

AEWA EUROPEAN GOOSE MANAGEMENT PLATFORM



**7th MEETING OF THE
AEWA EUROPEAN GOOSE MANAGEMENT
INTERNATIONAL WORKING GROUP**



21-23 June 2022, Helsinki, Finland

**STATUS REPORT OF
THE ADAPTIVE FLYWAY MANAGEMENT PROGRAMME (AFMP) FOR THE
NW/SW POPULATION OF THE GREYLAG GOOSE**

Prepared by EGMP Secretariat and Data Centre

Summary:

This document provides an overview of the Greylag Goose AFMP elements and related deliverables, status of the work and documents for the current 6-year cycle from 2020-2026. It includes an overview of the activities that are conducted on an annual basis, as well as the progress on activities that need to be completed by the end of the 6-year cycle.

The purpose of this document is to keep an overview of the AFMP implementation status and ensure that progress as well as any issues are tracked and identified. This overview shall be a dynamic document that is updated periodically and submitted to each EGM IWG meeting within the 6-year cycle.

Action requested from the EGM IWG:

The EGM IWG is requested to take note of the AFMP status report and provide further guidance to the Secretariat and Data Centre.

Moreover, the EGM IWG is requested to acknowledge the proposed timeline for the following deadlines in 2022-2023, in addition to the routine tasks:

1. Flyway decision model, including population models developed by EGM IWG8 in 2023;
2. Compilation of the impact models report and evaluation of use before EGM IWG8 in 2023;
3. EGMP National Reports 2022/2023, to be submitted for EGM IWG8 in 2023;
4. Systematic monitoring in place and development of factsheets by the Data Centre in collaboration with range states by EGM IWG8 in 2023. It is important to note that some monitoring activities are still missing from some range states. See Table 2 or the EGMP Population Status and Assessment Report for a full overview of data availability

Introduction

The Greylag Goose Adaptive Flyway Management Programme (GG AFMP) was first adopted for implementation by the European Goose Management International Working Group (EGM IWG) at the EGM IWG5 in June 2020 and submitted for final adoption, including the pending sections, at EGM IWG6 in June 2021.

Implementation of the activities outlined in the AFMP has started in 2020. Several activities, including the annual workplan, have been discussed and implemented by the Greylag Goose Task Force. These activities are reported separately in document AEWA/EGMIWG/7.15. The population status and assessment report of the NW/SW European Population of Greylag Goose is provided in document AEWA/EGMIWG/7.10.

As described in the AFMP, the management evaluation and adaptation of the NW/SW European population of Greylag Goose follows three iterative phases running in parallel (Figure 1).

1. A 10/12-year cycle of the ISSMP;
2. Two 6-year cycles of the AFMP, and within the AFMP:
 3. 1-year cycles of:
 - i. Indicators/monitoring related to population models/harvest assessment;
 - ii. Update of population models and harvest assessment;
 - iii. Annual implementation of actions by range states;
 - iv. Update work plans.

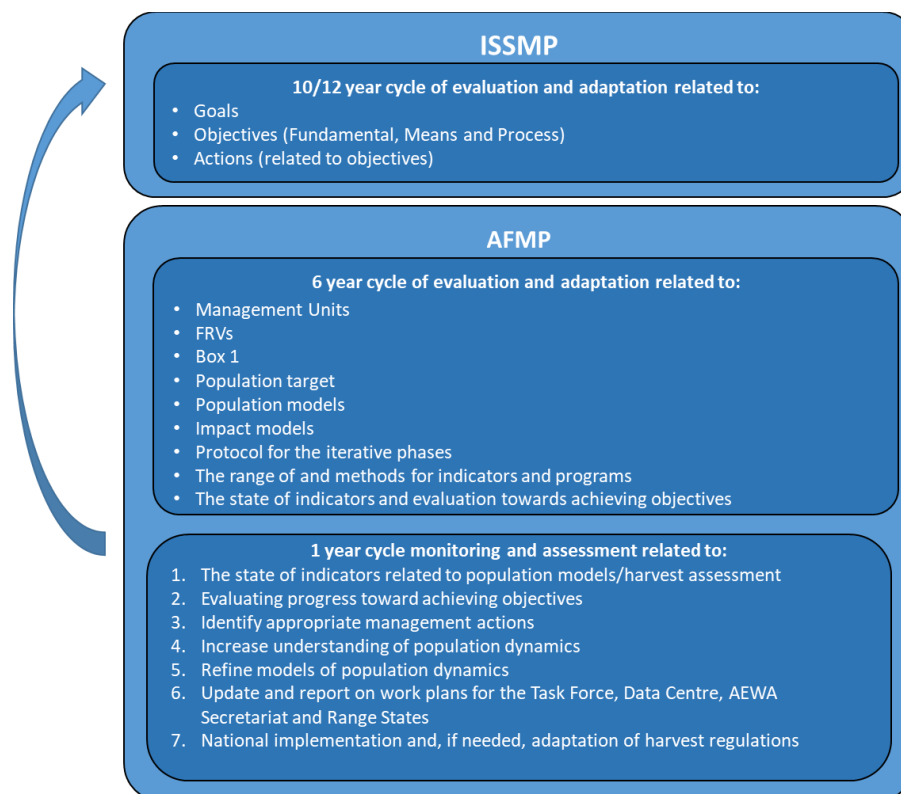


Figure 1. Flow chart of the management evaluation and adaptation of the NW/SW European population of Greylag Goose, taken from the GG AFMP adopted at 23 June 2021

In Table 1 below, a full overview is given on the AFMP elements and related deliverables, status of the work and documents for the current cycle 2020-2026. In the next cycle of the AFMP, elements related to the 6-year cycle (with the exception of collection and evaluation of indicators and the annual workplans) are only evaluated and adapted, if the Range States see a compelling reason for doing so and/or new scientific knowledge suggests a re-evaluation, unless otherwise is stated under the individual element in the table. If an evaluation shall take place, fiscal and staff resources must be in place, unless otherwise is stated under the individual element in the table.

In Table 2 a full overview of available monitoring data in the NW/SW European Greylag Goose population is provided. It should be noted that while there is a lot of monitoring activities in place in several countries, there still are countries where systematic monitoring is lacking.

Table 1. Overview of AFMP elements and related deliverables, status of the work and documents for the current cycle 2020-2026. In the next cycle of the AFMP elements related to the 6-year cycle (with the exception of collection and evaluation of indicators point 5a as well as Annex 1: Annual workplans) are only evaluated and adapted, if the Range States see a compelling reason for doing so and/or new scientific knowledge suggests a re-evaluation, unless otherwise is stated under the individual element in the table. If an evaluation shall take place, fiscal and staff resources must be in place, unless otherwise is stated under the individual element in the table.

Cells highlighted in blue require additional funding and resources.

Process/Element	Deliverable	Status	Document	Funding and Resources
6-year cycle of the AFMP				
1. Definition of MUs	Agreement of MUs as of EGM IWG4 in Perth 2019	Finalized	Doc. AEWA/EGMIWG/4.14 ¹ New scientific documents: Månsson et al 2021: https://link.springer.com/article/10.1007/s10344-022-01561-2 Nilsson et al. 2022: https://onlinelibrary.wiley.com/doi/10.1002/ece3.8740	n/a
2. Definitions of Favourable Reference Values (FRVs)	Gap-filling of FRVs before EGM IWG meeting in 2026.	Work done by the EGMP Data Centre in the period up to the EGM IWG meeting in 2026.	AFMP + Doc. AEWA/EGMIWG/Inf.6.10	Fiscal and personnel resources are in place.
3. Population targets above the FRVs	Agreement reached on the population target. Agreement on how the population target is used in harvest management before EGM IWG8 in 2023.	The work is currently under development by the EGMP Data Centre as part of a flyway decision model, which will be ready by the 2023 EGM IWG8 meeting.	AFMP	Fiscal and personnel resources are in place.

¹ https://egmp.aewa.info/sites/default/files/meeting_files/documents/AEWA_EGM_IWG_4_14_Def_GG_MUs.pdf

<p>4. Population Models to support harvest management</p>	<p>Flyway decision model, including population models developed before EGM IWG8 in 2023.</p>	<p>A flyway decision model, including population models, is currently under development by the EGMP Data Centre and will be ready by 2023 (EGM IWG8). This model will take over from the info-gap decision model, which ends in 2023, prior to EGM IWG8 meeting.</p>	<p>AFMP</p>	<p>Fiscal and personnel resources are in place.</p>
<p>5a. Monitoring indicators and programmes (1. collection of data and 2. evaluation)</p>	<p>1. Collection of data for indicators: Annual by 1 April for indicator: <ul style="list-style-type: none"> • I.1², VII.1³ By 31. Dec. 2025 <ul style="list-style-type: none"> • I.2⁴, II.1⁵, III.2⁶, III.3⁷, IV.1⁸, V.1⁹, V.2¹⁰, V.3¹¹, VI.1¹². </p>	<p>For indicator I.1 “Population size” and VII.1 “Hunting quota” information is missing from some range states. See Table 2 or the EGMP Population Status and Assessment Report for a full overview of data availability. For indicator IV.1 “Habitat negatively affected” Range</p>	<p>EGMP Database + EGMP Indicator report</p>	<p>Fiscal and personnel resources are in place.</p>

² Population size compared to the target population size

³ Available sustainable hunting quota

⁴ Range extent compared to Favourable Reference Range (FRR)

⁵ Relative change in damage payments

⁶ Number of bird strikes with aircrafts caused by Greylag Goose

⁷ Number of Greylag Geese passing over commercial airports

⁸ Area of natural habitat or habitat of threatened species negatively affected by Greylag Goose

⁹ Number of people enjoying watching geese

¹⁰ Number of recreational Greylag Goose hunters

¹¹ Number of Greylag Geese killed and used

¹² Relative change in cost of goose management

	<p>2. Evaluation of the state of these indicators and towards achieving objectives is done every 6-year, thus by 2026.</p>	<p>States will need to collect information from the organisations responsible for managing conservation areas on the damage caused by Greylag Goose two times during the lifetime of this AFMP.</p> <p>Evaluation of the state of these and towards achieving objectives are done by the EGMP Data Centre in the period up to the EGM IWG8 meeting in 2026.</p>		
5b. Monitoring indicators and programmes	Development and evaluation of the range and methods for indicators and programmes	Finalized	AFMP	n/a
6. Protocols for the iterative phase	<p>Protocols for:</p> <ol style="list-style-type: none"> 1. Indicators related to objectives 2. Indicators related to population model 3. Harvest assessment 4. Damaged impact assessment 	<ol style="list-style-type: none"> 1. Protocol for collection of indicators related to objectives are available under factsheets in the AFMP, however the assessment of the indicators need to be agreed. 2. Protocol for collection and use of indicators related to population models is available at the EGMP database. 3. Protocol for harvest assessment is awaiting finalisation of the flyway-wide decision model and 	AFMP EGMP Database	Fiscal and personnel resources are in place.

		systematic monitoring programs 4. Protocol for the damaged impact assessment are awaiting finalization of the impact models and agreements on use.		
Annex 1: Annual workplans	Annual workplans	Workplans reviewed and updated by the Task Forces annually and reported to the EGM IWG. On a biannual basis, reporting on the workplans will be conducted via the EGMP National Reports.	TF report and recommendations EGMP National Reports (submitted for EGM IWG8 in June 2023)	Fiscal and personnel resources are in place.
Annex 2. Box 1 of the ISSMP for the Greylag Goose	Box 1 report	Finalized	AFMP	n/a
Annex 3. Setting population targets	See point 3	See point 3	See point 3	See point 3
Annex 4. Population models	See point 4	See point 4	See point 4	See point 4
Annex 5. Impact models	Development of impact models. Compilation of the report and evaluation of use before EGM IWG8 2023.	Impact models have been developed in Sweden, Denmark and the Netherlands. Compilation of the report and evaluation of the use of these impact models in goose management still to be done and funded.	AFMP + EGMP Impact model report	Fiscal and personnel resources must be found to compile the report and evaluate the use of the impact models in goose management.
Annex 6. Indicator factsheet	See point 5	See point 5	See point 5	See point 5

Annex 7. Protocol for the iterative phase	See point 6	See point 6	See point 6	See point 6
Annex 8. Allocation of breeding numbers of greylag geese to wintering countries.	Agreement of allocation of breeding numbers to wintering countries.	Finalized	AFMP + Doc. AEWA/EGMIWG/Inf.6.12	n/a
1 year cycle within the AFMP				
Process	Deliverable	Status	Document	
Monitoring of indicators related to population models /harvest assessment	Annual update of raw data on the EGMP Database . Annual update of model estimates at Gitlab EGMP . A compilation is presented in the EGMP Population Status and Assessment Report	Raw data and model estimates are updated every year.	Raw data: EGMP Database Model estimates: EGMP Gitlab EGMP Population Status and Assessment Report	Fiscal and personnel resources are in place to collect and compile monitoring information. Annual model estimates are provided by the EGMP Data Centre National funding may be needed for some of the monitoring activities itself.
Update and report on work plans for the Task Force, Data Centre, AEWA Secretariat and Range States	<ul style="list-style-type: none"> Annex 1 in AFMP for Task Force workplan AEWA Sec and DC Report 	Review annually by Task Force, Data Centre, AEWA Secretariat and Range States	<ul style="list-style-type: none"> Annex 1 in AFMP AEWA Sec and DC Report 	Fiscal and personnel resources are in place.
Short term (2020-2022):				
Evaluation of bias in offtake completed	Harvest note	Finalized	EGMP Population Status and Assessment Report 2021	n/a
Systematic monitoring in place and development of factsheets	Monitoring plans and factsheet (Method-section's on the EGMP Database)	Under development by the EGMP Data Centre in collaboration with range states and IWC. Will be finalised in parallel with the development of population	EGMP Database See population specific monitoring plans and factsheets/method-sections	Fiscal and personnel resources are in place for developing monitoring plans and factsheets.

		models, thus before EGM IWG in 2023, when a dynamic and model-based assessment shall take place.	under each population (still under development).	National funding may be needed for some of the monitoring activities itself.
Harvest assessment ¹³ at population level	Annual update of the EGMP Population Status and Assessment Report	Finalized up to 2022	EGMP Population Status and Assessment Report up to 2022	Assessment done by the EGMP Data Centre
Long-term (2023-)				
Harvest assessment ¹³ at MU level	Annual update of the EGMP Population Status and Assessment Report	Tasks needed to move to a harvest assessment at MU level are under development. See point 3 (population target) and 4 (population models).	EGMP Population Status and Assessment Report from 2023	Assessment done by the EGMP Data Centre
National implementation and, if needed, adaptation of harvest regulations	Biannual EGMP National Reports submitted to the EGM IWG. Progress update will be added to the online workplan monitored by the GG Task Force	Updates are added to the workplans in the GG Task Force on a regular basis. Full report on national implementation status to be updated as part of the EGMP National Reports for EGM IWG8	GG Task Force workplan EGMP National Reports 2022/2023 (to be submitted for EGM IWG8 in 2023)	Funded by National initiatives

¹³ Evaluating progress toward achieving objectives, Identify appropriate management actions, Increase understanding of population dynamics and Refine models of population dynamics;

Table 2. Overview of available monitoring data in the NW/SW European Greylag Goose population.
 Grey cells makes data for MU1 and blue cells for MU2.
 X data collected (nearly) annually and reported to EGMP, x data collected (nearly) annually, (x) data collected in part of the country and/or not annually, - no data collected or reported to the EGMP, * 0 or not relevant range state in this respect.

	NO	SE	FI	DK	DE	NL	BE	FR	ES
Population count in January	X	X	*	X	-	X	X	X	(x)
Breeding Bird Index	X	X	X	X	-	X	*	*	*
Summer count	(x)	(x)	(x)	(x)	(x)	X	X	(x)	(x)
Productivity	(x)	-	(x)	-	-	X	-	-	-
Hunting bag	X	X	X	X	(x)	*	X	(x)	(x)
Split hunting data into April-July and August-March	no	(yes)	yes	yes	-	*	(yes)	yes	?
Derogation	(x)	X	X	X	X	X	X	*	*
Split derogation data into April-July and August-March	no	no	no	(yes)	-	yes	yes		
Crippling rate		(x)				(x)			