

## Greylag Goose Session

**GREYLAG GOOSE NORTHWEST/SOUTHWEST EUROPEAN  
POPULATION STATUS REPORT 2016-2019**



Greylag Goose NW/SW European Population Status Report 2016-2019.  
AEWA/EGMIWG/5.13

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*Report prepared by the AEWA European Goose Management Platform (EGMP) Data Centre*

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## Data contribution

### Midwinter counts

Norway: Ingunn Tombre, Norwegian Institute for Nature Research (NINA), Sweden: Leif Nilsson, Lund University & Per Risberg, Swedish Environmental Protection Agency, Finland: Esko Hyvärinen, Ministry of the Environment, Denmark: Preben Clausen & Rasmus Due Nielsen, Aarhus University, The Netherlands: Kees Koffijberg, SOVON, Belgium: Floris Verhaeghe, Agency of Nature and Forest, Spain: Guillermo Ceballos, Andalusian Institute of Hunting and Inland Fisheries & Carlos Guillén del Rey, Ministry of Agriculture, Fisheries and Food and Wetlands International.

### Common Bird Monitoring

Norway: John Atle Kålås, Norwegian Institute for Nature Research (NINA) and Ingar Jostein Øien, BirdLife Norway, Sweden: Åke Lindström, Lund University, Finland: Aleksi Lehikoinen, The Helsinki Lab of Ornithology, Denmark: Thomas Vikstrøm, DOF-Birdlife Denmark, The Netherlands: Chris van Turnhout, SOVON and Wallonia, Belgium: Antoine Derouaux, Natagora.

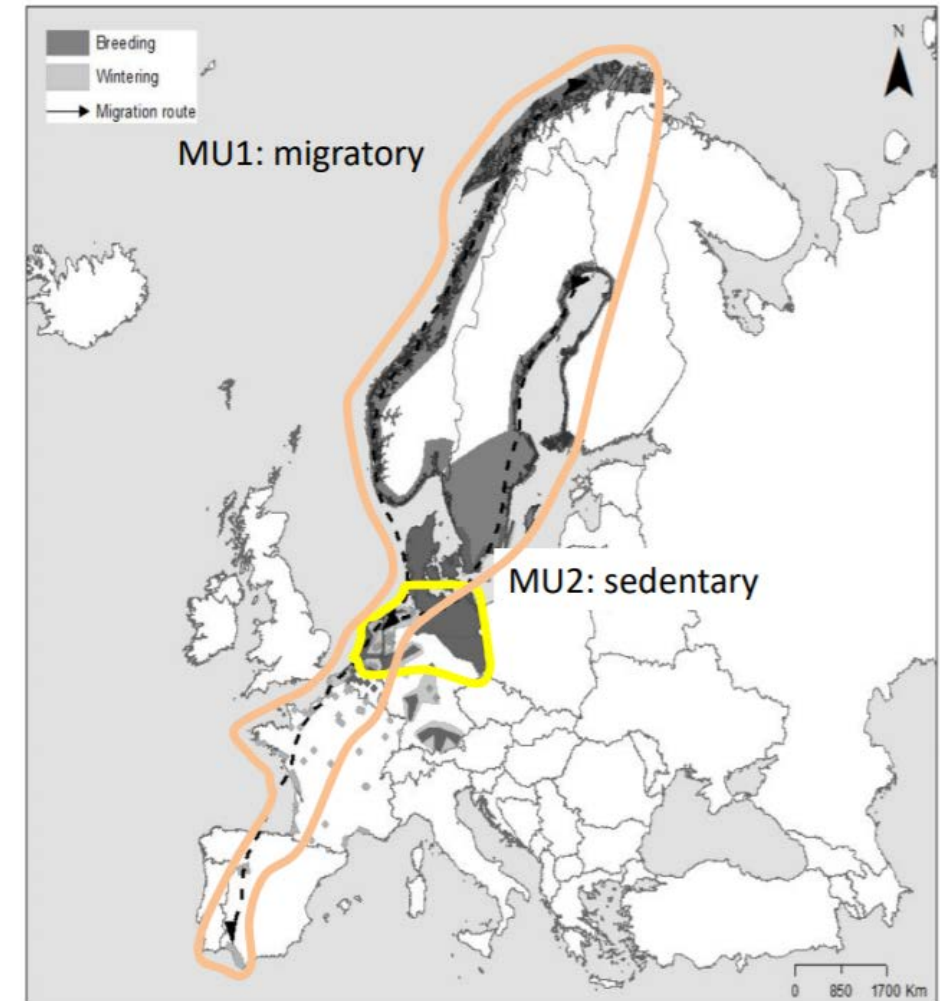
### Hunting Bag and Derogation Killing

Norway: Ingunn Tombre, Norwegian Institute for Nature Research (NINA), Sweden: Per Risberg, Swedish Environmental Protection Agency, Finland: Janne Pitkänen, Ministry of Agriculture and Forestry, Denmark: Thomas Kjær Christensen, Aarhus University and Anders Jensen, Environmental Protection Agency. Belgium: Floris Verhaeghe, Agency of Nature and Forest, Spain: Guillermo Ceballos, Instituto Andaluz de Caza y Pesca continental.

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## Northwest/Southwest European Population- Two Management units

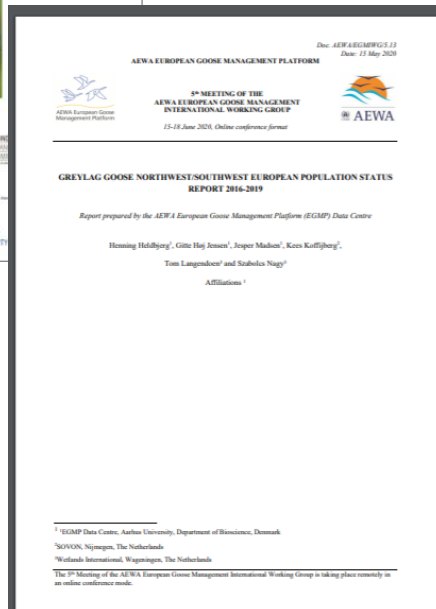
- MU1: Migratory
- MU2: Sedentary
  - Range states: Norway, Sweden, Finland, Denmark, Germany, The Netherlands, Belgium, France and Spain
  - Geese from this population also occur regularly in Poland (PL), Czech Republic (CZ) and Portugal (PT),
- Borders of the MUs are only indicative and may be adapted over time.



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## Background

- Powolny et al. 2018. AEWA International Single Species Management Plan for the Greylag Goose (*Anser anser*) - Northwest/Southwest European population. AEWA Technical Series No. 71. Bonn, Germany
- The EGM IWG has agreed to continue the process of implementing the Species Management Plan (ISSMP)
- This is the first status report



## Aim

- To compile monitoring data on the SW/NW European population of Greylag Goose.
  - used to **assess the population development** and **provide input to a decision model** (info-gap analysis)
  - that will **allow decision makers to make more informed decisions** about a harvest strategy
- To highlight the main limitations in the data, which currently prevents the development of an optimal harvest strategy.

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## Data

- Mid-winter data
  - Very important since simultaneous counts are performed across the range of the population
  - Similar data included in three different ways
    - All data or only from fixed monitoring sites
    - Raw data or imputed data
- Breeding birds (Common Bird Monitoring)
- Hunting Bag and Derogation Killing

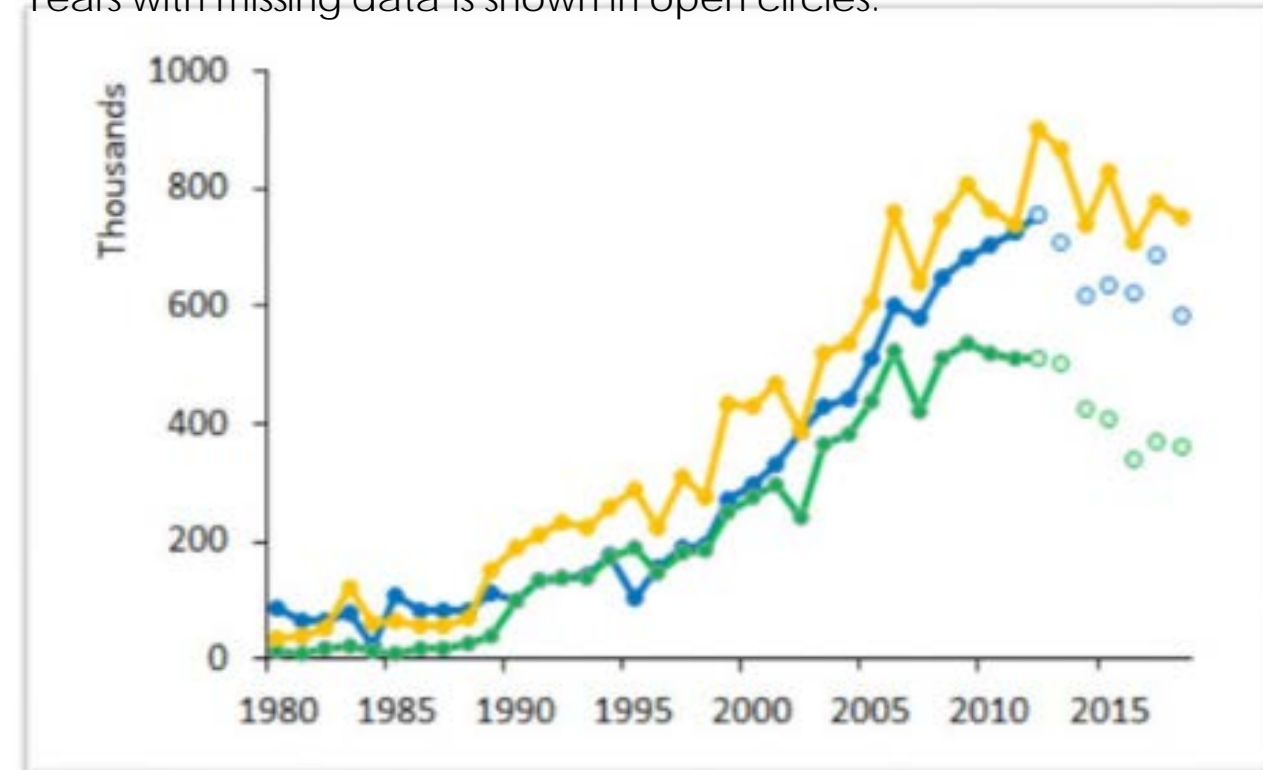
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## Mid-winter counts - Growth rates

- Large increase in population size
- Followed by a stable or maybe even declining population to c. 750,000
- However, these estimates of the population size are likely biased low.

Year	Growth rate
<i>IWC imputed</i>	
1980-2018	1.088
2004-2012	1.050
2004-2016	1.024
2009-2018	0.993

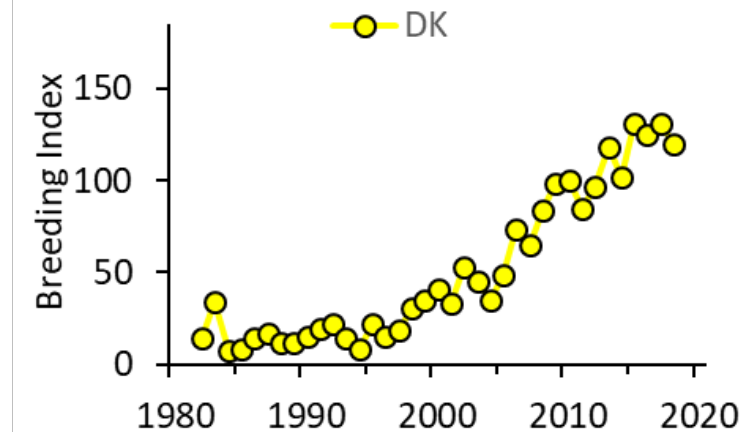
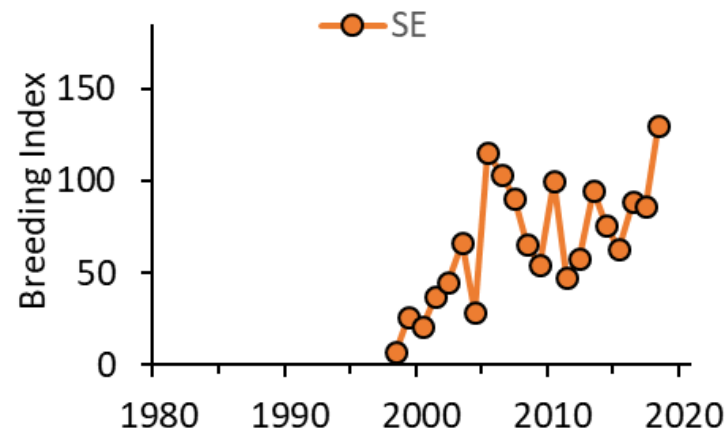
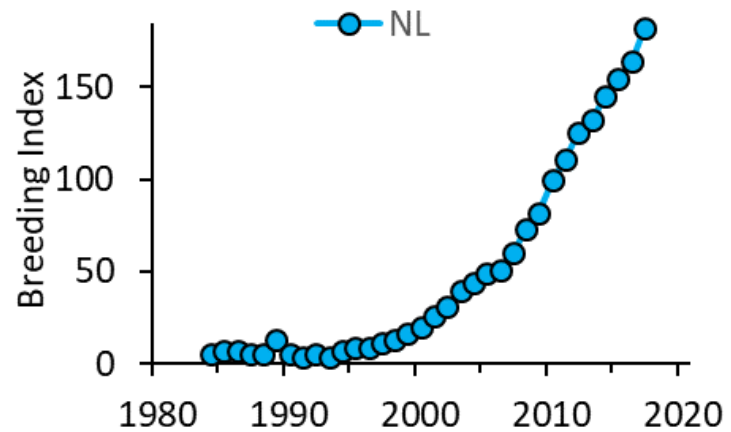
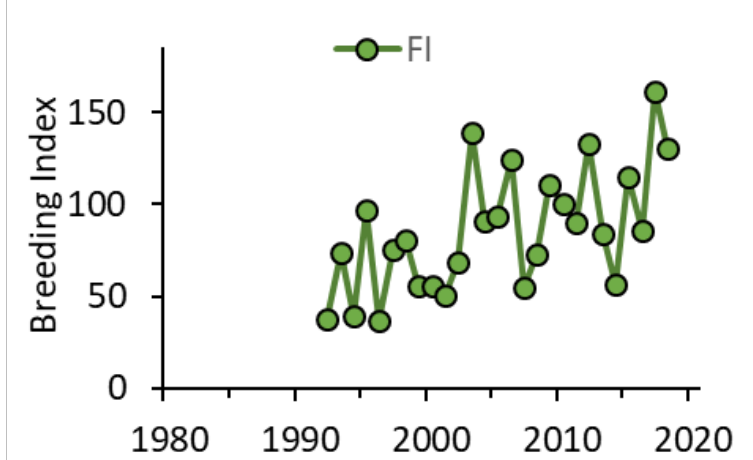
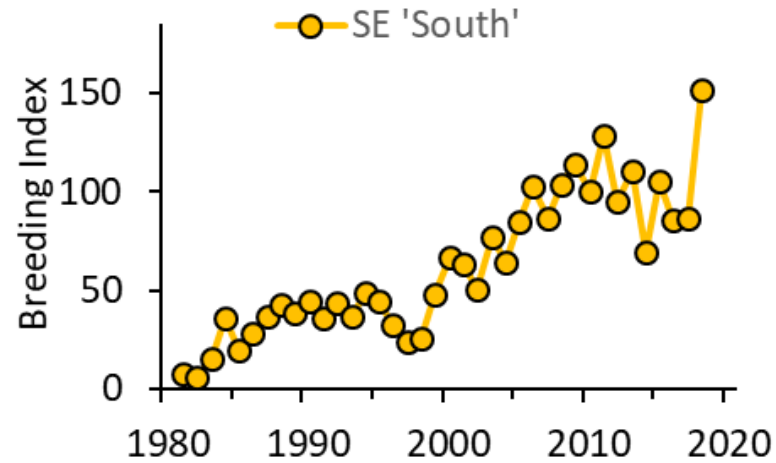
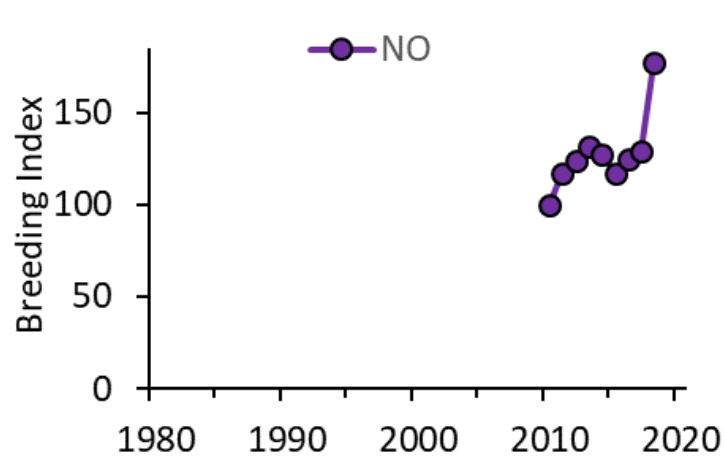
Figure 2. Total January population size EGMP national totals (blue), IWC count totals (green) and imputed IWC totals (yellow).  
Years with missing data is shown in open circles.





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## Breeding Bird Monitoring



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## Harvest

- Harvest (2018): a total of 108,411 shot Greylag Geese
- Biased low: Only available from part of the range; Norway, Sweden, Denmark, Finland and Donana (Andalusia, Spain)
- No report from:
  - Germany (2015: c. 54,000)
  - France (2013: c. 10,600)
  - Belgium (2017: 2,235)
- No hunting in The Netherlands

## Derogation

- No derogation: France and Spain
- Denmark, Norway and Belgium, a total of 5,549 was reported (2019)
- Finland and Sweden, a total of 445 was reported(2018)
- The Netherlands (2016): c. 163,000 individuals, c. 56,000 eggs and c. 29,000 nests
- Germany (2016): 1,582 individuals, 8,919 eggs and 1,843 nests

## Main limitations in the data - counts

### Mid-winter counts

- We lack data from most recent years from key range states as Germany and Spain
- The processing time is long in some countries, hence the population estimates are not up-to-date
- The data reported differ between countries

### Breeding bird indices

- No population estimates, only breeding indices (relative change)
- Complicated by a large (unknown and varying) number of non-breeding birds.

## Main limitations in the data - offtake

### Hunting

- No reporting from Germany since 2015
- National hunting bag surveys in France are only carried out approximately every 12 years – we need annual offtake data
- Hunting bag statistics are only available from Andalusia (including Donana) in Spain

### Derogation

- No recent available and/or reliable information from the two important countries: Germany and The Netherlands

## Conclusions - 1

- The mid-winter results show a slowing down and a recent stabilisation or even a decline in the population size.
  - A saturation of the main areas we study
  - Less immigration to MU2 from the Nordic countries
  - Increased offtake
  - Bias in counts
- There is a tendency for a decline in the South, however due to incomplete data, from Spain in particular, it is still highly uncertain



## Conclusions - 2

- Due to data deficiencies, it is currently not possible to model an optimal harvest strategy for the NW/SW European population of Greylag Goose, which will require reliable harvest and population counts reported annually, and with less delays.
- It is not possible to make such requested assessments before better monitoring data is available.

## Looking forward

- See to that counts and offtake data are reliable and easily available
- We need to study the regional differentiation more in detail to understand the spatial variation and enable the management at MU-basis.
  - **Neckbanding** across the whole range is needed to understand the exchange rates between MUs throughout the year and to track the rapid changes in wintering strategies of the population.
  - **Summer population estimates** should be extended in Germany (already happening in BE, NL and some parts of DE) to obtain reliable breeding population sizes for MU2
  - To initiate a **coordinated monitoring** (after the breeding season and before any harvest of the population) to understand the production of juveniles and the variation in this between range states and MUs