



Barnacle Goose Session

*Adaptive Flyway Management Programme for the East
Greenland/Scotland & Ireland Population of the Barnacle Goose*

AEWA European Goose Management Platform

15-18 June 2020

EGM IWG5

Online Conference Format



Adaptive Flyway Management Programme for the East Greenland/Scotland & Ireland Population of the Barnacle Goose
Doc. AEWA/EGMIWG/5.20

Outline

International Single
Species Management
Plan (ISSMP)

Barnacle Goose

Three population-
specific Adaptive
Flyway Management
Programmes (AFMP)

East Greenland/UK
& Ireland population

Svalbard/Southwest
Scotland population

Russia/Netherlands
& Germany population
or its three MUs

Each AFMP

- Defines management units as necessary
- Defines Favourable Reference Values for the population/management unit – based on an agreed methodology
- Contains population/management unit-specific analyses outlined in Box 1
- Provides protocols to assess the cumulative impact of all off-take (including both legal hunting and derogations)
- Sets out workplans for the ISSMP actions relevant for the population/management unit
- Range States remain responsible for their derogation measures
- Range States remain responsible for national planning and implementation within the framework of the ISSMP

Process and content based what was agreed at EGM IWG4 in Doc. AEWA/EGMIWG/4.13/CORR. 1

- 1) Definition of MUs (Chapter 1);
- 2) Definition of Favourable Reference Values (FRVs) for the population and its MUs (Chapter 2);
- 3) Provide a consolidated assessment of damages and risks caused by this population of Barnacle Goose (Annexes 2 and 4, i.e. Box 1 and the Impact Model);
- 4) Establish protocols to assess the cumulative impact of all off-take including both derogations and legal hunting, where allowed (Chapters 3 and 5)
- 5) Establish indicators (Chapter 4 and Annex 5)



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1. Definition of Management Units (MUs)

- The ISSMP has mandated the EGM IWG to define the Management Units (MUs) in the AFMP.
- The Range States of the East Greenland/Scotland & Ireland population agreed to manage this population as one Management Unit, following a Range State Meeting of the Barnacle Goose Adaptive Flyway Management Development Process which took place in Reykjavik, Iceland on 1 October 2019.

2. Definitions of Favourable Reference Values (FRVs)

- **Favourable Reference Populations (FRPs):**

- Based on the wintering population around 2000 (i.e. Agreement Value): 54,000 individuals

- **Favourable Reference Range (FRR):**

- Breeding: c. 100,000 km²
- Non-breeding: c. 121,500 km²

- **Favourable Reference Habitat (FRH)**

- There is sufficient extent and quality of habitat to sustain the FRP

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3. Cumulative impact of derogation and legal hunting: mandate

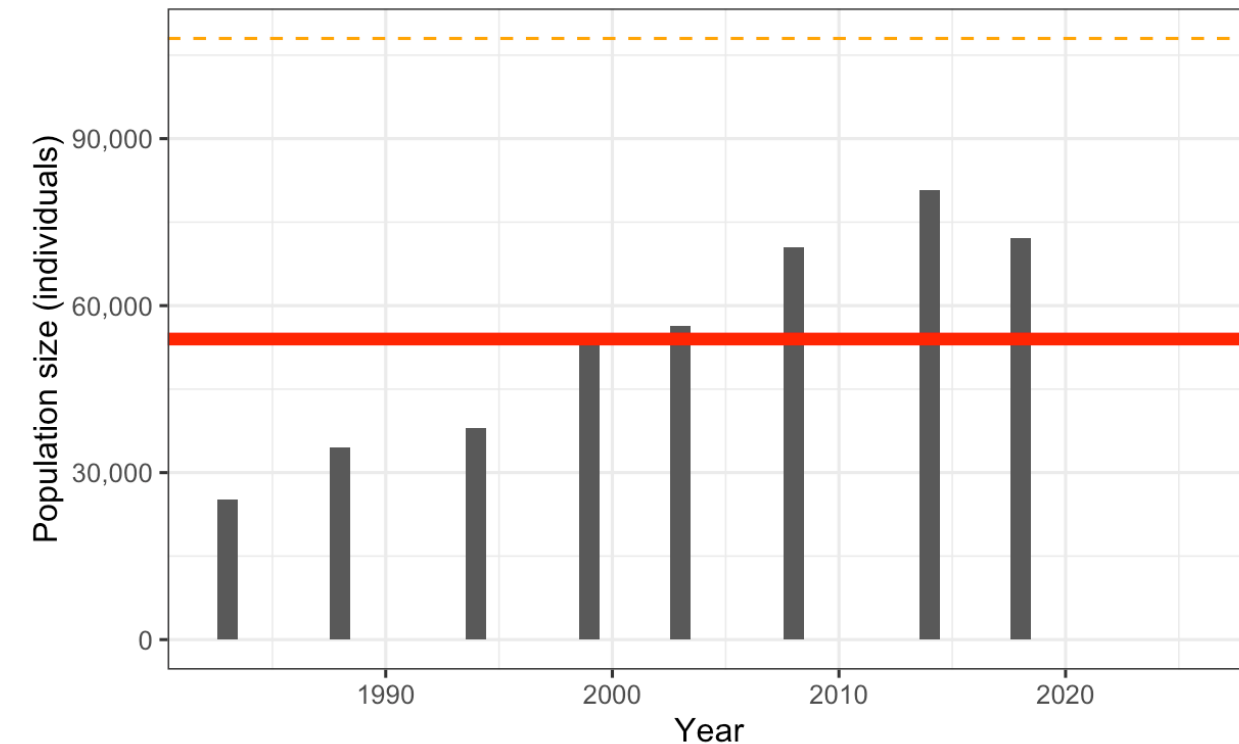
Actions 4.2 of the ISSMP requires to “asses periodically, and report to the AEWA EGM IWG, the cumulative impact of derogations (as well as hunting in Range States in which derogation is not required):

- *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, coordinate the derogation measures between Range States to avoid risk to the population and to enhance the effectiveness of the measures”.*

The role of the Adaptive Flyway Management Programme for East Greenland/Scotland & Ireland population of the Barnacle Goose is not to maintain the population at a certain target level, but prevent that the population declines below the FRP.

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3. Cumulative impact of derogation and legal hunting: management concept



A two-tier approach:

- $CV > 200\%$ of the FRP:
 - Monitoring of population size, offtake under derogation and hunting;
 - Prediction of population development
- $CV < 200\%$ of the FRP:
 - Monitoring of population size, offtake under derogation and hunting;
 - Prediction of population development;
 - Coordination of offtake under derogation and hunting;
 - Taking coordinated conservation measures, if necessary.

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Monitoring indicators and programmes: general principles

Indicators to be used in the assessment of the ISSMP and the AFMP

- Annual data collection in most cases, but reporting only in Dec. 2025 in most cases
- Same indicators for the same species
- We need indication of trends (increasing or decreasing) not necessarily absolute values
- Indicators should be robust but relatively inexpensive, building on existing data collection
- Use of relative annual indices at national level combined into multinational indices at flyway level

Indicator fact sheets (Annex 5)

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Monitoring indicators and programmes: proposed indicators

- I. Maintain the population at a satisfactory level
 1. Population size compared to the Favourable Reference Population (FRP)
 2. Range extent compared to Favourable Reference Range (FRR)
- II. Minimize agricultural damage and conflicts
 1. Relative change in damage payments
- III. Minimize the risk to public health and air safety
 1. Risk of zoonotic influenza transmission to the general public
 2. Number of bird strikes caused by Barnacle Goose
 3. Number of Barnacle Geese passing over the commercial airports
- IV. Minimize the risk to other flora and fauna
 1. Area of natural habitat or habitat of threatened species negatively affected by Barnacle Goose
- V. Maximise ecosystem services
 1. Number of people enjoying watching geese
- VI. Minimise costs of goose management
 1. Relative change in cost of goose management

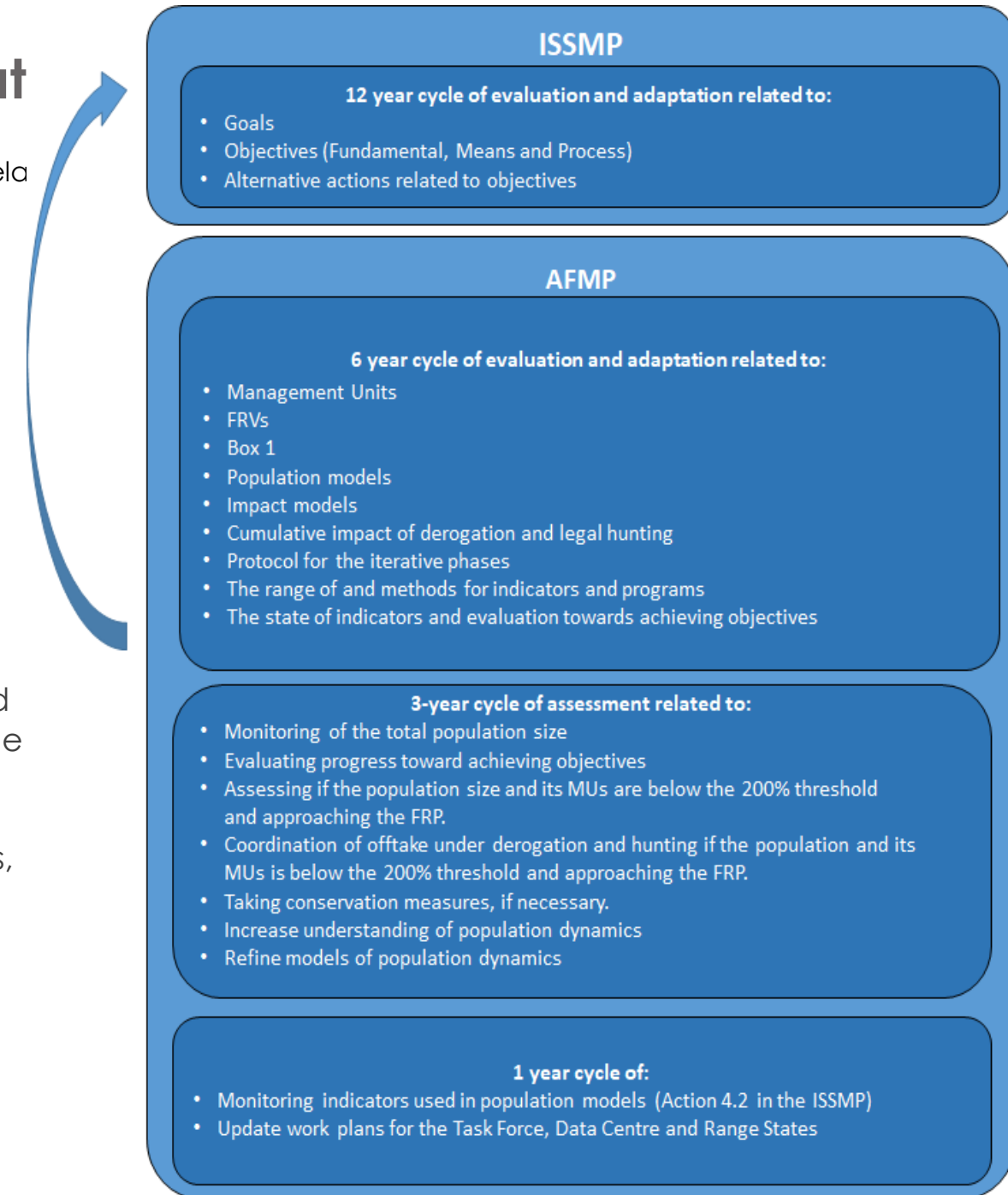
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Protocols for the iterative phase

A 10/12 year cycle of the ISSMP;

- **Two 6-year cycles** of the AFMP, and within the AFMP:
- **Two 3-year cycles** of monitoring of the total population size and assessing if the actual size of the population and its MUs are below the 200% threshold and approaching the FRP;
- 1-year cycles of monitoring in Scotland and Iceland (population sizes, age ratios, harvest and derogation); update of work plans.





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Two 3-year cycle within the AFMP

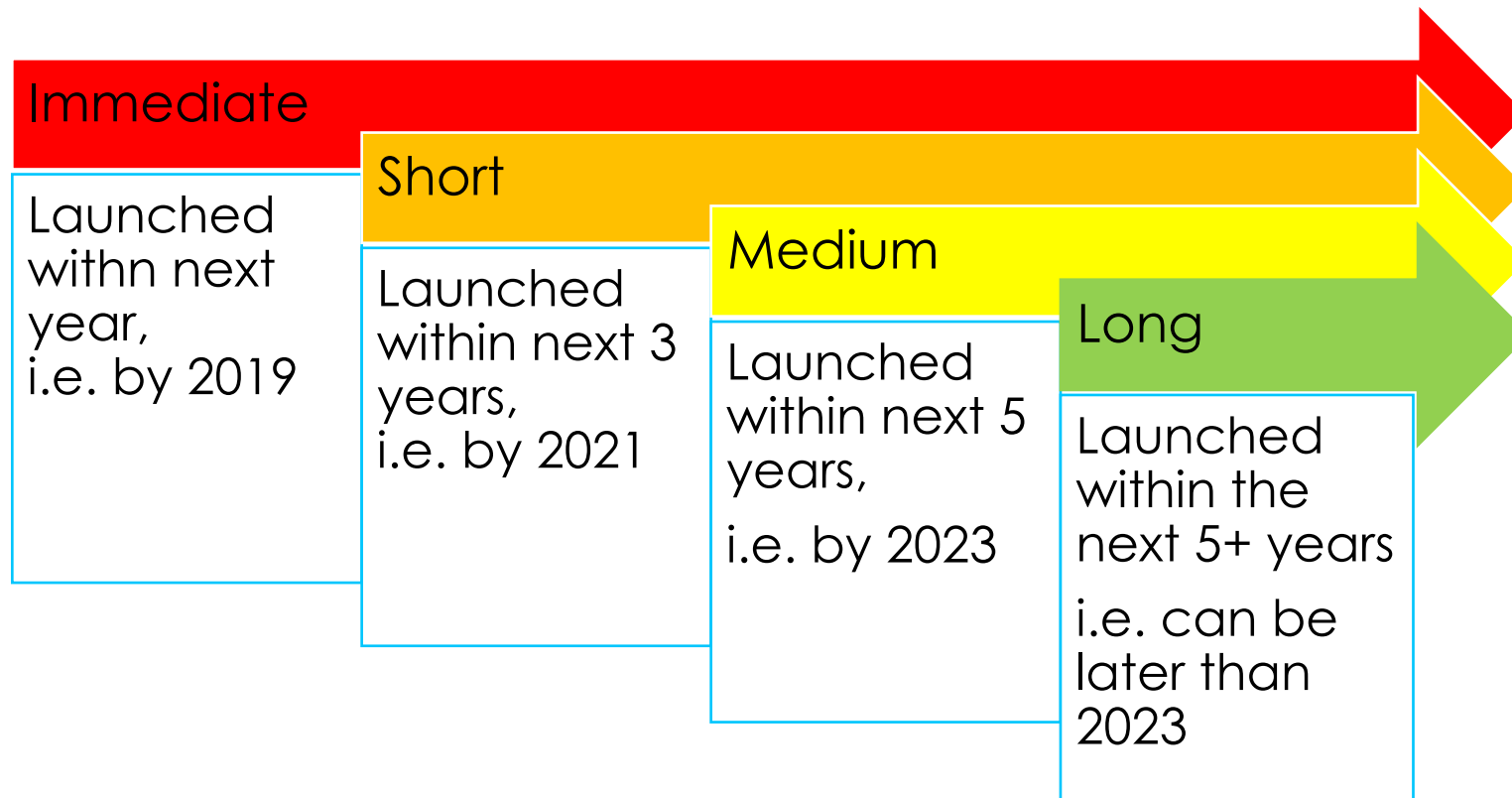
- Monitoring of the total population size (spring) and breeding population size in Iceland;
- Review the need for two Management Units;
- Evaluating progress toward achieving objectives;
- Assessing whether the population size is below the 200% threshold and approaching the FRP;
- If below the 200% threshold and approaching the FRP: coordination of offtake (derogation and hunting);
- Taking coordinated conservation measures, if necessary;
- Increase understanding of population dynamics;
- Refine models of population dynamics.

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1-year cycles within the AFMP of data collection and update of work plans

- Population count at key sites in Scotland (ongoing);
- Age counts on Islay and Tiree in Scotland (October-December, ongoing);
- Breeding numbers on South Iceland (ongoing);
- Offtake data (harvest and derogation) (ongoing);
- Crippling rate for the same periods as offtake (season 2020/21-).
- Monitoring data is to be submitted to the EGMP Data Centre on an annual basis (every 3-year for the total population count), and no later than 30 April each year.

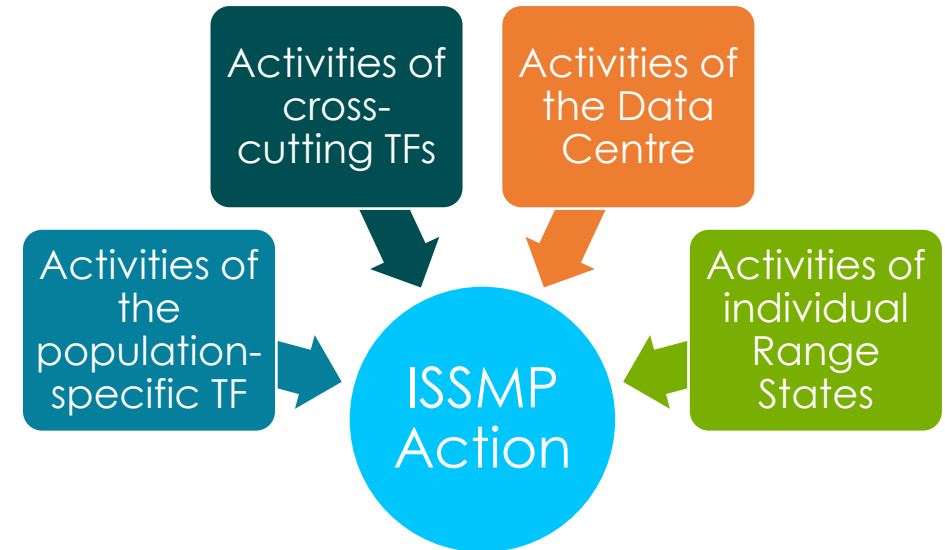
Annual workplans



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Annual workplans

- Workplans to be developed by 30 September 2020
- National workplans are to guide the implementation of the ISSMP in the Range State and to be shared for information purposes only
- Workplans of the population-specific TF, the Agriculture TF and the EGMP Data Centre will be adopted by the EGM IWG in writing and revised at the next meeting of the EGM IWG in June 2021 (EGM IWG6).



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Annual workplans

Cross-cutting action	Actions from the ISSMP	Priority	Timescale	Activities carried out by				
				Population/MU specific Task Force	Ad hoc cross cutting TF	Data Centre & Modelling Consortium	Belgium	Denmark
	1.1 Provide adequate protection and management to key sites of international importance under Article 4(1) of the Birds Directive in the EU and other relevant instruments in other Range States throughout the range of the populations and maintain them in good ecological status	Essential	Short / Rolling					
	1.2 Promote goose-based eco-tourism at selected key sites	Medium	Medium					
	2.1 Take key sites for geese into account in land use planning and growing of sensitive crops[1]	High	Immediate / Rolling					
	2.2. Provide accommodation areas to reduce risks and conflicts at sensitive areas through e.g. subsidies[2]	Medium	Medium/ Rolling					
	2.3 Apply scaring and/or land management techniques to reduce the attractiveness of sensitive areas to geese, monitoring the implications of such local displacement for conflicts at wider scale[3]	High	Short / Rolling					
	3.1. Reduce risk posed by goose migration to air safety through operational measures such as radar surveillance[4]	High	Short / Rolling					
x	3.2 Establish an internationally coordinated programme to assess agricultural damage including monitoring and assessment protocols	High	Short					
	3.3 Liaise with farmers affected by goose damages to reduce agricultural conflicts	High	Short / Rolling					
	4.1 If necessary and if there is no other satisfactory solution, apply lethal population control under derogations according to the provisions of the Birds Directive, the Bern Convention and AEWA, for preventing serious damage to crops	Essential	Short					
	4.2 Assess periodically, and report to the AEWA EGM IWG, the cumulative impact of derogations (as well as hunting in Range States in which derogation is not required) 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	Essential	Short					



Thank you!