

Swedish goose monitoring



Svensk
Fågeltaxering

The Swedish Bird Survey



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Fredrik Haas

“Founding fathers”
in the 1960s

Leif Nilsson

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The Swedish Bird Survey



Financed by the Swedish Environmental
Protection Agency (SEPA)

Collaboration and support - 21 County
Administrative Boards



Mission:

Monitor population changes among Swedish birds

The Swedish Bird Survey



1967 Waterbird counts, autumn/winter

1975 Point counts, summer/winter, free choice

1996 Fixed Routes

2010 Night counts

2015 Wetland surveys (with Birdlife Sweden)

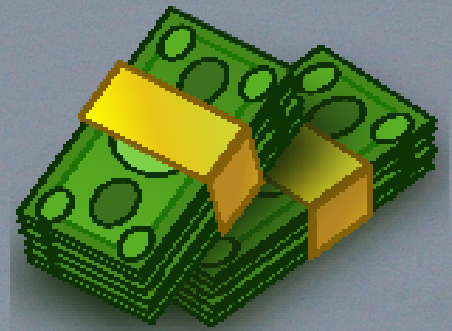
2015 Coastal surveys

1977 Goose counts

>750 persons participate yearly



Goose monitoring



Classical counts previously funded by the Swedish Hunters Association
and
special surveys by SEPA/Naturvårdsverket



From 2022 SEPA takes it all

Goose monitoring – when?

-2022

January

One survey in:

September

October

November



Goose monitoring – when?

2022 -
January
September
October
~~November~~

One survey in:

At some places much more
frequent, and in more months.

Goose monitoring – how?

- Mix of methods (roost counts and counts on feeding sites)
- Bottom up driven choice of methods



Goose monitoring – what?

Bean goose

Pop. count in January

Pop. count in March (*not Swedish bird survey*)

Pop. count in October

Productivity estimates in October

Greylag goose

Pop. count in January

Pop. count in September

Productivity estimates in Aug/Sep

Indices from common bird monitoring

Pink-footed goose

Pop. count in April/May (*not Swedish bird survey*)

Pop. count in November (*not Swedish bird survey*)

Goose monitoring – where?

- Fairly good coverage of classical goose areas
- Less good coverage of areas that has become important in recent years
- The network of dedicated goose surveyors needs to expand.



Goose monitoring – where?

- Observations of geese are registered on the nearest IWC counting sector if the distance between is not too far.
- These sectors were originally used for duck monitoring.



Geographical precision 0-5km

Swedish data not useful for studies where geographical precision needs to be high.

Goose monitoring – data?

Use of opportunistic data – gap filling

	January	September	October
Greylag goose	Low-moderate	Moderate	High
Bean goose	Low	Moderate	Low-moderate
Pink-footed	Low	Low-moderate	Low
White-fronted	Low-moderate	High	Moderate
Canada goose	Low-moderate	High	High
Barnacle goose	Low	High	High

Goose monitoring – data?

Data flow

- Dedicated goose counts – reported directly to us in Excel-forms
- IWC-data - reported directly to us in Excel-forms or online
- Harvesting of data from Artportalen (Swedish species gateway)
- All data transferred to GIS-layers (one layer per species and source)
- Visual inspection to remove duplicates
- Export GIS-data to database format
- Data uploaded to postgresSQL-server

Data ready for EGMP, two to eight months after the surveys have been carried out.