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## Workshop for the Revision of Pink-footed Goose ISSMP

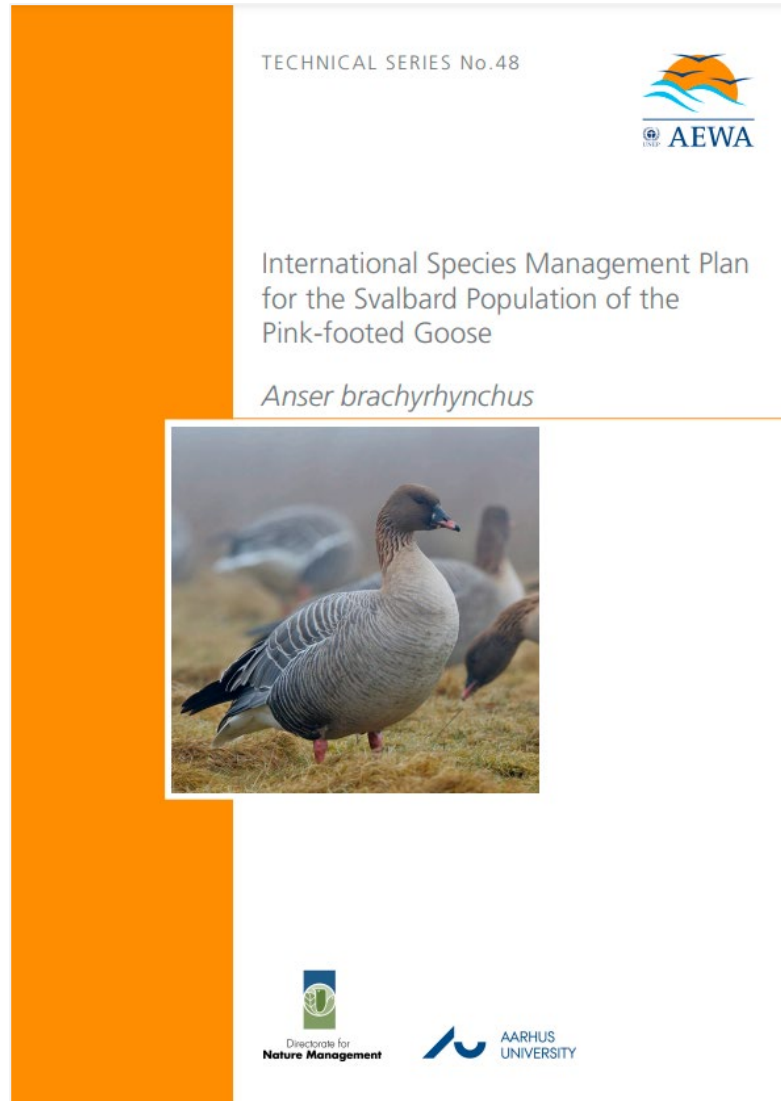
*ISSMP Evaluation summary*

*Jesper Madsen on behalf of the PfG Task Force*

8-9 October 2024 | Levanger, Norway



# AEWA European Goose Management Platform



## ISSMP

- Initial workshop 2010
- Adopted by Meeting of the Parties to AEWA (MOP5) 2012
- Implementation workshop 2012
- Adaptive harvest management implemented 2013
- Evaluation 2024
- Planned revision 2025

The first European flyway-based adaptive management plan for a migratory waterbird population

# AEWA European Goose Management Platform

## Goal and objectives

Maintain favourable population status at flyway level while taking into account biodiversity, economic and recreational interests

Maintain population range and ecological integrity

Minimize agricultural conflicts

Maintain sustainable and stable population

Avoid increase in tundra vegetation degradation

Allow recreational use not jeopardizing population or social acceptance

Improve habitat management

Optimise compensation and subsidy systems

Improve recreational values of geese

Increase habitats where geese make no damage

Maintain a population of around 60,000 individuals

Minimise crippling of birds due to hunting

Increase information

Increase goose tourism

Restore grasslands

Adapt and optimise harvest regulations and practices

Increase hunting opportunities

Decrease disturbance

# Indicators of objectives (I-V)

## Objective I. Maintain population range and ecological integrity

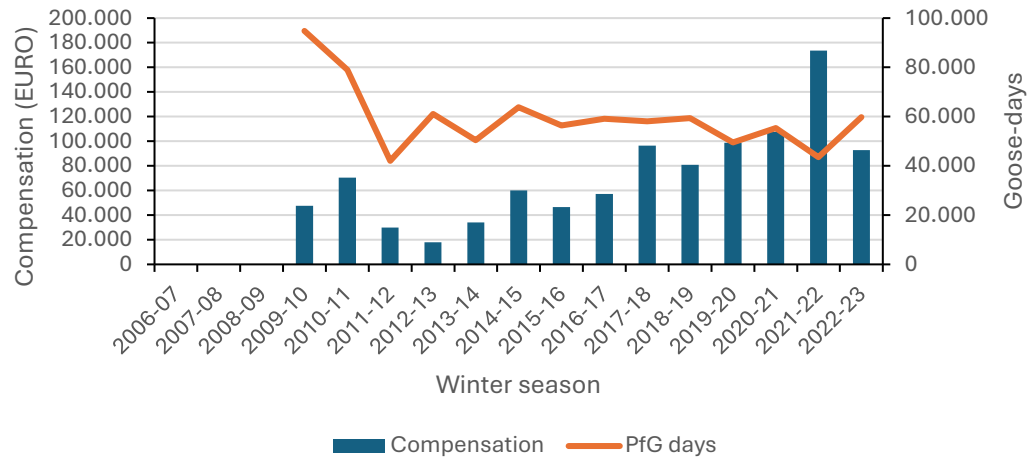
### Indicators of range (2013-2022)

Country	Autumn	Winter	Spring
Norway	Stable	NA	Increase
Denmark	Increase	Increase	Increase
The Netherlands	Increase (28%)	Increase (28%)	NA
Belgium	Increase	300 km <sup>2</sup> => 500 km <sup>2</sup>	NA
Overall	Increase	Increase	Increase

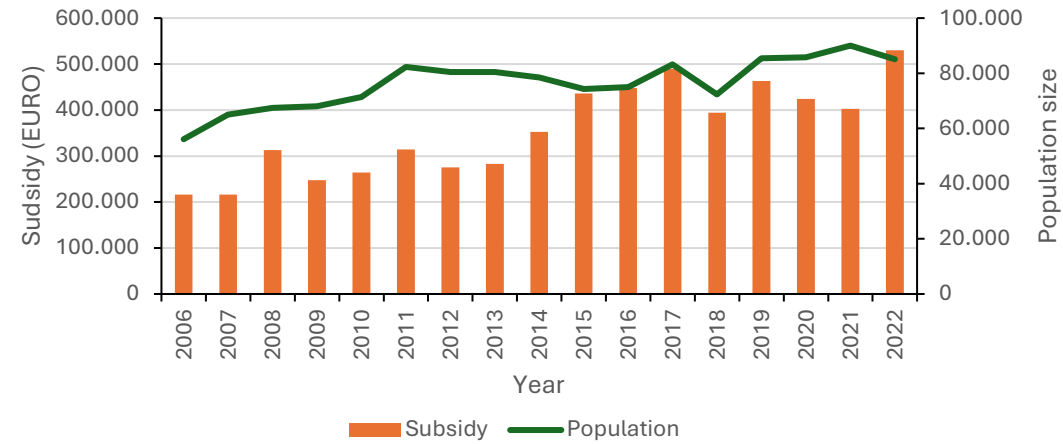
# Objective II. Minimise agricultural conflicts

## Indicators of agricultural conflict

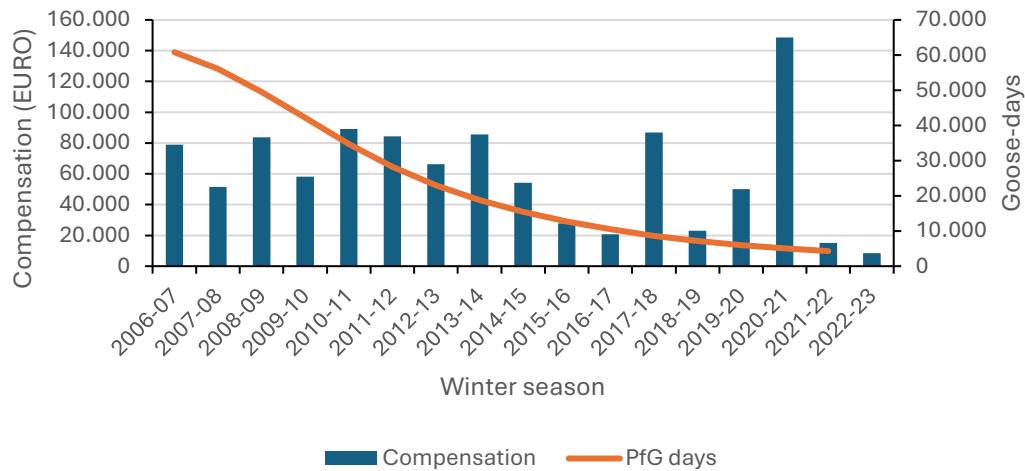
### Belgium - compensation



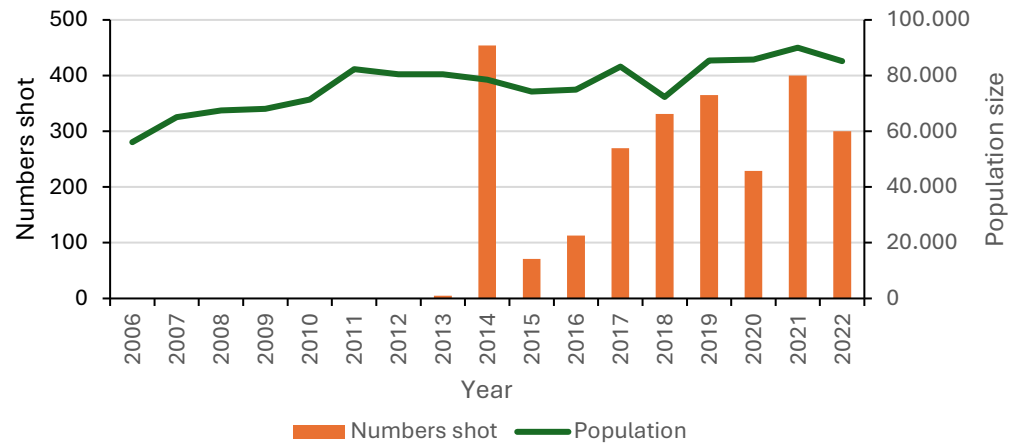
### Norway - subsidies



### The Netherlands - compensation

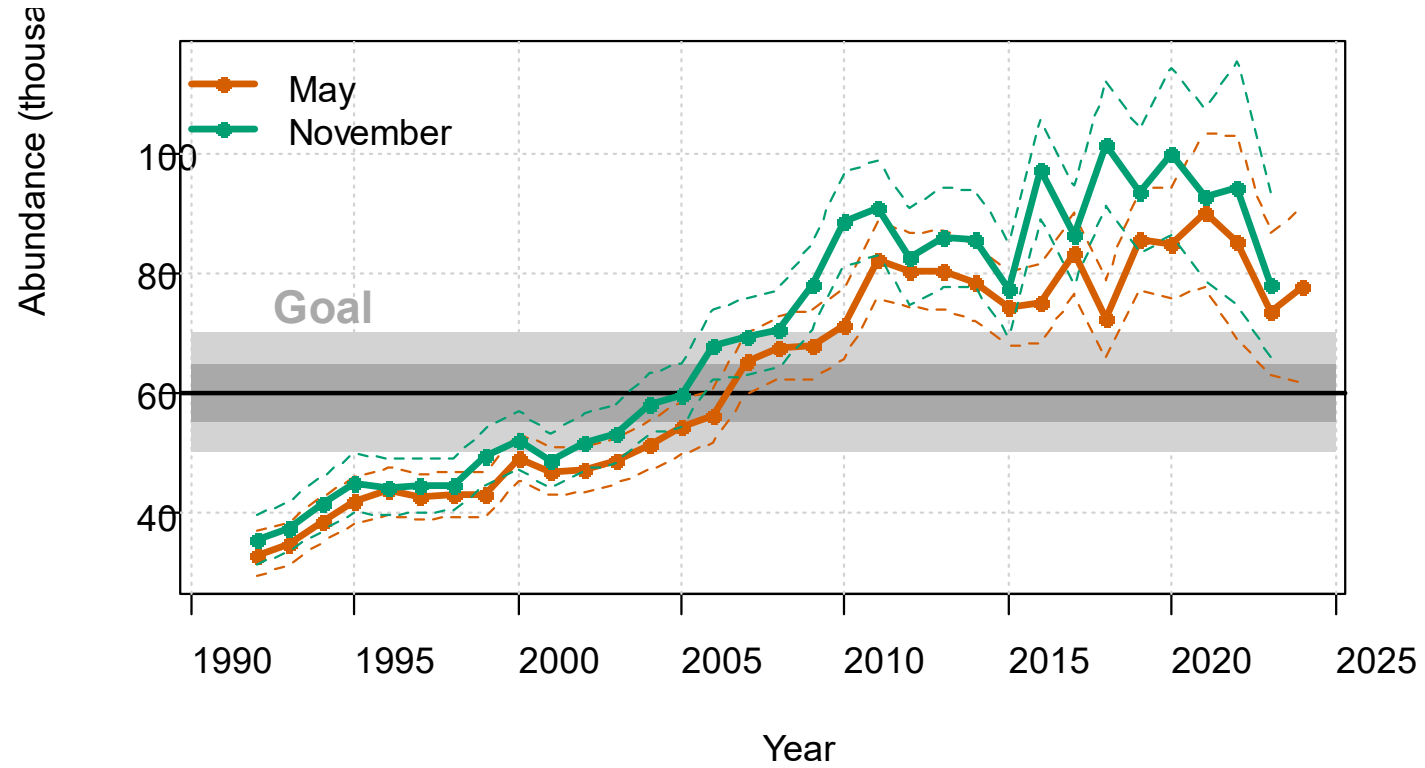


### Denmark - derogation shooting



## Objective III. Maintain sustainable and stable population

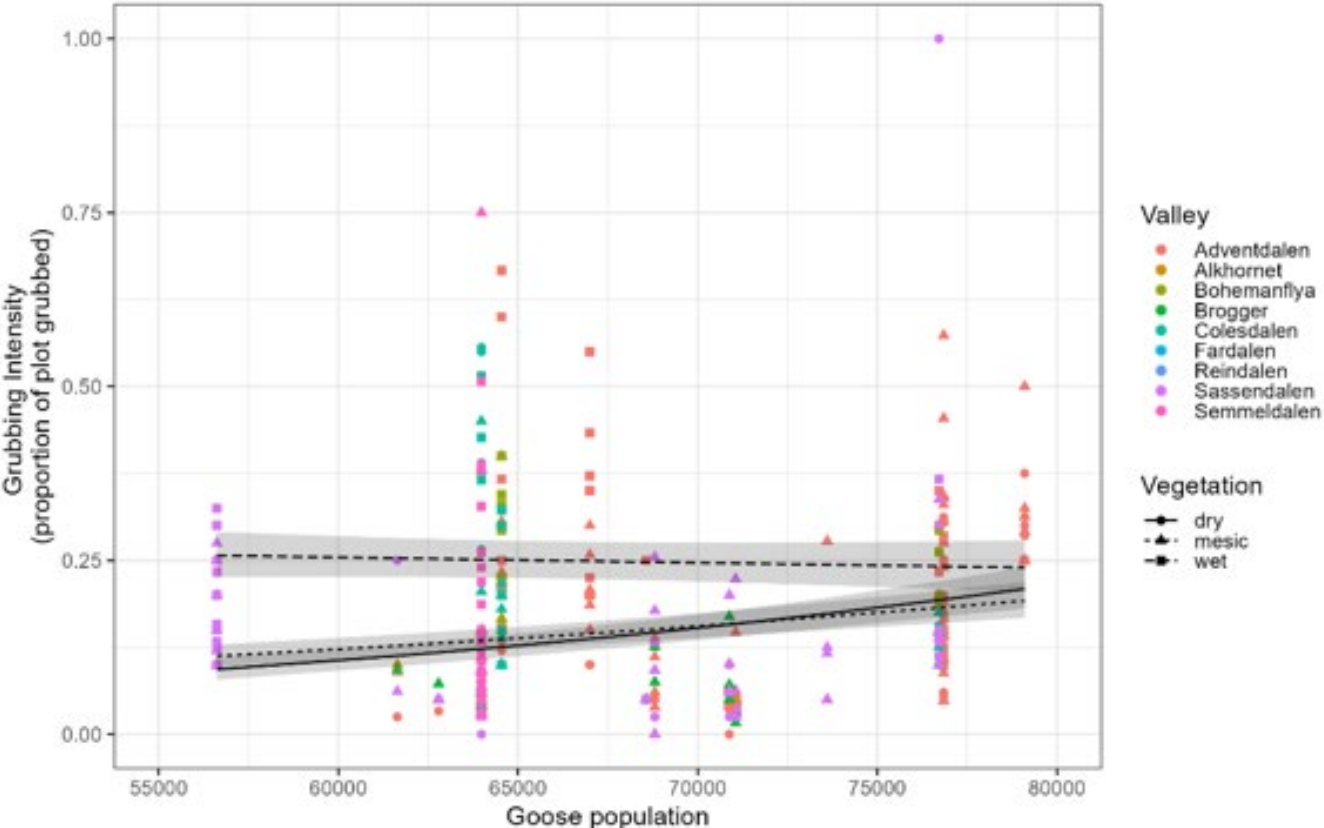
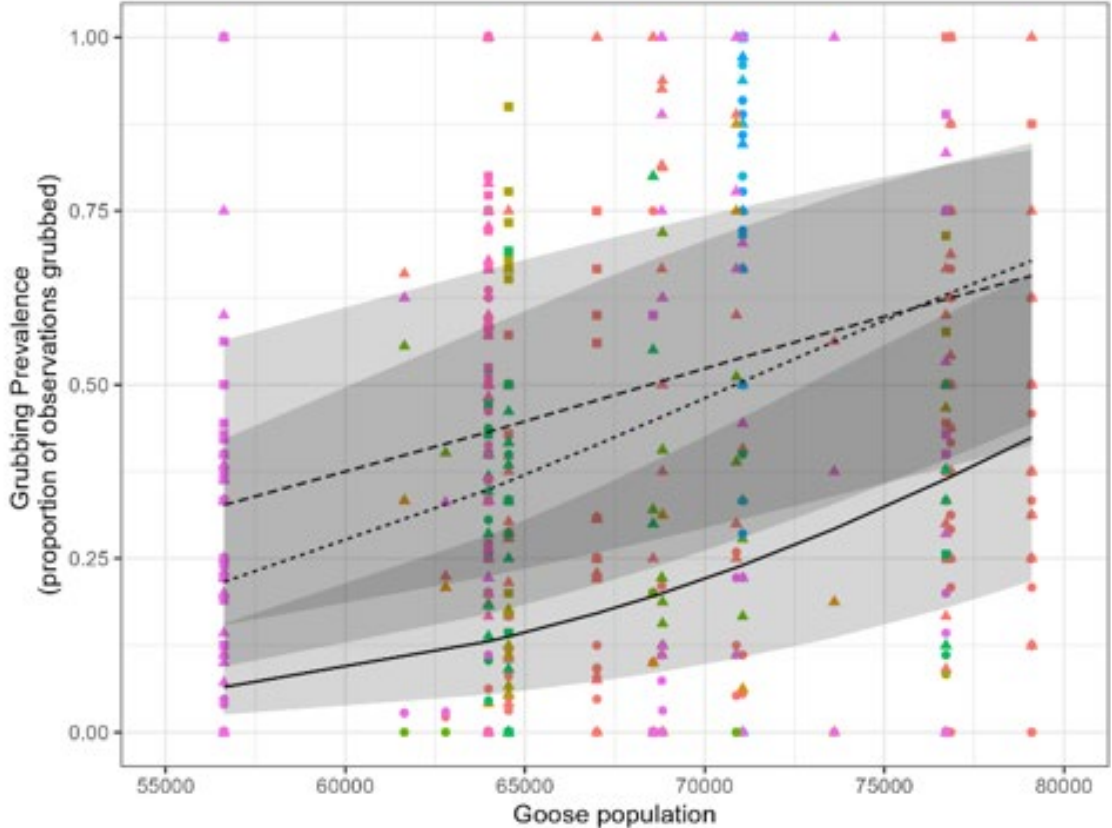
# Population development (IPM estimate)





Objective IV. Avoid increase in tundra vegetation degradation

# Relationship between goose abundance and ecosystem effects (tundra)



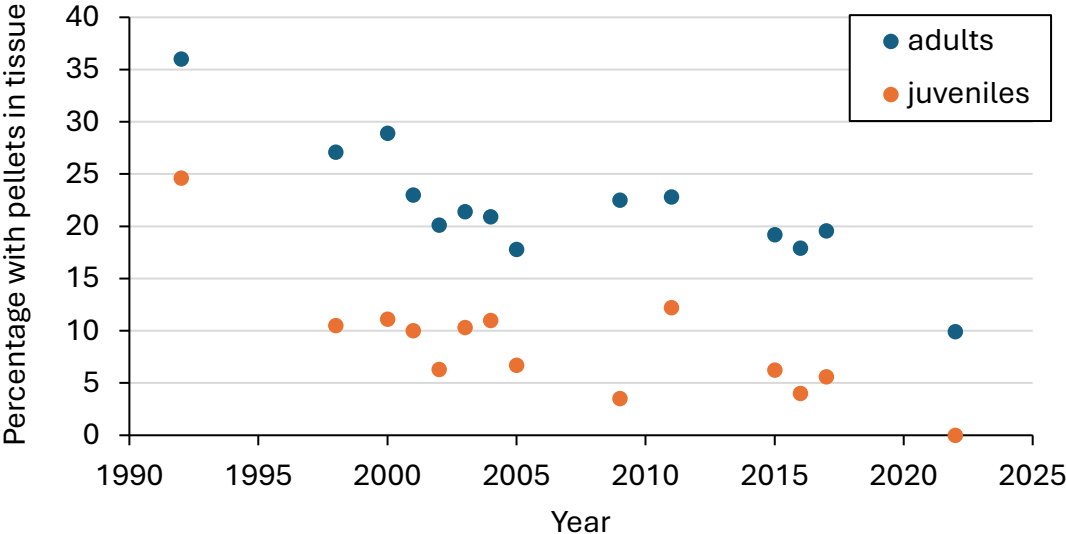
Source: Ravolainen et al. 2024, in prep.



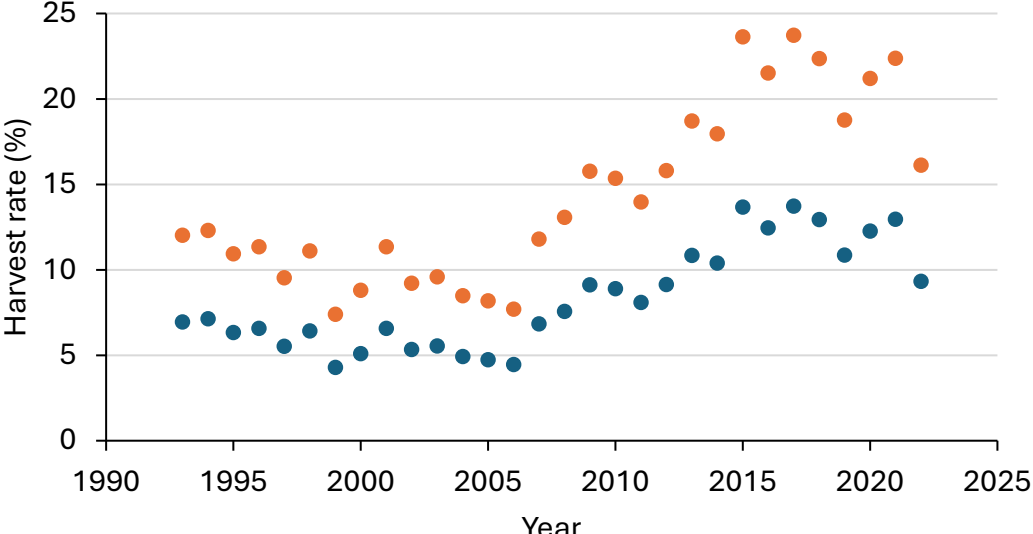
# Objective V. Reduce crippling due to hunting

## Indicators of crippling due to shotgun shooting

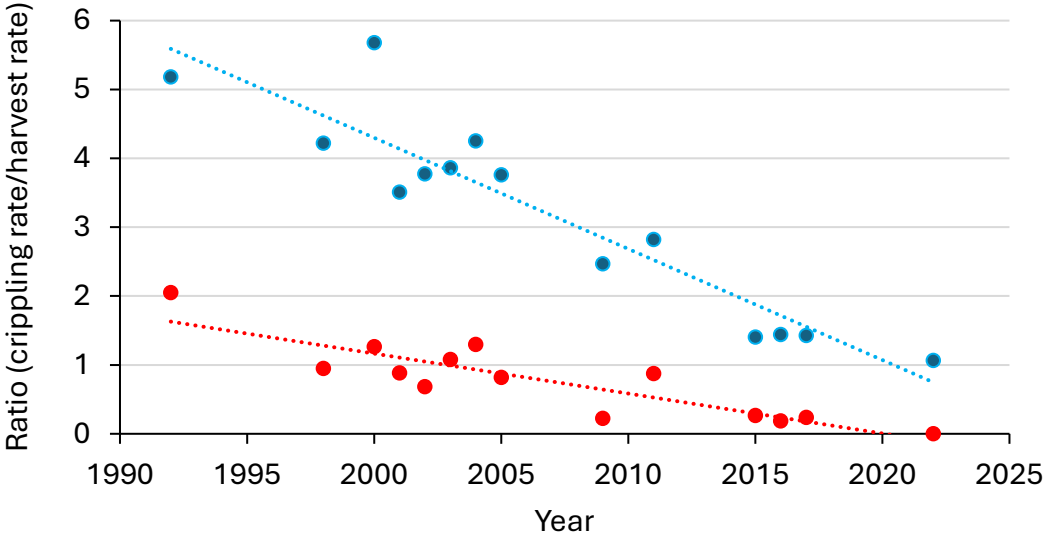
### Crippling rate



### Harvest rate (IPM)



### Crippling ratio



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## Have the goal and purpose been achieved?

### The goal has been achieved:

- (1) the range has been maintained and even expanded,
- (2) the agricultural conflicts have subsided,
- (3) the population has stabilised (yet, above the population target), primarily as a result of increased harvest levels in agreement with the implemented adaptive harvest management framework,
- (4) the extent and intensity of goose grazing effects on tundra vegetation in Svalbard has been slowed down and,
- (5) crippling due to hunting has decreased despite increasing harvest rate which is ascribed to a change in hunting practises, awareness raising and practical courses in effective goose shooting.

### Further:

- The existence of the plan itself and communication have also been an important alleviating issue in the farmers' communities.
- The plan has boosted international collaboration and science

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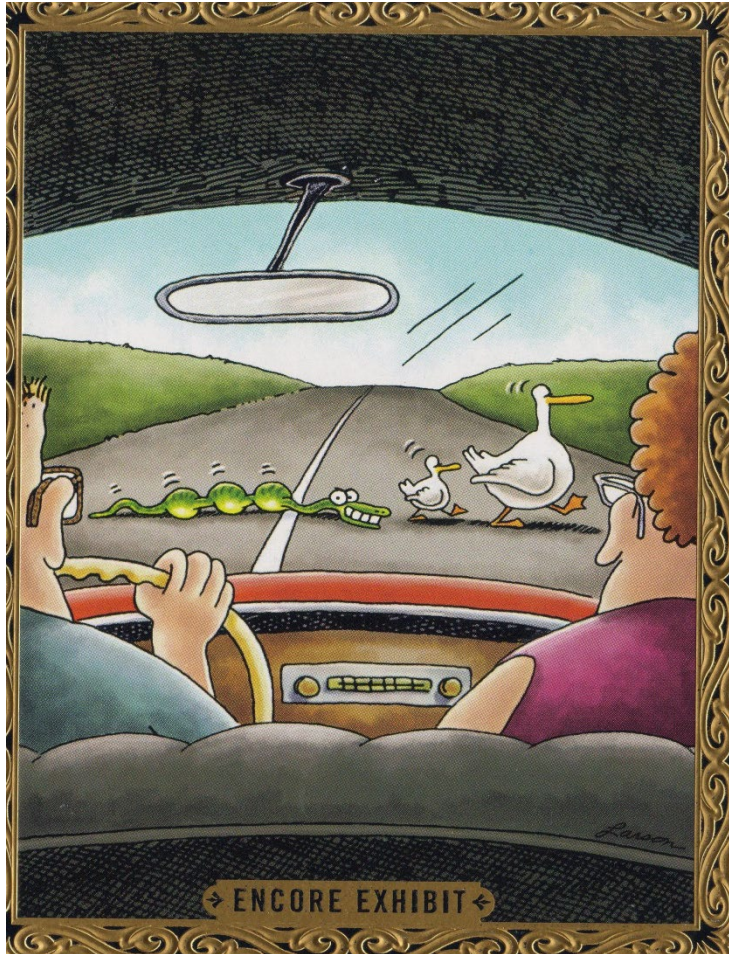
## Are conservation or management actions still needed to maintain achievements?

Continued implementation of management actions is needed, as follows:

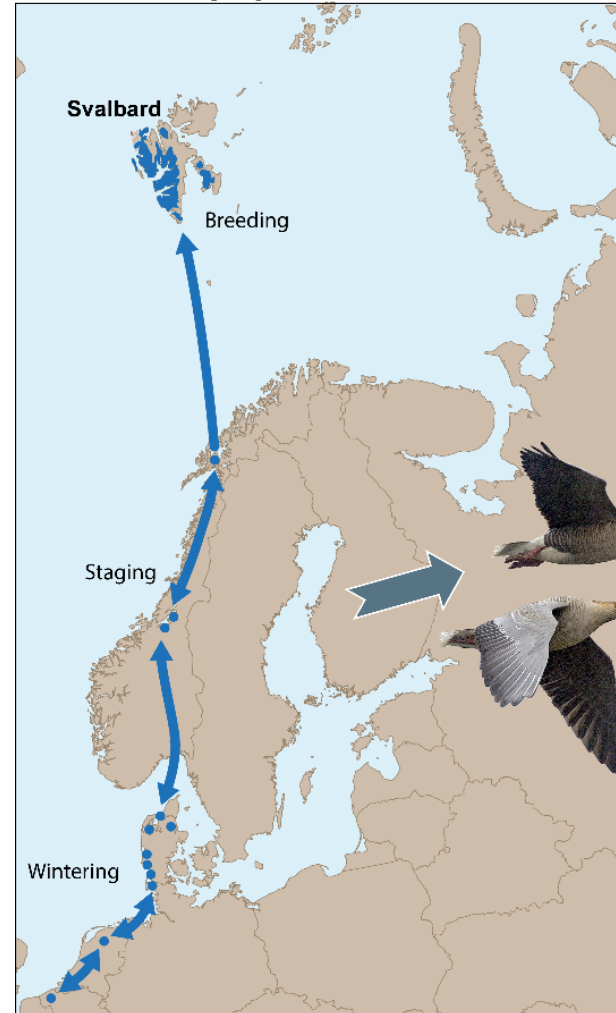
- (1) A continuation of the adaptive harvest management programme is important to ensure that a stable population can be maintained in order to maintain agricultural conflicts to an acceptable level and to avoid potential negative effects on Arctic tundra ecosystems,
- (2) AHM managed to stabilise the population, but did not manage to reach the population target set out in the ISSMP. It is needed to reflect on the target and on additional and/or alternative actions to reach it,
- (3) the effects of goose grazing on tundra vegetation may change in light of observed and anticipated rapid warming of the Arctic and,
- (4) the population has rapidly and unexpectedly expanded its breeding range to Novaya Zemlya in north Russia and its non-breeding range to include Finland and Sweden, partly based on an emigration from the traditional flyway. This is likely to continue in the coming decade, with yet unknown effects on the overall population size and the biodiversity and human-related interests. To manage this situation, a dynamic and adaptive framework is required.

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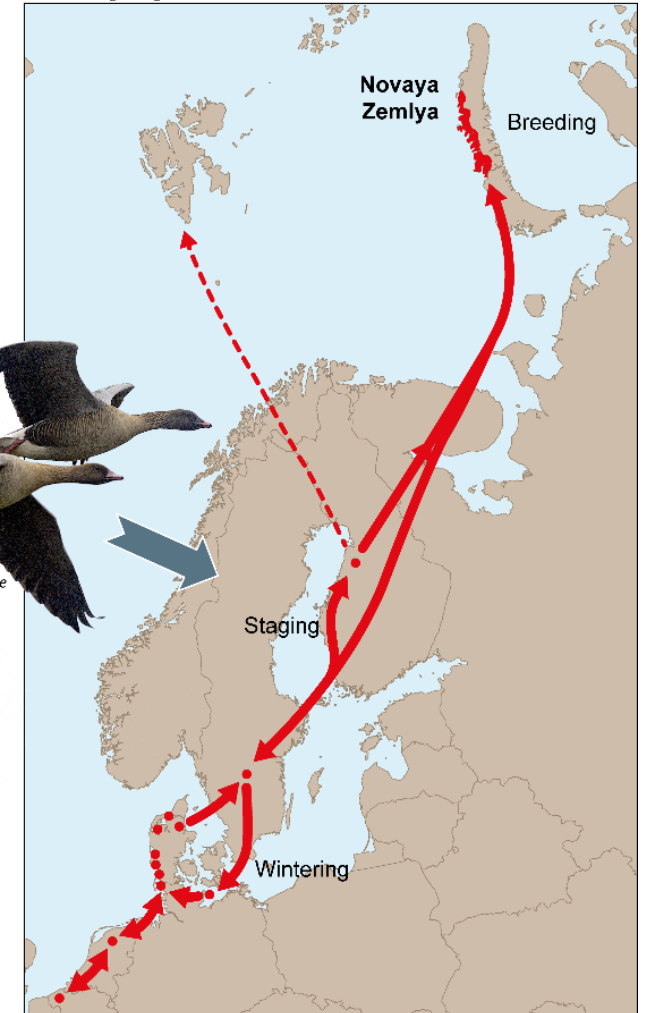
Are there new insights, biological or other background information, emerging issues or threats?



Traditional population



New population



*Pink-footed goose*

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## **If there are new issues, does the action framework of the Plan need to be changed to address these?**

**Yes.**

The spread of the population means that Finland and Sweden (AEWA Range States) have accepted to become Range States of a revised ISSMP for the Pink-footed Goose.

The AEWA Technical Committee and the EGMP Pink-footed Goose Task Force have recommended that the population is treated as one biogeographic population.

It has to be decided by the Range States whether or not to manage the population as one or split it into two Management Units (MU) with MU-specific Favourable Reference Values, management objectives and actions. These issues will require a review and adjustment of the action framework.

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## Is the intervention logic of the Plan working?

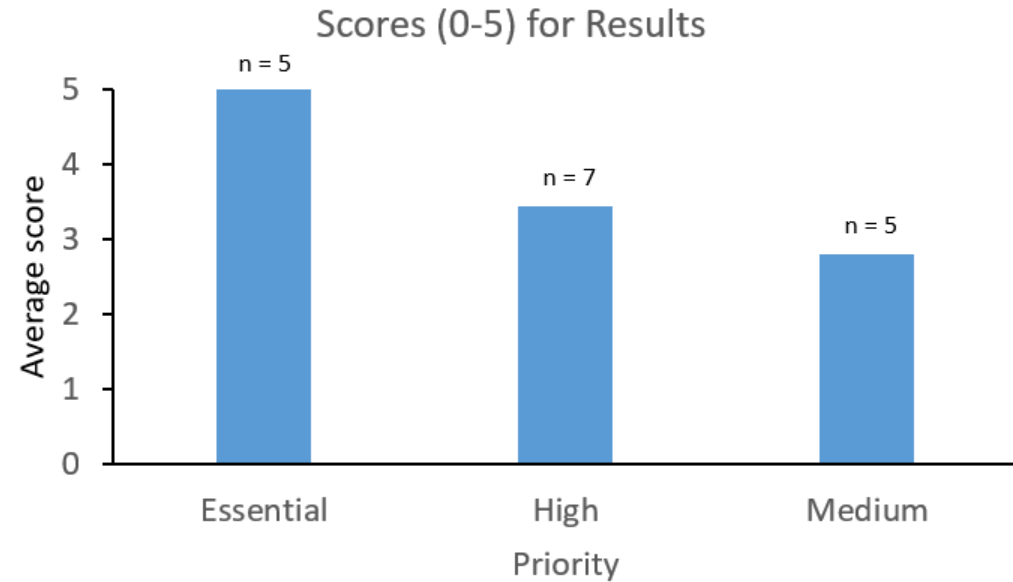
### To what extent have actions been implemented?

- Ten essential key actions were identified in the ISSMP (See Annex 1). Using the below Score system (0-5), the distribution of scores was:
  - Score 1: 1 (not implemented)
  - Score 2: 1 (limited progress)
  - Score 3: 3 (good progress)
  - Score 4: 1 (significant progress)
  - Score 5: 4 (implemented)
  - Average: 3.6

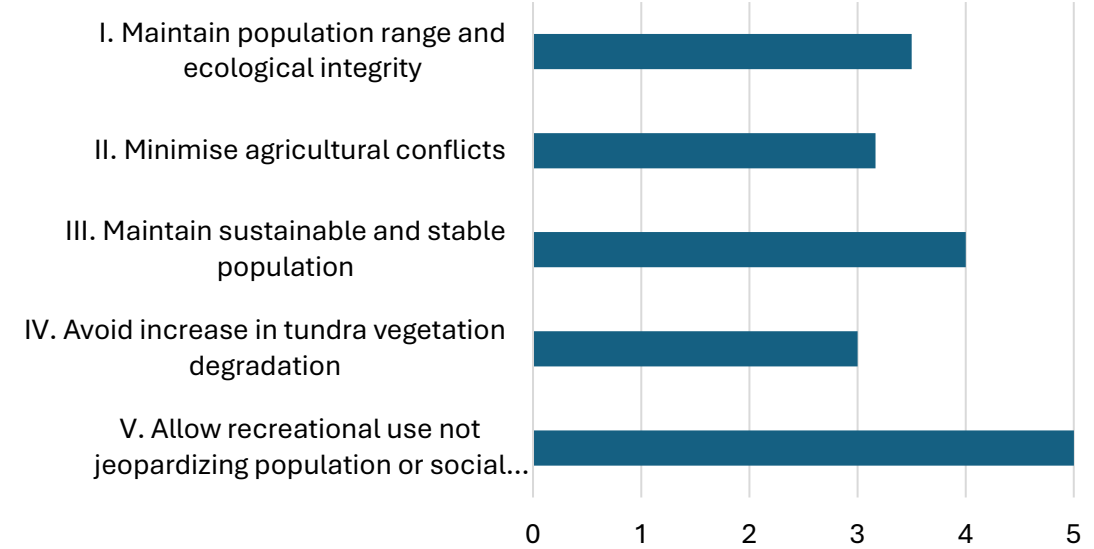
Action score	Not assessed	Not implemented / not achieved / no progress / regress	Limited progress	Good progress	Significant progress	Implemented / achieved	Mean result / objective score
0							0
1							0.1 – 1.0
2							1.1 – 2.9
3							3.0 – 3.9
4							4.0 - 4.9
5							5

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To what extent have results and objectives been achieved?



Scores (0-5) of achieving objectives



Action score	Not assessed	Not implemented / not achieved / no progress / regress	Limited progress	Good progress	Significant progress	Implemented / achieved	Mean result / objective score
0							0
1							0.1 – 1.0
2							1.1 – 2.9
3							3.0 – 3.9
4							4.0 - 4.9
5							5



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## What were the main obstacles hindering implementation and achieving defined results and objectives?

- It has been achieved to stabilise the population size, however not at the target of 60,000, but approximately 10-20,000 individuals above (spring population size). To bring the population closer to the target, it would have been necessary to take further action to increase the harvest or alternative actions to reduce adult survival or reproduction.
- The proposed action to prevent the establishment of breeding colonies of PfG from the mainland in Norway has not been prioritised. The agricultural conflict appears to have been reduced, and it does not appear that the grazing ('grubbing') by geese on tundra vegetation has such a negative impact as originally feared, and this stabilisation has reduced the necessity for population control on the mainland of Norway. This calls for a new discussion about the population target.

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## What were the main obstacles hindering implementation and achieving defined results and objectives?

- Restoration of grassland habitat was identified as a key action to minimise agricultural conflicts. This has not been implemented except from seminatural grassland restoration projects in Belgium benefitting PfG.
- Development of national management plans including promotion of ecotourism has not been given high priority. Public outreach initiatives and dissemination have been taken in Belgium, Denmark and Norway, including film reportages and publishing a goose cook book, but the more strategic approach to increase ecotourism and outreach initiatives has lacked funding.

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**The Range States participating in the implementation of the management plan consider the necessity of continuing concerted actions to address the issue of damage to crops**

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**The population is still considered by the AEWA Technical Committee and the Range States a priority for management planning**

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## Step 2:

## Conclusion and recommendations

It is recommended to proceed with a full revision including goal, purpose, objectives and action framework