

AEWA European Goose Management Platform

21-23 June 2021

EGM IWG6

Online Conference Format



Title: Population status report Barnacle Goose

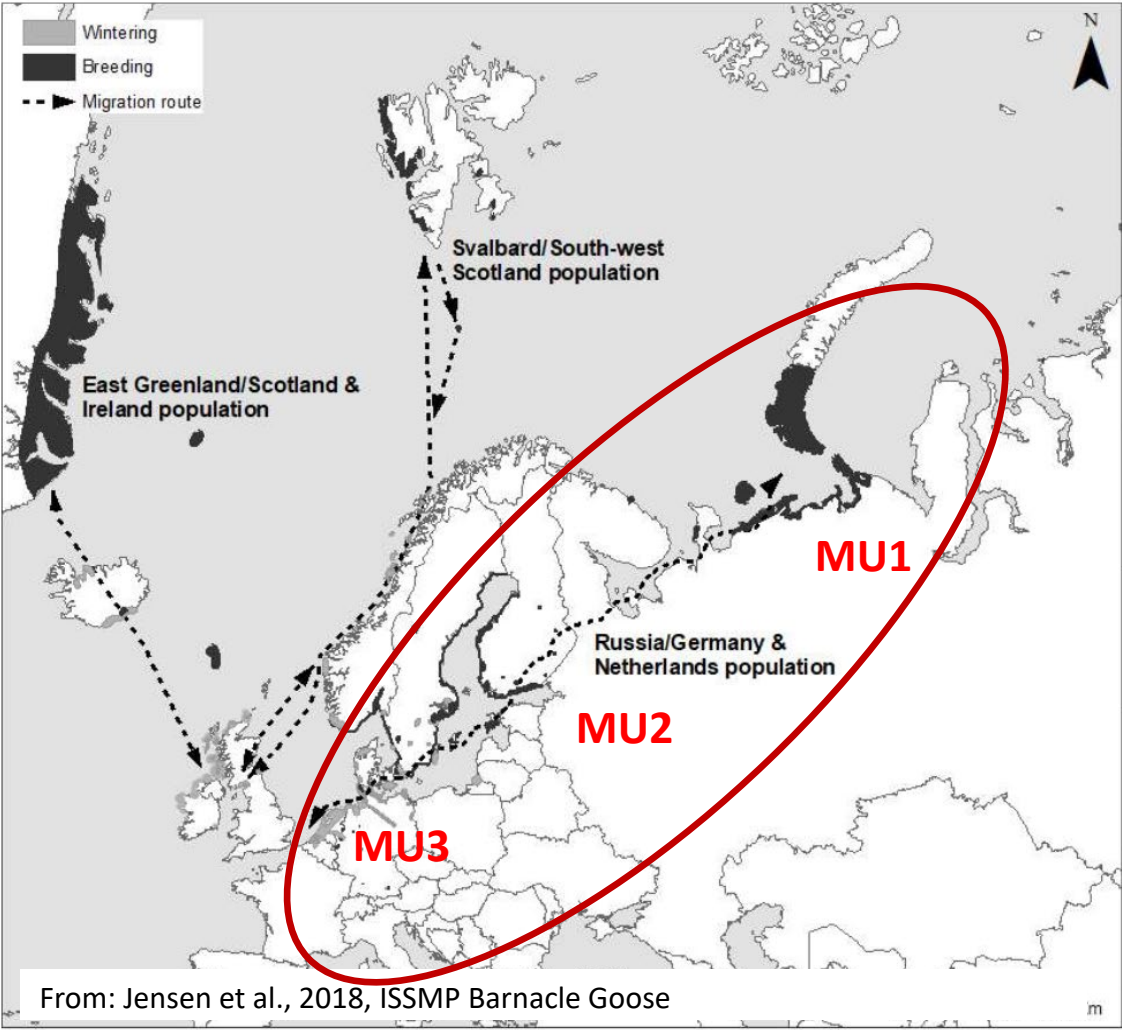
Subtitle: Russia/Germany – Netherlands population

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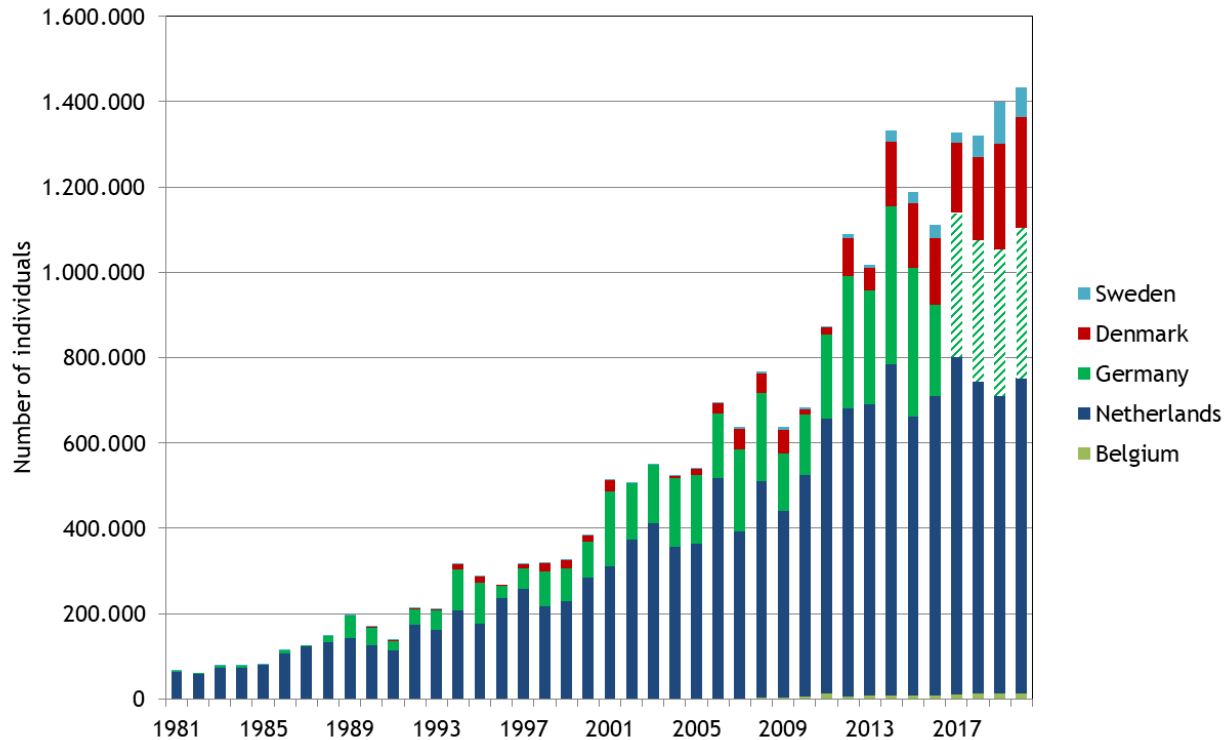
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Doc. AEWA/EGMIWG/6_6



Winter surveys (all MUs)



Current population size entire flyway, January 2019-2020: ~ 1.4 Million individuals (FRP in AFMP: 380,000)

Country	2019	2020
Belgium	11,898	13,180
The Netherlands	698,777	739,023
Germany	N/A	N/A
Denmark	249,026	259,000
Sweden	96,660	68,521
Total flyway (winter) without Germany	1,056,361	1,079,724
Total including imputed numbers for Germany	1,398,777	1,432,413

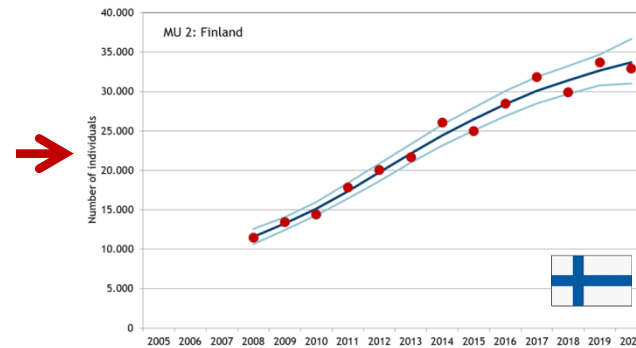
BUT no data received from Germany since January 2017 – last four years imputed (shaded in graph)

Overall trend since 1980 +9 % / yr. Increasingly wintering in DE, DK and SE

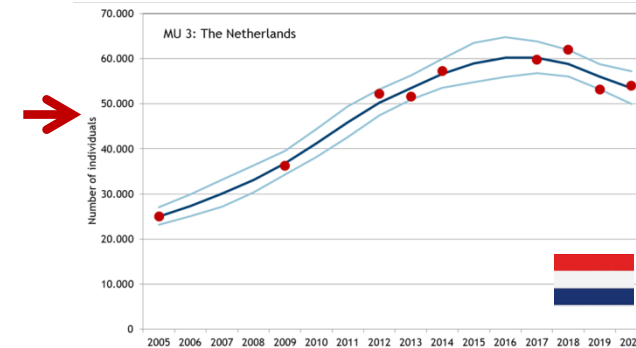
Summer surveys (MU2 & 3, individuals *not* pairs)

Table 5.3. Numbers of Barnacle Geese in July 2019-2020 in MU2 and MU3. Numbers for Belgium represent an estimate. Birds in Russia may be (partly) included by counts in Finland.

Country / MU	2019	2020
MU 2:		
Finland	33,707	32,900
Estonia	N/A	N/A
Russia	N/A	N/A
Sweden	N/A	N/A
Norway – Oslofjord	1777	1896
Denmark	N/A	N/A
MU 3:		
Belgium	(500)	(500)
The Netherlands	53,219	54,000
Germany – Nordrhein-Westfalen	714	705
Germany - Niedersachsen	N/A	N/A
Germany – Schleswig-Holstein	N/A	N/A



MU2 only Finland and Oslofjord/Norway. Long-term increase in Finland: +10 % / yr



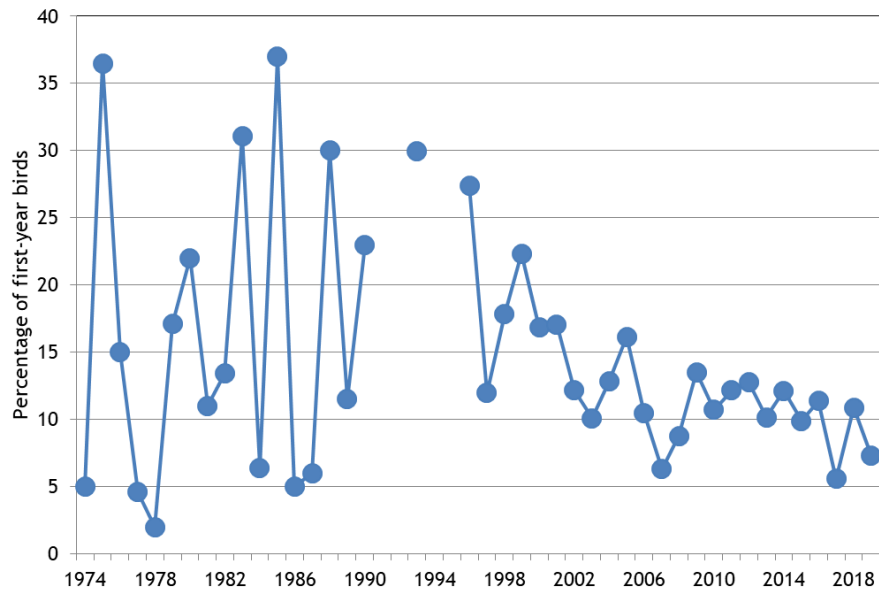
MU3 dominated by Netherlands: +6 % / yr, but tends to decline recently

→ Estimate MU3 from previous report 65-70,000 ind. likely needs to be revised, pending on data from Germany

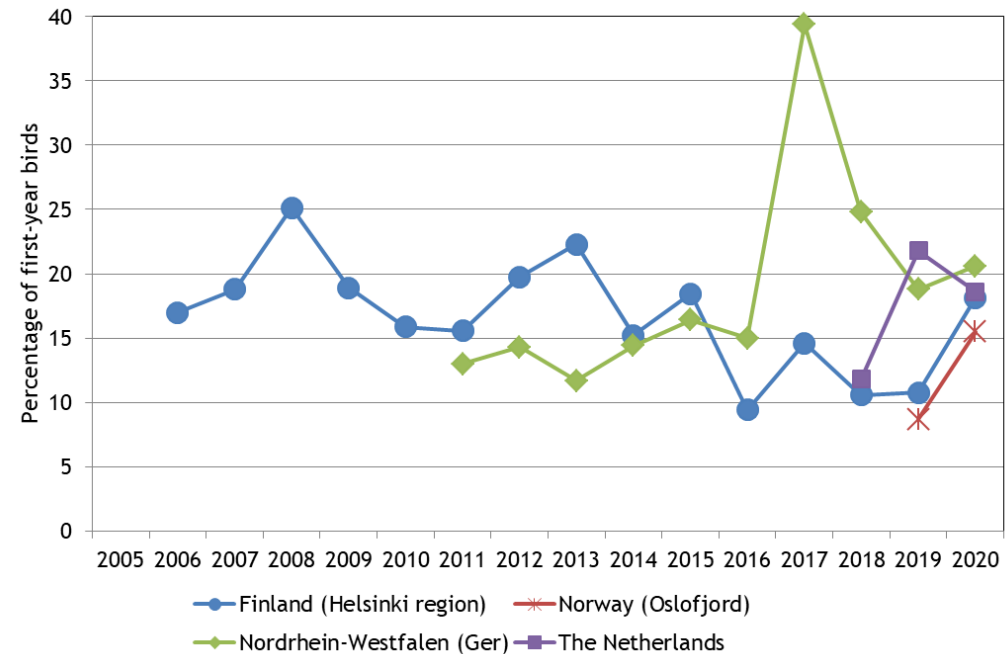
→ 200% threshold for breeding no. (coordinated derogations) in AFMP still valid

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Productivity

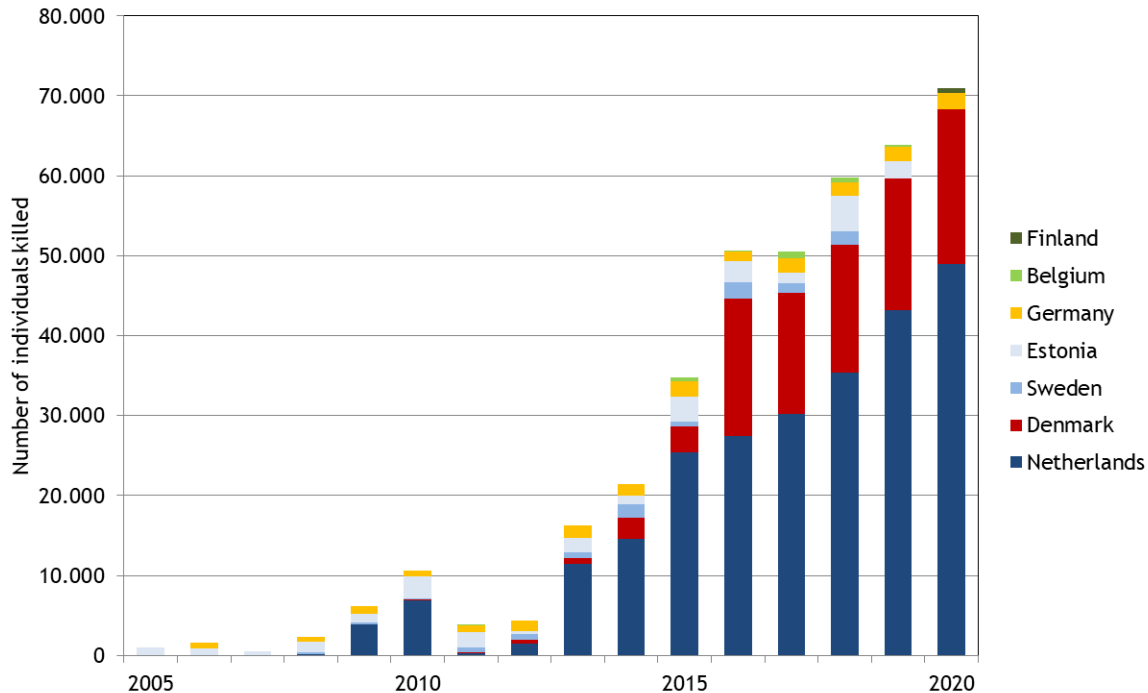


MU1/2 collected in autumn in mainly Netherlands and Northern Germany:
long-term decline and less variation, currently ~ 9 % first-year birds in flocks. General pattern highly similar to other arctic geese like GWfG or TuBG



MU2/3 collected in July/August in only part of the countries and not always representative:
Sedentary populations (NL, DE) seem to have higher productivity as migratory (FI, NO). Finland mainly Helsinki region, decline may be due to density-dependence

Offtake (all MUs)



Overall increase in numbers killed, to > 70,000 in 2020.

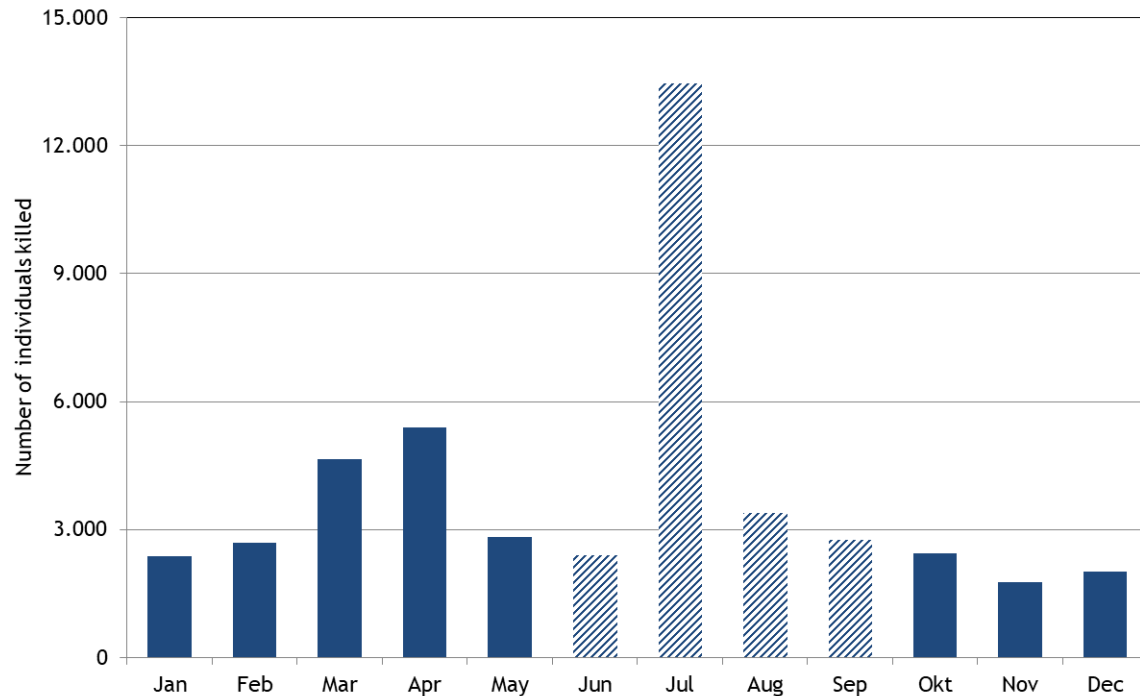
Data missing for several countries 2019 and especially 2020 (EU reporting in progress). Up to 2018 ~85 % of total in NL and DK

Note:

these only represents derogation figures from either Eionet Data repository or national data. Recently updated with data from DK 2020. Data after 2018 not yet final as not all data submitted to EU yet

Harvest Russia not included (because unknown)

Offtake: a closer look 1



Example from NL (averages 2019-2020) with monthly resolution (data retrieved from regional Wildlife Councils)

29% of killed birds in July (moult catches), only affecting MU3 (sum even 48% of annual off-take from Jun-Sep)

→ Thus data with higher temporal resolution (like month) greatly assist in assigning off-take to MUs (in the IPM framework, to assess cumulative impact of derogations)

Offtake: a closer look 2

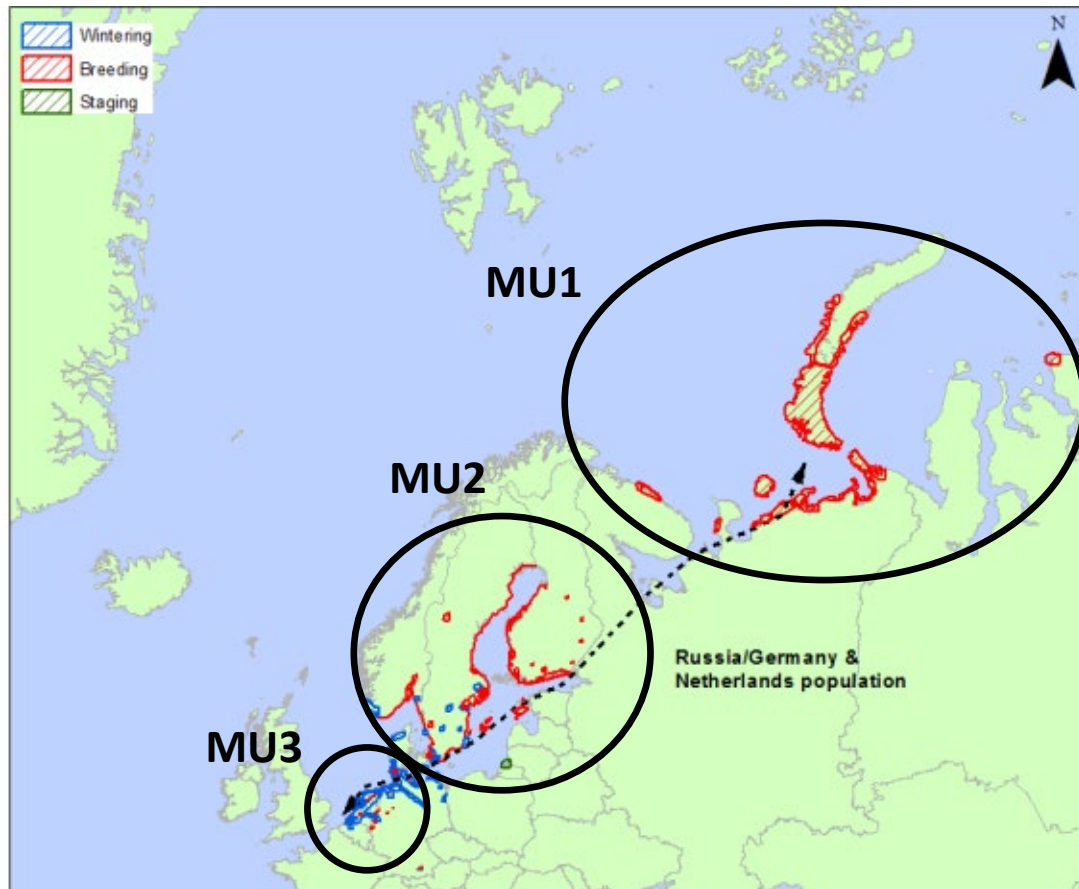
Table 5.5. Baseline data on crippling rates recorded for Barnacle Geese.

Country	Year or Season	Time of year	Number sampled	Percentage with embedded pellets	Source
Denmark	2009	spring	111	12.6	Holm & Madsen, 2012
Denmark	2011	spring	136	11.8	Holm & Madsen, 2012
The Netherlands	2017	summer	69	24.6	Wageningen Environmental Research, unpublished
The Netherlands	2018/2019	winter	284	16.5	Wageningen Environmental Research, unpublished
The Netherlands	2018	summer	102	26.5	Wageningen Environmental Research, unpublished
Germany	2018/2019	winter	215	7.4	Wageningen Environmental Research, unpublished
Lithuania	2018/2019	winter	29	6.9	Wageningen Environmental Research, unpublished
Denmark	2019	spring	50	18.0	Aarhus University/K. Clausen, unpublished

Monitoring of crippling rates by Wageningen Environmental Research & Aarhus University in NL/DE/LT and DK (during ringing operations). Increased data collection as part of AFMP process.

Crippling rates seem to be quite high (when compared to e.g. Pinkfeet) and point at differences between countries and between winter (migratory) and summer (residents), but full assessment (also comparing age-classes, etc.) has to be made

Progress IPM Modelling (Hans Baveco & Paul Goedhart, WENR)



MU 1: Arctic population

- IPM has been set up and performs well (when modelled output and counts compared), presented during IWG5
- Census data, survival and productivity available, derogation data with some assumptions assigned to MUs

MU 2 and 3: Baltic and North Sea population

- Added to the existing model structure spring 2021 (see appendix in status report)
- Analysis and evaluation in autumn 2021, will be presented during IWG7 (June 2022)
- Mostly only data available for >2005, lacking for parts of Germany and countries in the Baltic, except Finland (planned summer surveys in Baltic). Survival data derived from (older) ringing scheme. Derogation data available but difficult to assign to either MU2 or MU3 (or MU1)

To wrap up: main issues that remain

- Flyway: winter surveys, data missing for Germany 2017-2020, so estimate flyway population comes with some uncertainty (Germany usually had at least ~25% of the wintering pop.)
- MU 2: lack of summer surveys in DK and SE, no estimate for size MU2 possible yet. Productivity data only available in Finland/Oslofjord Norway (some issues if representative for Finland) → surveys (numbers/productivity) planned in 2021-2022 (FGGI)
- MU3: Incomplete coverage of summer surveys in MU3 (parts of Germany missing). Productivity data mainly from NL. Estimate to some extent possible as by far largest share in NL
- Derogation data become available after some time, but often preliminary data are available as well on national level. Higher resolution (time, space) preferable to be able to assign to MU in IPM (and to be able to assess cumulative impact of derogations on MU-level). Still, harvest data from (spring) hunting in Russia (MU1) is lacking.



Thank you!

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- Markku Mikkola-Roos (Finnish Environment Institute, FI)
- Johannes Wahl (Dachverband Deutscher Avifaunisten, DE)
- Erik van Winden (Sovon Vogelonderzoek Nederland, NL)
- all counters submitting data to the national co-ordinators