

WATERBIRD COUNTS IN DENMARK

WITH SPECIAL EMPHASIS ON EGMP GOOSE MONITORING















WHERE IT ALL BEGAN



DANISH REVIEW OF GAME BIOLOGY Vol. 9 no. 1

Waterfowl Populations in Denmark 1965 - 1973

A Survey of the Non-breeding Populations of Ducks, Swans and Coot and their Shooting Utilization

by
Anders Holm Joensen

Med et dansk resumé: Andefuglebestandene i Danmark 1965–1973. De ikke ynglende bestande af ænder, svaner og blishøns, og deres jagtlige udnyttelse.

Резюме на русском языке

Популяции утиных в Дании с 1965 по 1973 г. Не гнездящиеся популяции уток, лебедей и лысух, и их охотничье использование

COMMUNICATION NO. 120 FROM VILDTBIOLOGISK STATION Vildtbiologisk Station, Kale, 8410 Rønde, Denmark

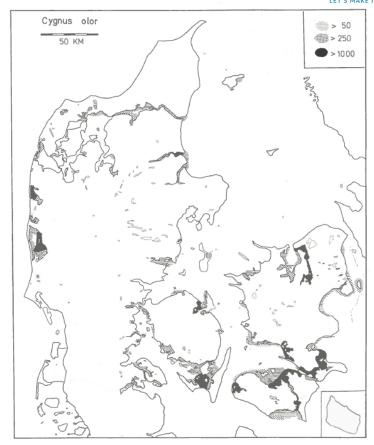


Fig. 64. Summary map for *C. olor* showing areas where flocks of more than 50, 250 or 1,000 birds respectively are found regularly during autumn, winter and spring.

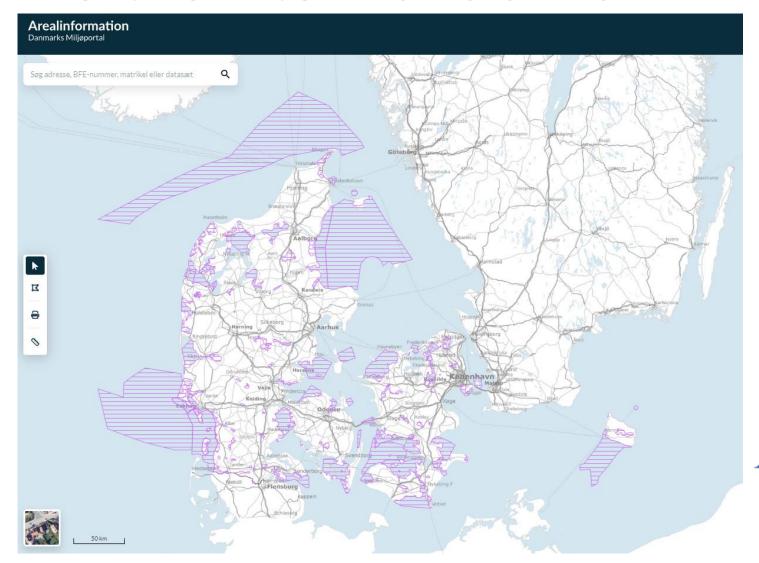


WATERBIRD COUNTS IN DENMARK NOW

- >Under the NOVANA programme (National Monitoring and Assessment Programme for the Aquatic and Terrestrial Environment) since 2004
- > Multiple purposes, on request from : Ministry of Environment of Denmark
- > Covering 48 species of breeding birds listed in Annex 1 of the EU Birds Directive
- > and 68 species of passage/wintering waterbirds



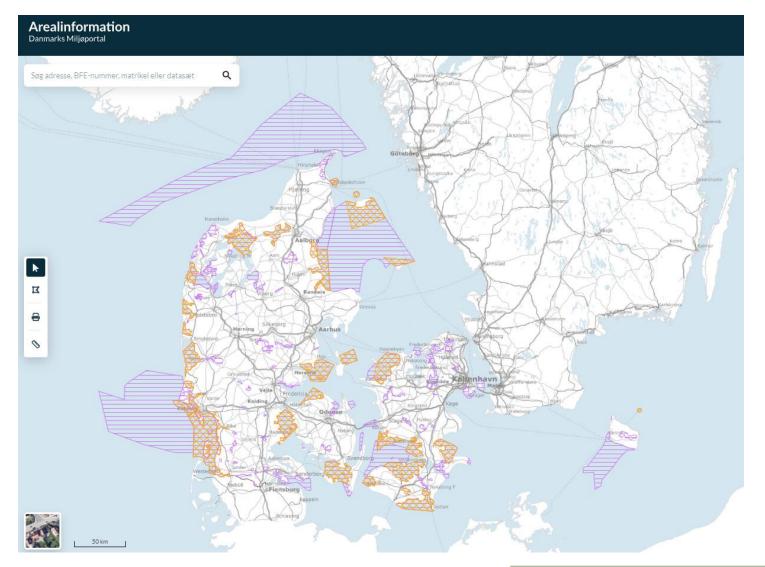
MONITORING 125 EU SPA'S







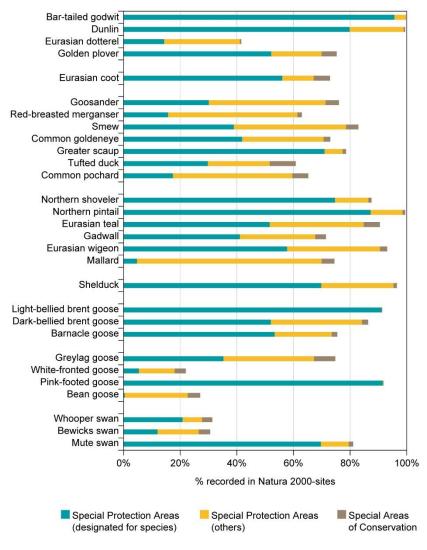
... AND 28 RAMSAR SITES







EU BIRDS DIRECTIVE ARTICLE 12 REPORT



- National population estimates
- > Trends of these
- >% of these in SPA's
- > Dataflow -> AEWA CSR

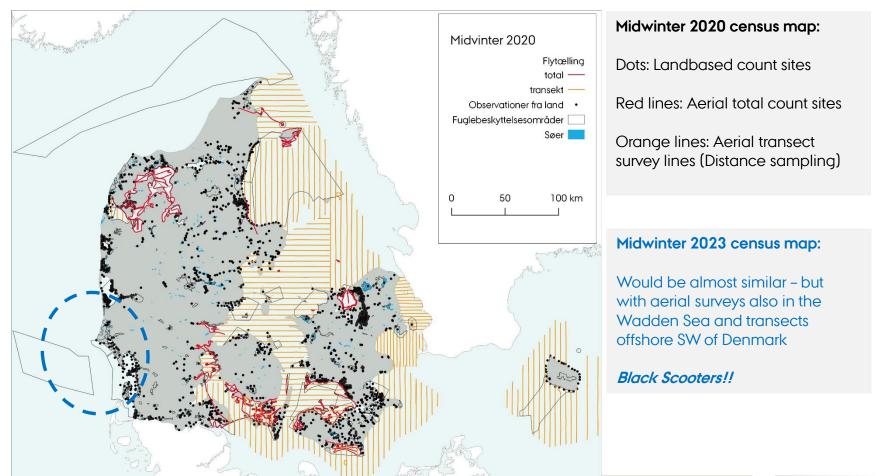






COMPLETE NATIONAL CENSUSES

> Regular - but not annual complete censuses



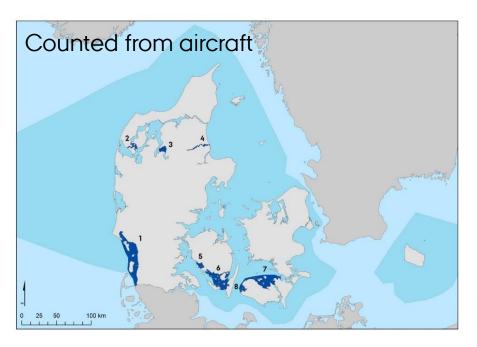


WATERBIRD TRENDS IN DENMARK

- now 118

 > Since 1987 annual 'reduced site network'

 International Waterbird Census counts in 49 sites
- > These are the IWC sites -> Wetlands International





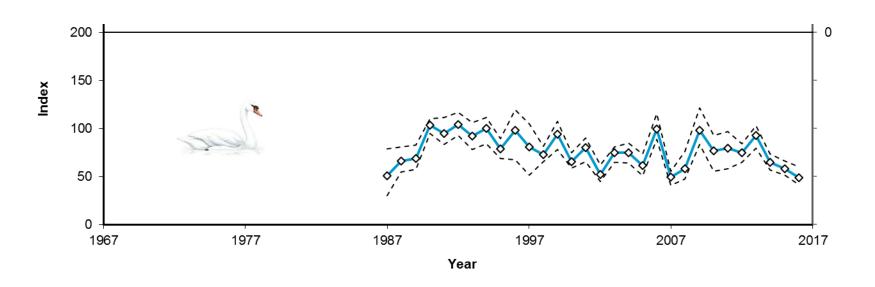


IWC SITES TRENDS

> example Mute Swan



> Stable population, with smaller numbers following severe winters in the early-mid 1980's and some relatively cold winters recently



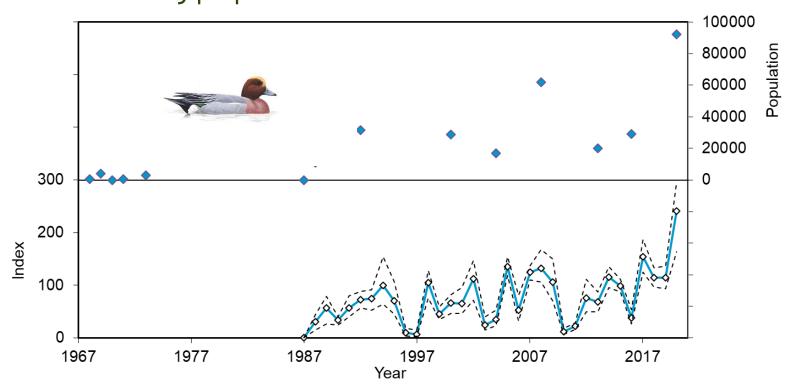


COMPLETE NATIONAL CENSUSES

> example Wigeon

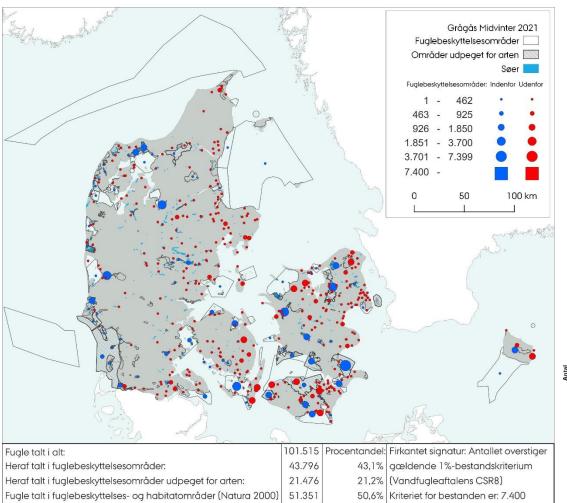


> Increasing population - in 2023 more than Mallard!

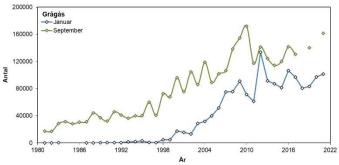




BUT FOR GEESE – ANNUAL COMPLETE NATIONAL CENSUSES



- >Starting in 1981
- >IWC network not sufficient coverage





GEESE – SCHEDULES FOR COMPLETE NATIONAL CENSUSES

> Current 2022-2027 NOVANA 6 year period

| NOVANA count months by year | | | | | | | | | | |
|-----------------------------|------|------|------|------|------|------|------------------------------------|--|--|--|
| Month | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | Focal species | Note | | |
| January | | | | | | | All goose species (all waterbirds) | | | |
| Februar | | | | | | | | | | |
| March | | | | | | | Barnacle and Pink-footed Goose | | | |
| April | | | | | | | Light-bellied Brent Goose | (almost Dark-bellied because of mandatory sites) | | |
| May | | | | | | | Dark-bellied Brent Goose | (also Light-bellied because of mandatory sites) | | |
| Juni | | | | | | | | | | |
| Juli | | | | | | | | | | |
| August | | | | | | | Greylag Goose | replacing September count | | |
| September | | | | | | | | | | |
| October | | | | | | | All goose species (all waterbirds) | Greylag, (Barnacle), the two Brent Geese | | |
| November | | | | | | | Pink-footed Goose | | | |
| December | | | | | | | | | | |
| | | | | | | | Pink-footed Goose | | | |

- > October new annual all waterbird species count
- > August new "every second year" count



AD HOC - NATIONAL CENSUSES OF PINK-FOOTED GOOSE (NOVEMBER AND MAY)

> "Live transmission"



Kort Satellit stiansand

Kort Satellit stiansand

First Satellit stiansand

Kort Satellit stiansand

First Satellit Skövde Visi fuld skærm

Linköping

First Satellit Skövde Visi fuld skærm

First Skövde Visi fuld skærm

Firs

Count this weekend

So far 26,500 Pink-footed Geese typed in

20,035 north of the Wadden Sea

Bean Geese coming in

But these are day-time Wadden Sea counts – will be replaced by night-roost counts



ORGANISED THROUGH OUR INHOUSE WWW.FUGLEDATA.DK WEBSITE

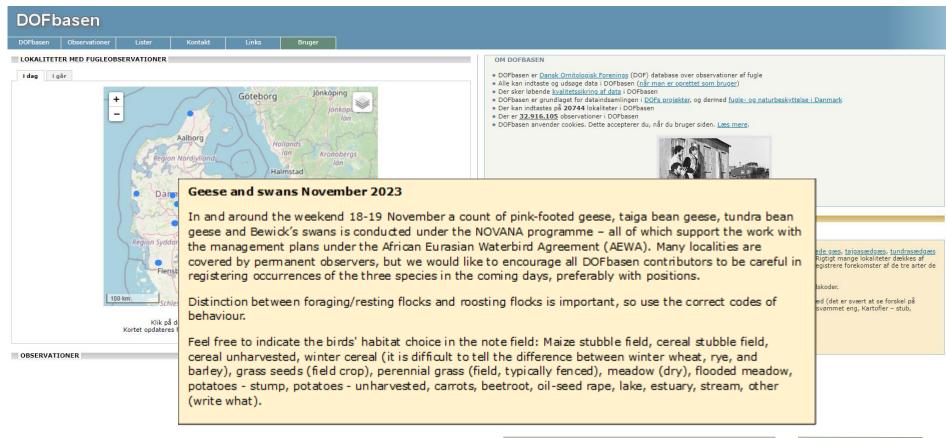


- Counters sign up (or rarely sign out)
- > 125+ counters are assigned to their specific count units
- Counters type their data
- Counters ask for "driving money"
- > 1.4 mio. birds in January 2023



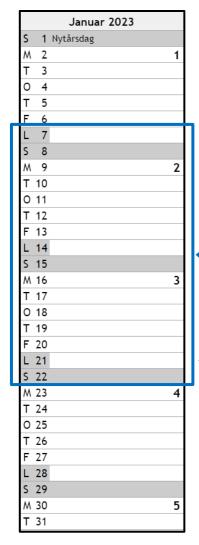
SUPPLEMENTED WITH DATA FROM DOFBASEN.DK

> Focus point announcements





PICKING SUPPLEMETARY DATA AND DATES FROM DOFBASEN



Our two week census period

IWC census weekend

But Wadden Sea (optimal tides!)
ALL covered by our observer network

-> dictates DOFbasen data down-load

| DOFbasen | Observationer | Lister | Kontakt | Links | Bruger |
|--|------------------|-----------------|--|--|--------|
| SØG I DOFB | ASEN | | | | |
| Periode: Fra dato/til dato Observationstyp Fugle/andre dyr: | e: Observationer | Dato 22-01-2023 | Dato | Andre indtastere Medobservatør: Observatør: Billeder: | ; |
| Område: Art/artsgruppe: | Artsinterval V | v | IBA-kriterium: Kommentarer: Største forekomst: Tekststreng: | | |
| Fra art: Til art: Antal: Adfærd/alder: | Alkefugl sp. | Find art | | Sortering: | Dato 🗸 |
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| Bilag 1/rødlisten | : 🔻 | | | | |

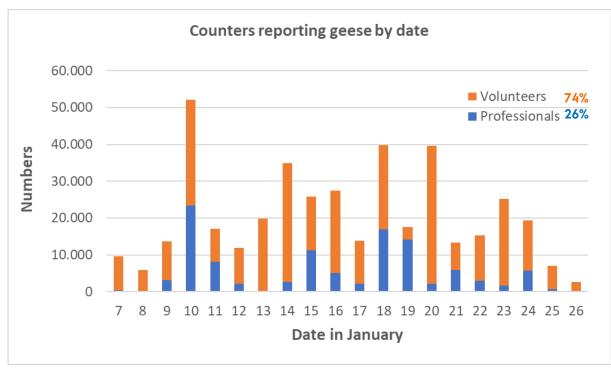
EGMP GOOSE MONITORING WORKHOP DRAGØR, DENMARK

22-23 NOVEMBER 2023



OUR FUGLEDATA.DK DATA FROM JANUARY 2023

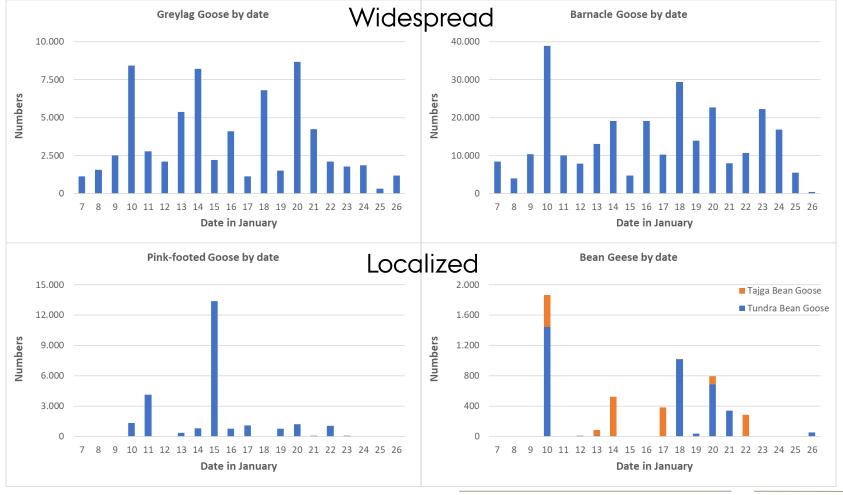
| Goose species | Totals |
|----------------------------|---------|
| Greylag Goose | 67.963 |
| White-fronted Goose | 21.242 |
| Tundra Bean Goose | 3.606 |
| Tajga Bean Goose | 1.807 |
| Bean Goose (unidentified) | 4 |
| Pink-footed Goose | 25.046 |
| Light-bellied Brent Goose | 5.516 |
| Dark-bellied Brent Goose | 2.029 |
| Brent Goose (unidentified) | 140 |
| Barnacle Goose | 275.803 |
| Canada Goose | 8.038 |
| Goose (unidentified) | 42 |
| Totals | 411.236 |



All land-based data typed in by 16 February



OUR FUGLEDATA.DK OBSERVER NETWORK DATA FROM JANUARY 2023





ADDING DATA TOGETHER

- > Our fugledata.dk observer network data goes in GIS first
- > 10 km buffer around each counted count unit polygon centroid used to assign where DOFbasen data are obvious overlaps, or potential supplementary data
- > Those outside buffers inspected manually, to pick "the best additional count data" by region, by date, by observer (typically add 10-20% additional Barnacle and Greylag Geese)
- > Those inside buffers inspected manually, but primarily for the less numerous species (that is the two Bean Geese and Pink-footed Goose, adds a few %, because major sites are all covered by our observer network)

 | Compare Cooper Monitoring Workhop of the less numerous species (that is the two Bean Geese and Pink-footed Goose, adds a few %, because major sites are all covered by our observer network)



A WORKED EXAMPLE – GREYLAG GOOSE, SUMMER 2018 SURVEY (SUMMER HOLIDAYS!!!)

