© J.P.Kjeldsen
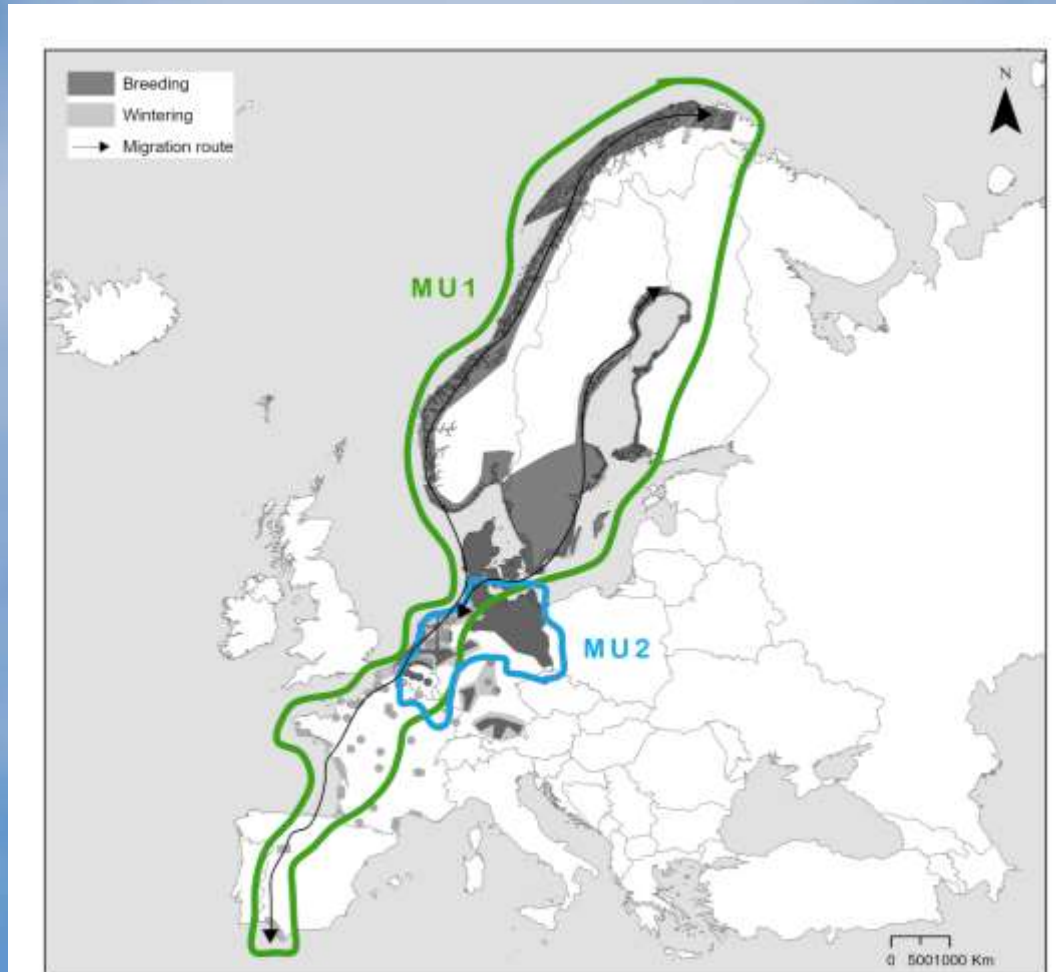
Greylag Goose: Population & Assessment Report

Doc. AEWA/EGMIWG/7.10/Rev.2 – Gitte Høj Jensen

Management units and Population Targets

MU1 (migratory unit):

FRP: 31,100 breeding pairs

Target: 70,000 breeding pairs

MU2 (sedentary unit in NL, BE, DE, FR):

FRP: 72,980 breeding pairs

Target: 80,000 breeding pairs

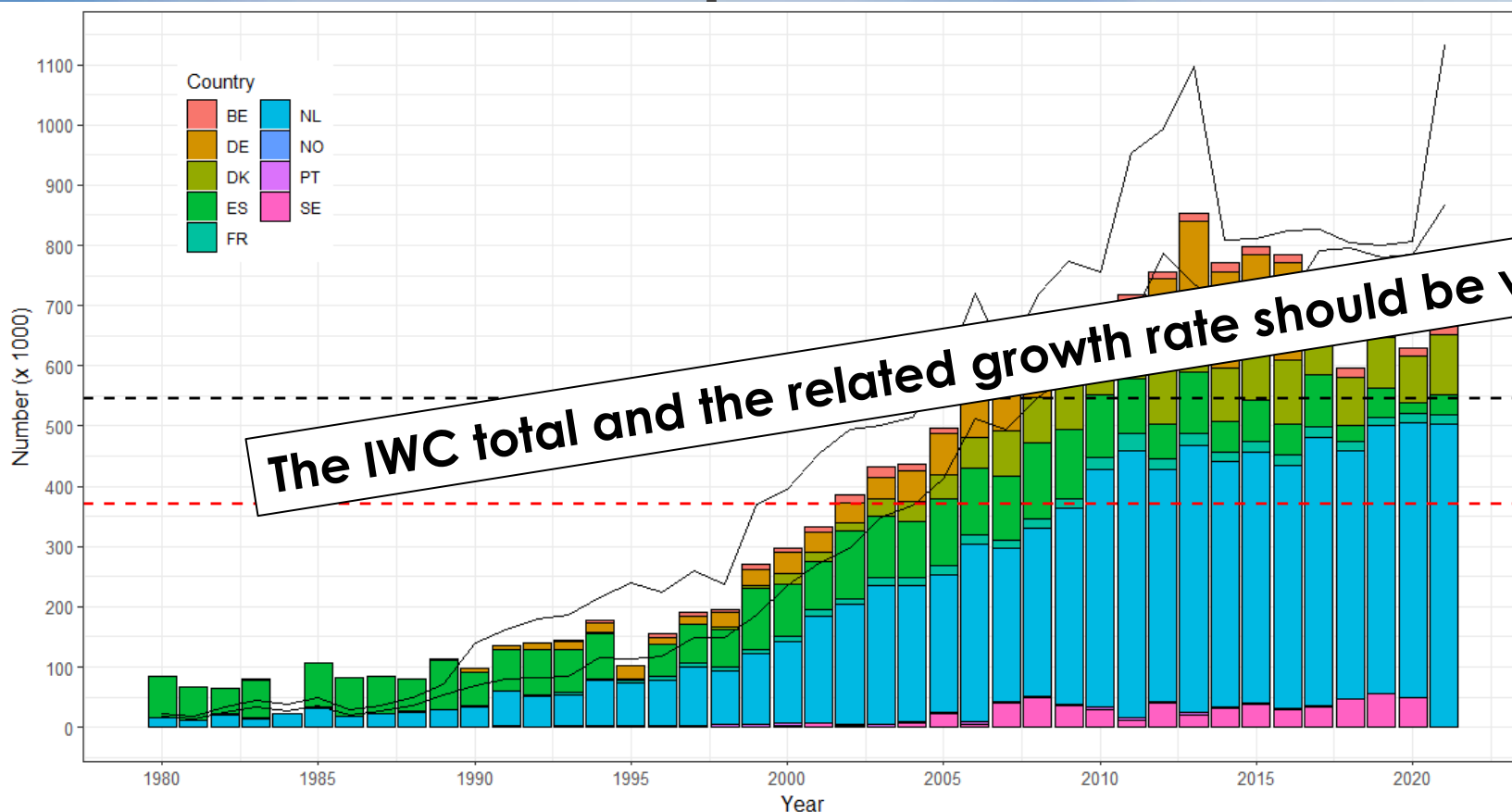**Total population (Winter estimates)**:

FRP: 370,400 individuals

Target: 545,000 individuals

Management strategies and Assessment protocol up until 2022

- Information-gap ("info-gap") decision model

- Range states have agreed on a management criterion of a 15% reduction in the flyway population size over 10 years ~ annual finite growth rate of 0.96 – 1.00

- Growth rate is assessed based on 10-years trend calculated from the latest available data using IWC imputed values and additional country-specific data from January.
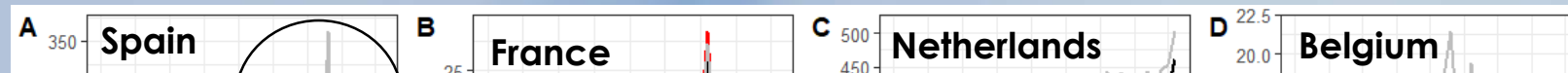
Population status – Winter counts

Development of the size (individuals) of the NW/SW European mid-winter population of Greylag Geese at a country level based on EGMP counts (bars) and at the population level based on IWC imputed values including (upper black line) and excluding (lower blackline) imputed values from Spain. EGMP count data is missing from Germany from 2017-2021 and Portugal from 2018-2021, and no count was performed in Sweden in 2021. IWC imputed values are available from 1980-2021. The dashed black line represents the target for the wintering population, and the red dashed line represents the FRP.

The IWC total and the related growth rate should be viewed critically.

Population size generally stable since 2012

...ed values for the total population in 2021:

- 1,131,525 individuals including ES
- GR: **0.994** (0.963-1.025)

- 865,582 individuals excluding ES
- GR: **1.014** (1.002-1.026).

Population status – Winter counts

Data gaps after 2010

Overesti... 2011-2...

A	350	**Spain**	B	**France**	25	C	500	**Netherlands**	450	D	22.5	**Belgium**	20.0

Management guidance:

- Given the large uncertainty in the estimates from Spain, it is difficult to make a conclusion on the population trend.

- It is important to note that the potentially observed population decrease is mainly a result of a decreasing population in Spain

- Thus, it is recommended that the accuracy of the Spanish population estimates and trend is investigated and analyzed before the assessment in 2023.

- More reasons for moving to a dynamic, model-based management of the population

Preconditions for the dynamic, model-based management of the population

The following actions need to be implemented before the 2023/2024 hunting season:

1. Establish the necessary monitoring frameworks outlined in the AFMP, particularly:

    a. summer counts to estimate the population size at the MU level.

    b. reliable and up-to-date offtake data (both derogation and harvest) which in terms of derogation, can be assigned to MUs;

2. Acquire fiscal and/or personnel resources to develop population models by 2023. **In place**
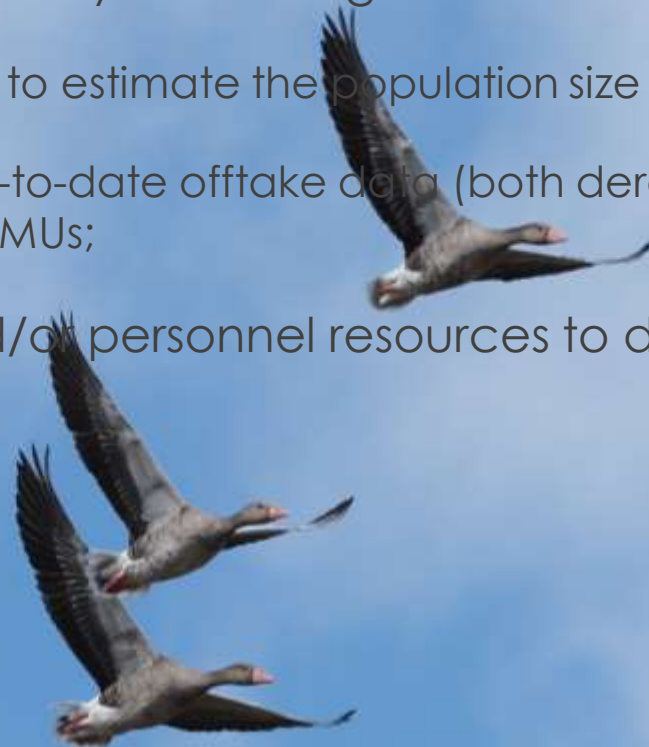
Summer counts in MU1

- For MU1 (migratory unit), post-breeding summer counts are currently being explored within the Fennoscandian Greylag Goose Initiative (FGGI), including projects in Norway, Sweden, Finland, and Denmark. The results from these projects will be presented in 2023.
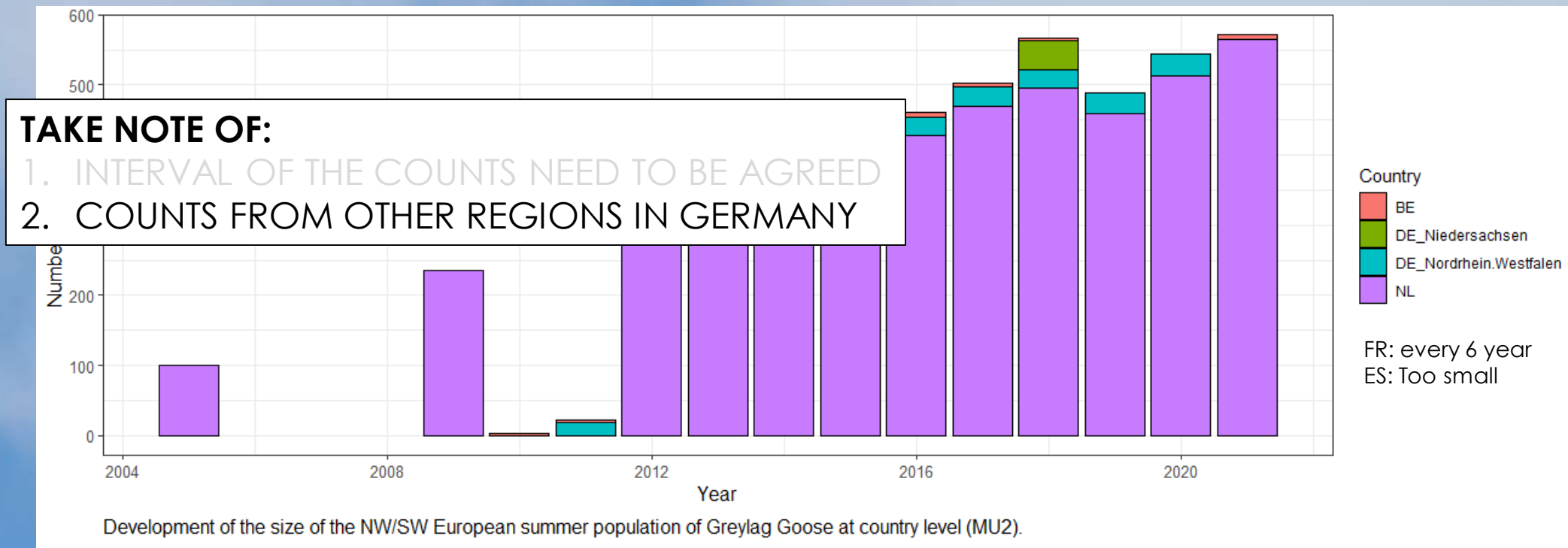
TAKE NOTE OF:
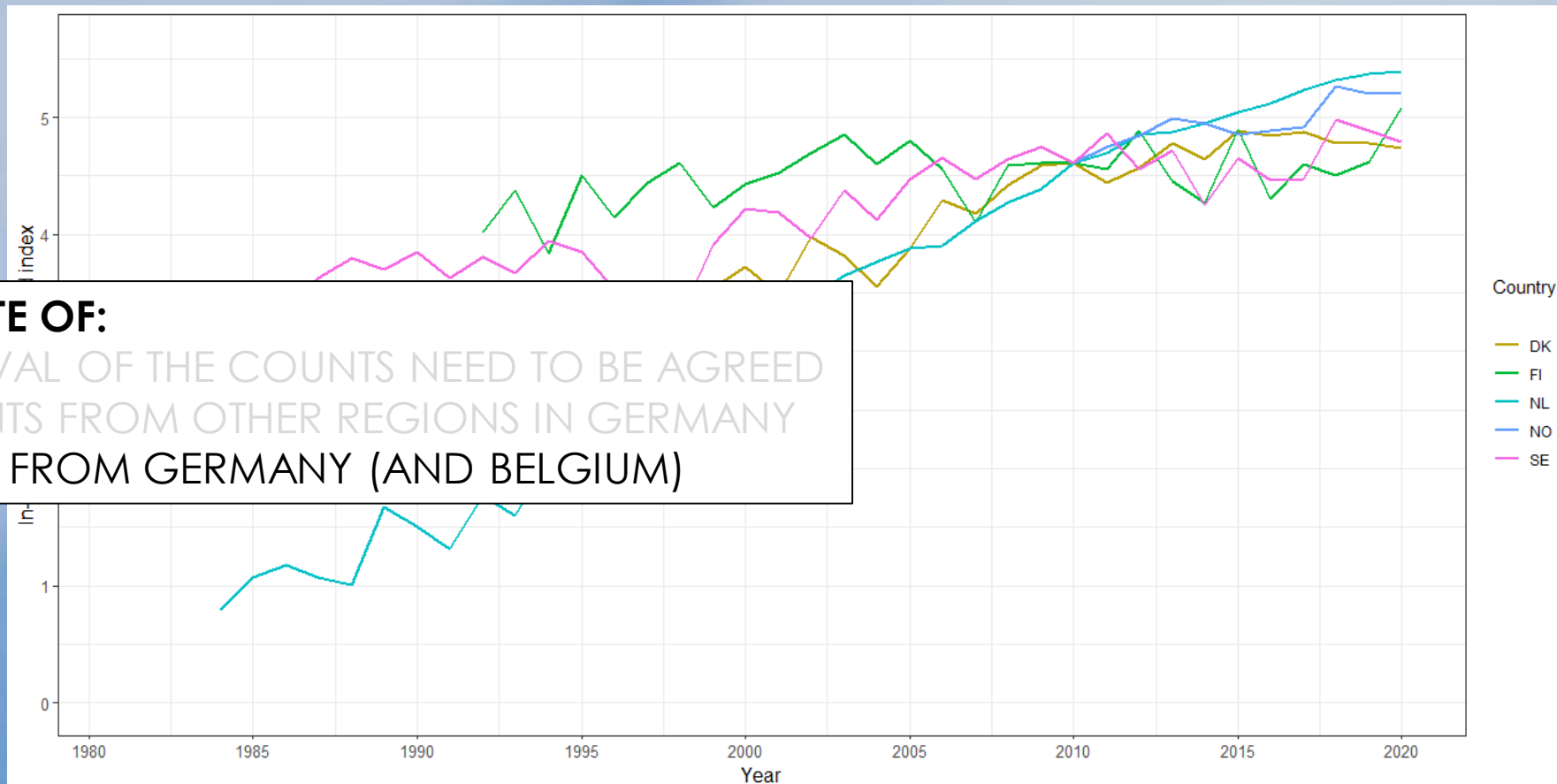1. INTERVAL OF THE COUNTS NEED TO BE AGREED IN THE COMING CYCLE

Summer counts in MU2

- MU2: Sedentary unit in NL, BE, DE, FR

TAKE NOTE OF:
1. INTERVAL OF THE COUNTS NEED TO BE AGREED
2. COUNTS FROM OTHER REGIONS IN GERMANY

Country
- BE
- DE_Niedersachsen
- DE_Nordrhein.Westfalen
- NL

FR: every 6 year
ES: Too small

Development of the size of the NW/SW European summer population of Greylag Goose at country level (MU2).
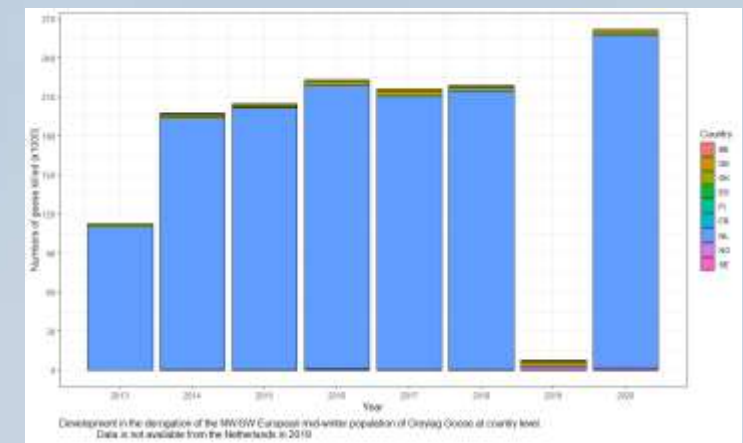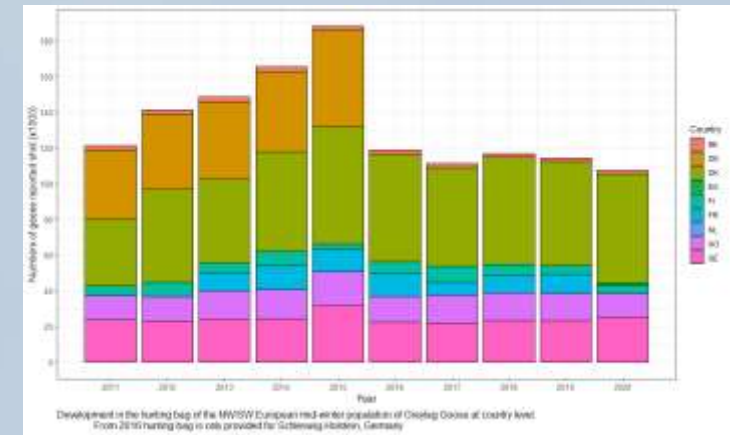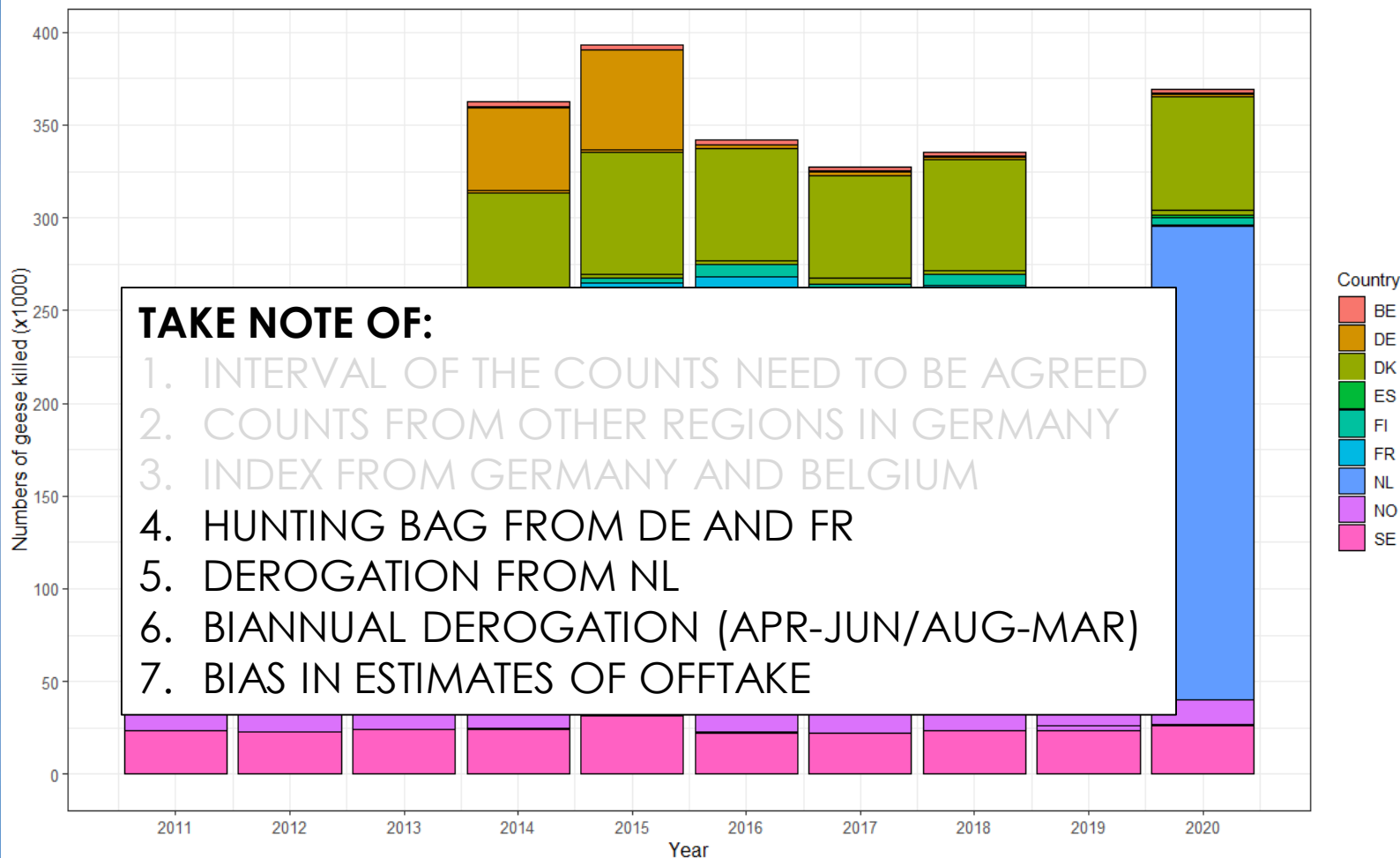
Breeding Bird index - trend
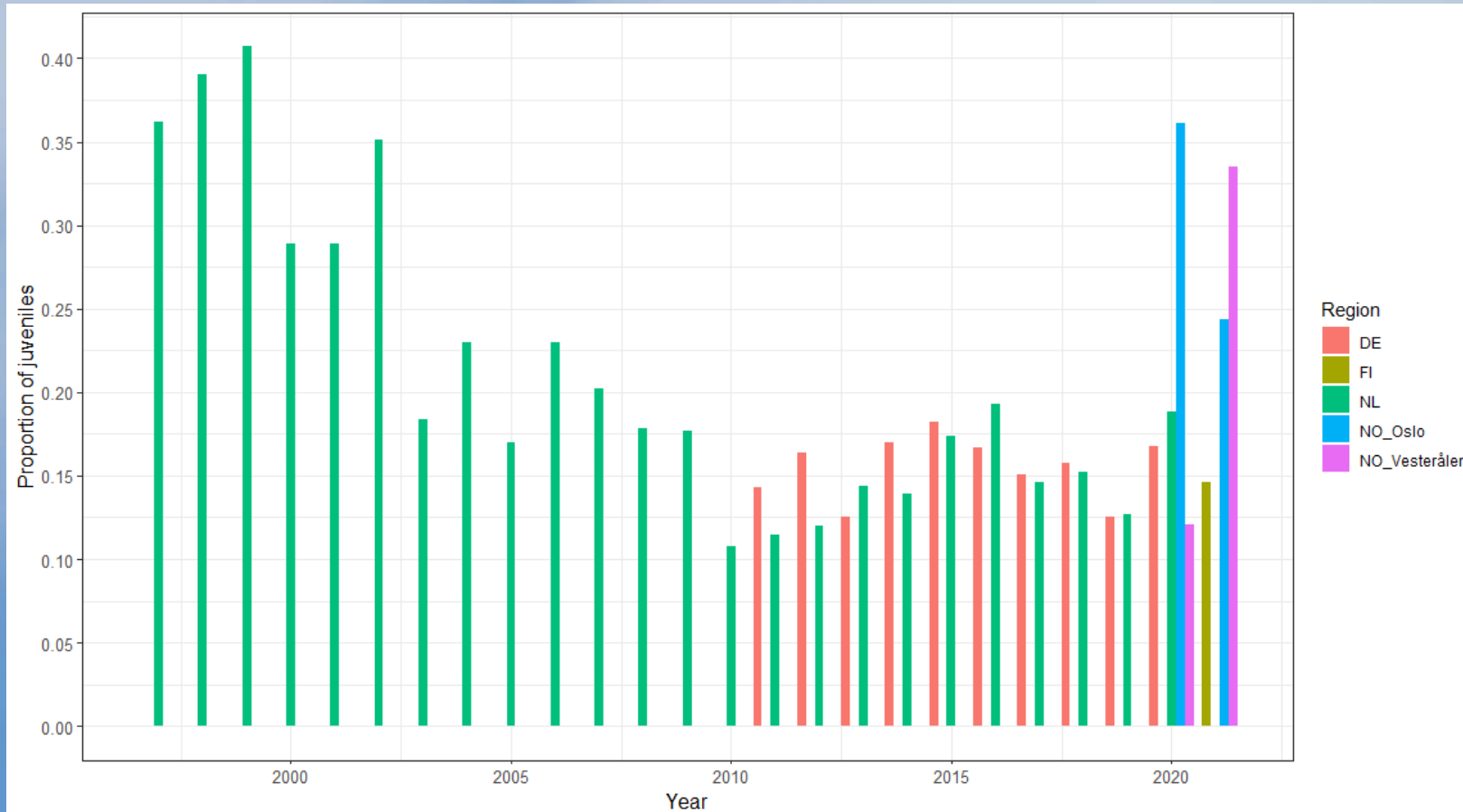

TAKE NOTE OF:
1. INTERVAL OF THE COUNTS NEED TO BE AGREED
2. COUNTS FROM OTHER REGIONS IN GERMANY
3. INDEX FROM GERMANY (AND BELGIUM)

National ln-transformed breeding bird indices for Greylag Goose provided by the different national Common Bird Monitoring programmes:
Norway (NO) 2010-2021, Sweden (SE) 1981-2021, Finland (FI) 1992-2021, Denmark (DK) 1987-2021 and The Netherlands (NL) 1984-2020.
The index is set to 100 in year 2010.

Mortality

TAKE NOTE OF:
1. INTERVAL OF THE COUNTS NEED TO BE AGREED
2. COUNTS FROM OTHER REGIONS IN GERMANY
3. INDEX FROM GERMANY AND BELGIUM
4. HUNTING BAG FROM DE AND FR
5. DEROGATION FROM NL
6. BIANNUAL DEROGATION (APR-JUN/AUG-MAR)
7. BIAS IN ESTIMATES OF OFFTAKE

Reproduction

Proportion of juveniles of the NW/SW European population of Greylag Goose at country level.
From 1997-2020 in the Netherlands, 2011-2020 in North Rhine Westphalia, Germany,
2020-2021 in Vesterålen and Oslofjord-area, Norway and in 2021 in Finland.

Survival

- No assessment of survival rates has been carried out since those provided in the ISSMP, but work is in progress by Office Français de la Biodiversité (OFB), and Netherlands Institute of Ecology (NIOO).

Preconditions for the dynamic, model-based management of the population

1. Establish the necessary monitoring frameworks outlined in the AFMP, particularly:

   a. summer counts to estimate the population size at the MU level.

      a. **Interval of summer counts remains to be agreed upon + counts from other regions in Germany.**

      b. **Breeding bird index from Germany (and Belgium)**

   b. reliable and up-to-date offtake data (both derogation and harvest) which in terms of derogation, can be assigned to MUs;

      a. **Hunting bag from Germany and France (1 year time lag)**

      b. **Biannual derogation (and hunting bag) information (April-June and August-March)**

      c. **Bias in estimates of offtake**

2. Acquire fiscal and/or personnel resources to develop population models by 2023. **In place**

Data providers

Tom Langendoen, Mencía Serrano Ruiz de Dulanto, Ingunn Tombre, Kees Koffijberg, Henk van der Jeugd, Iben Hove Sørensen, Preben Clausen, Niklas Liljebäck, Matthieu Guillemain, Per Risberg; Daniel Palm Eskildsen, Koen Devos, Andreas Lindén, John Atle Kålås, Floris Verhaeghe, Mikko Alhainen, Mariano Rodriguez Alonso, Guillermo Ceballos, Åke Lindström, Antti Below, Arne Follestad, Fredrik Haas, Leif Nilsson, Håkon Kampe-Persson, Johan Månsson, Kjell Isaksen, Charles-Henri De Barsac, Anders Jensen, Thomas Kjær Christensen and many other regional coordinators and observers

THANK YOU!