raising and organisation of an international workshop on hunting organisation, lessons learned, exchange of best practises, preparation of guidelines (focussed on PfG in Scandinavia);
- 3. Analysis of potential biases in demographic variables used in monitoring/modelling;
- 4. Report on development of new migration route;
- 5. Prepare note on clarification of the 60,000 target (spring or autumn numbers?) to be used in future assessments for IWG5;
- 6. Pending funding opportunities, analyse ecosystem services provided by PfG.

Outcomes and progress have been accomplished on tasks 1, 2, 3, 4 and 5 which will be reported here, while it has not been possible to acquire funding for task 6.

## 3. Outcomes and recommendations

## **3.1 Internal review of Annual Reports**

In line with previous years, it has been agreed that the PFG TF acts as internal EGMP review panel for the annual monitoring and harvest assessment reports (early June 2020). The timeline for review has been agreed and will be implemented in advance of EGM IWG5.

## **3.2 International exchange on hunting organisation**

Iben Hove Sørensen, Danish Hunters' Association, Ove Martin Gundersen, Norwegian Farmers' Union and Jesper Madsen organised a small informal workshop, held on 16 January 2020 in West Jutland, Denmark, with a group of hunters from Norway and Denmark willing to work together on exchanging best practises regarding hunting organisation and use of gear to attract geese and reduce crippling. This group can be used to promote best practises in the field, and they can contribute to developing courses.

In Denmark, contact between experienced goose hunters and coordinators of events for new hunters has been established in order to promote best practise and educate new hunters developing an interest in goose hunting. Furthermore, the group can support the systematic collection of wings for age assessment of the hunting bags in Denmark and Norway. Norwegian hunters and the Danish Hunters' Association are working on further exchange, focusing on hunting and ethics and sustainable hunting practices.

The Farmers' Union in Norway is planning a campaign highlighting hunting as a tool to managing the damage for farmers. Norwegian Farmers' Union's goose project is developing a course for the Norwegian Hunters and Angler Association (NJFF). The goal is to educate goose hunting instructors. The first instructors will be educated in 2021. The project will also develop the course for the hunters and themes will be: (1) Biology of species, (2) Management, (3) The hunt for the optimal hunt, (4) Hunting and ethics, (5) Geese as a resource, (6) Forms of hunting, (7) Use of camouflage, (8) Decoying and (9) Training clay shooting.

The goose project is also working with to new areas for optimizing hunting, in Steinkjer Municipality and in Selbu Municipality, respectively. Finally, goose hunting courses will be continued this year until the NJFF courses are ready.

Ove Martin Gundersen has applied for funds from the government for production of a goose hunting video that can be used to train hunters on hunting in crop fields. At present, the outcome is pending. Given that funds are approved, a 30-minute-long video will be produced this year with a budget of 150.000 NOK. Alternatively, this may be a task for 2021.

#### 3.3 Analysis of potential biases in demographic variables used in monitoring/modelling

This task was addressed using the newly developed Integrated Population Model for the population of the Pink-footed Goose, published in a recent scientific publication:

Johnson FA, Zimmerman GS, Jensen GH, Clausen KK, Frederiksen M, Madsen J. 2020. Using integrated population models for insights into monitoring programs: an application using pink-footed geese. Ecological Modelling. 415. https://doi.org/10.1016/j.ecolmodel.2019.108869

The results will be used to discuss and, if necessary, fine-tune monitoring or find alternative ways of monitoring certain variables.

The work will be continued in the coming year by further technical analyses.

## **3.4 Report on the new migration route**

GPS-tracking of 23 individual PFG caught in Oulu, Finland in the springs of 2018 and 2019 has shown that a new migration route and breeding grounds are emerging. Hence, it seems that a group of c. 3000 geese have started to migrate to breeding grounds in Novaya Zemlya, North Russia to breed (breeding attempts have been confirmed by GPS tracking and field observations in the autumn). In the autumn, the geese migrate straight to staging grounds in the region around Örebro, Sweden, from where they continue to wintering grounds in SE Denmark. Some birds move on to the traditional wintering grounds (occurring from Flanders, Belgium in the south to NW Denmark), but in spring they all appear to return to staging areas in Sweden (mainly Örebro), continuing to Oulu in Finland before the migration to the breeding grounds. Some geese from the traditional flyway follow the Novaya Zemlya group on spring migration to Sweden and Finland but migrate from there onwards to Svalbard.

The results of the first two full annual cycles of the GPS-tracking of the Novaya Zemlya birds will be analysed and written up for a scientific manuscript in the autumn of 2020.

#### **3.5 Recommendation on the population target (spring or autumn numbers?)**

The population target of 60,000 (range 50,000-70,000) for PFG was agreed by the PFG International Working Group in 2010-2011 and implemented in the ISSMP for the PFG in 2012. However, by that time a decision was not made on whether the target represented a spring or an autumn population estimate. As long as the population stayed well above the target, this has not been a critical issue. However, now that the population appears to have stabilised and even started to decrease towards the target due to the increased harvest, it is timely that the IWG decides on this matter.

When the ISSMP was implemented, the monitoring of the population was based on counts in November. Due to problems with the coverage in autumn, it was decided to supplement the November counts with counts in May. Furthermore, an independent estimate based on Capture-Mark-Recapture was included, which also provides an estimate of the spring population size. The newly developed Integrated Population Model for the PFG, uses all the counts and estimates as well as additional demographic and harvest data to estimate both the autumn and spring population size. The IPM estimates that the autumn population size is above the size in the subsequent spring (Figure 1). This is as expected due to mortality caused by hunting and natural causes occurring between autumn and spring. The relative difference between the autumn and spring estimates has increased in recent years, which may have been caused by the increased harvest mortality since the introduction of the adaptive harvest management program.



*Figure 1.* The development of the population of the Svalbard Pink-footed Goose estimated by an Integrated Population Model, divided into estimates derived for May and November, respectively (including 95% c.l.). See also PFG Harvest Assessment 2020.

The PFG TF recommends using the spring population estimate as the 60,000 population target based on the considerations that:

- The ISSMP was established to address management issues which specifically occur in spring, namely damage to crops in Norway and pre-breeding tundra degradation in Svalbard; hence the target was set to mitigate these problems and was agreed by the International Working Group as a tolerable level.
- Since the implementation of the ISSMP, the target has been accepted as the spring estimate by the Norwegian farmers and authorities dealing with the agricultural conflict.
- Choosing spring estimates will provide a bigger buffer from an ecological perspective.
- Autumn estimates appear to be more variable than spring estimates, at least in the most recent decade.
- Choosing spring estimates will allow for better and more constant hunting opportunities, which will, in turn, contribute to the reduction of conflict with farmers because hunting gives a revenue to landowners and is seen as a mitigating action.

So far, the ISSMP does not treat the new Russian Novaya Zemlya breeding group as a separate entity. Hence, their numbers are included in the current population estimate. With continued growth of this group, it might be relevant to consider whether to define this group as a separate management unit in the longer term, i.e. in the process of the revision of the ISSMP in 2022. If this is decided, it will have implications for the population target setting and corresponding recommendations.

It should be noted that even if spring estimates are chosen, the PFG TF recommends that autumn count shall be continued because it has a long history (carried out since the 1960s and used for various national purposes), it is used as a backup for spring counts, and the count is regarded as a stimulus for the volunteers in the field.

## 4. Workplan 2020/2021

The work plan for the PFG TF for the coming year will be discussed at the virtual meeting in the TF on 11 June 2020 and will be presented at the EGM IWG5.