#### AEWA EUROPEAN GOOSE MANAGEMENT PLATFORM



### MEETING ON THE BARNACLE GOOSE ADAPTIVE FLYWAY MANAGEMENT PROGRAMMES DEVELOPMENT PROCESS



1 October 2019, Reykjavík, Iceland

# PROCESS FOR THE DEVELOPMENT OF THE ADAPTIVE FLYWAY MANAGEMENT PROGRAMMES FOR THE EAST GREENLAND/SCOTLAND & IRELAND POPULATION AND THE SVALBARD/SOUTH-WEST SCOTLAND POPULATION OF THE BARNACLE GOOSE



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#### 1. Background

The International Single Species Management Plan (ISSMP) for the Barnacle Goose (*Branta leucopsis*) was developed according to Paragraph 4.3.4 of the AEWA Action Plan, which provides for developing ISSMPs for populations which cause significant damage, in particular, to crops and fisheries. In addition, it responds to AEWA Resolution 6.4, which requested the establishment of a multi-species goose management platform and process to address the sustainable use of goose populations and to provide for the resolution of humangoose conflicts, targeting as a matter of priority Barnacle and Greylag Geese.

The ISSMP for the Barnacle Goose was adopted at the 7<sup>th</sup> Session of the Meeting of the Parties to AEWA (MOP7), 4-8 December 2018 in Durban, South Africa, following various stakeholder workshops and extensive consultation with the Range States and relevant stakeholders.

The ISSMP provides a mandate for developing population-specific Adaptive Flyway Management Programmes (AFMPs) for each of the three populations (Russia/Germany & Netherlands; East Greenland/Scotland & Ireland, Svalbard/South-west Scotland) of Barnacle Goose, recognising that the populations have a different status on Table 1 of AEWA and that there are regional differences in migratory behaviour and the human-wildlife conflicts involved. These AFMPs shall be formally adopted by the European Goose Management International Working Group (EGM IWG) and then reviewed periodically.

At the 4<sup>th</sup> Meeting of the European Goose Management International Working Group which took place from 18-20 June in Perth, Scotland (EGM IWG4) Range States agreed on the proposed outline and content of the AFMP for the Barnacle Goose Russia/Germany & the Netherlands population including the proposed timeline and steps, as well as data and resources needed. For the East Greenland/Scotland & Ireland Population and the Svalbard/South-west Scotland Population it was agreed that a Range State meeting will be organized in autumn 2019, to agree on the process.

This document focuses on the development of the AFMPs for the East Greenland/Scotland & Ireland Population and the Svalbard/South-west Scotland Population of the Barnacle Goose, following the agreed outline of an AFMP.

#### 2. Agreed outline of an AFMP for the Barnacle Goose

#### Main body of the AFMP:

#### 1. Introduction

Description on the purpose and scope of the AFMP.

#### 2. Definition of Management Units (MUs)

Further data and subsequent analysis are still required to confirm the definition of the appropriate management unit/s.

#### 3. Definition of Favourable Reference Values (FRVs)

The FRVs for the Barnacle Goose will be included in this section, using the agreed methodology by the EGM IWG (currently under consideration).

#### 4. Cumulative impact of derogations and legal hunting

Assessment of the cumulative impact of derogations and hunting<sup>1</sup> on the development of the population, the likelihood of serious damage to agriculture and risk to air safety and to other flora and fauna (including the Arctic ecosystems) and the non-lethal measures taken to prevent damage/risk, as well as the effectiveness of these. If necessary, this section will propose a coordination of the derogation measures between Range States to avoid risk to the population and to enhance effectiveness of the measures.

#### 5. Monitoring indicators and programmes

Clear and effective monitoring indicators and programmes are identified to measure that the management objectives are met.

#### **6. Protocols for the iterative phase** (decision making, monitoring and assessment)

Management actions are evaluated systematically and adapted accordingly for improved management. The detailed protocols will be added as an Annex to the AFMP.

The following sections will be added as Annexes to the AFMP:

#### Annex 1. MU-specific workplans

Annual MU-specific workplans will be included and reviewed by the EGM IWG at their annual meetings. Workplans will include priority activities identified in the ISSMP, as well as other activities agreed by the EGM IWG at their annual meetings.

#### Annex 2. Box 1 of the ISSMP for the Barnacle Goose

- a. Characterisation of the spatial and temporal extent and trends of damage to agriculture and of risks to human health and air safety as well as to other flora and fauna that can be attributed to the population/MU in question, including predicted future changes in these;
- b. A description of the methods applied in the past assessments [for the need for derogations] for each country and recommendations for the development of future guidelines for assessments;
- c. Description of the methods applied or tested to prevent damages and to reduce risks, their effectiveness and sufficiency to tackle the problem;
- d. Understanding of the link between population level and damages or risk;
- e. List of SPAs and other protected areas designated for the Barnacle Goose;
- f. Management of the species and the damage inside and outside SPAs;
- g. Tackling damage prevention inside and outside SPAs (accommodation areas, derogations, etc.).

#### **Annex 3. Population Models**

This section will include the Barnacle Goose population models to assess the cumulative impact of derogations and hunting that will be prepared under the supervision of the Data Centre, to inform decisions. Range States will be requested to nominate experts to join the EGMP Modelling Consortium for the development of the population models.

#### **Annex 4. Impact Models**

This section will include models that will assess the predicted outcomes of defined management actions (e.g. effect of derogations) on the fundamental objectives set in the ISSMP.

#### Annex 5. Protocols for the iterative phase (decision making, monitoring and assessment)

Protocols for the iterative phase will be presented in this section, in order to systematically evaluate management actions and adapt them accordingly for improved management.

#### 3. Provisional<sup>1</sup> Steps for the Development of an AFMP

The development of the AFMP requires a number of steps that are highly dependent on the availability of funding, human resources and time, to provide a transparent management process that is informed by robust science.

Table 1 outlines the decisions and activities that are required in the process and that are to be agreed by the Range States at this meeting.

**Table 1.** Key decisions and resources needed for the development of the Barnacle Goose AFMPs (East Greenland/Scotland & Ireland population and the Svalbard/South-West Scotland population) Table to be agreed and completed at the Range State meeting.

Decision / activity	Responsibility	Extra resources needed	Timeframe for decision or funding to be provided
AFMPs process agreed	Range States		
[MUs defined and agreed]			
[FRVs defined and agreed]			
Collate data for Box 1			
Development of population models			
Development of impact models			
AFMP compilation			

## 4. Data needs for the purpose of the Barnacle Goose AFMPs (East Greenland/Scotland & Ireland population and the Svalbard/South-West Scotland population)

The following data requirements (Table 2) were identified to ensure the timely delivery of each step in the process for the development of the AFMP for the Barnacle Goose Russia/Germany & Netherlands Population. For the East Greenland/Scotland & Ireland population and the Svalbard/South-West Scotland population similar data requirements are expected.

**Table 2.** Data needs for the development of the Barnacle Goose AFMPs for the East Greenland/Scotland & Ireland population and the Svalbard/South-West Scotland population) Table to be agreed and completed at the Range State meeting.

Purpose / activity	Type of data	Responsibility	Timeframe for data to be provided
Population models	Capture-Mark-Recapture material (leg-banding and metal ringing)		
Population models and assessment of impacts of	Population counts (mid-winter)		

<sup>&</sup>lt;sup>1</sup> The timeline for the development of the AFMP is subject to the timely availability of data, funding and human resources.

derogations and		
harvest		
Population models		
and assessment of	Off-take under derogations and	
impacts of	hunting and their seasonal	
derogations and	distribution	
harvest		
Agricultural impact assessment	Damage assessment, compensation, subsidies paid, derogation off-take statistics (according to the indicators proposed by the Agricultural Task Force)	
Air safety risk assessment	Bird strike statistics	
Ecosystem impact assessment	Measurements of tundra degradation; effect on breeding meadow birds	
Population model	Population counts (summer;	
updates	pending decisions on MUs)	
Agricultural impact models	Damage assessment statistics	

#### **Action requested from the Range States**

Agree on a process to develop the AFMPs for the East Greenland/Scotland & Ireland population and the Svalbard/South-West Scotland population of the Barnacle Goose, including the coordination and workflow of the process, data and resource needs, as well as recommended tentative timelines.