

# Conflicts between geese & agriculture in Finland

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# Conflicts between geese & agriculture in Finland

- Who is doing the damage (culprit species)?
- Where does the damage occur?
- When does the damage occur?
- What is damaged?

# Main culprit species: the Barnacle goose

...and grey geese



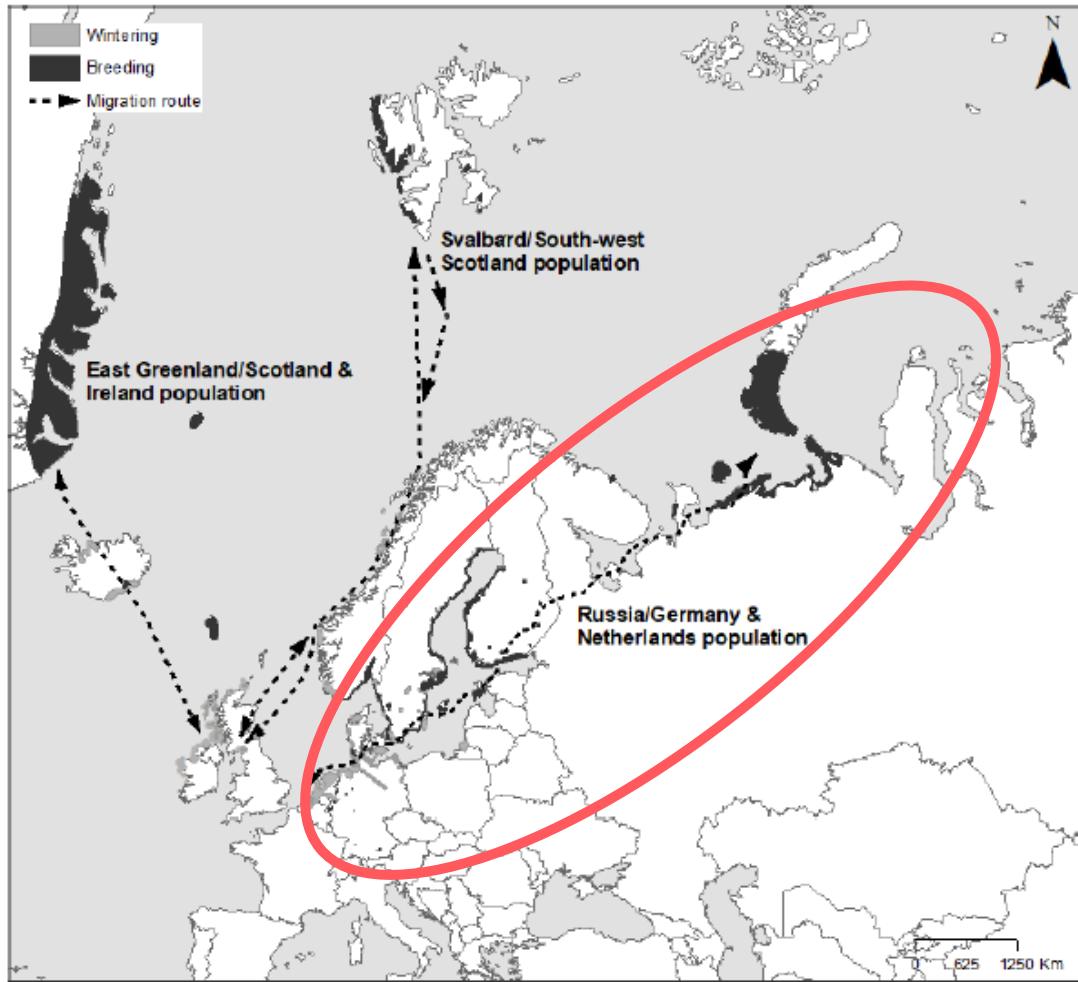


Figure 1. Annual distribution and migration routes for the three populations of Barnacle Geese; East Greenland/Scotland & Ireland, Svalbard/South-west Scotland and Russia/Germany & Netherlands populations including breeding (dark grey) and wintering and staging (light grey) areas.

Jensen, G.H., Madsen, J., Nagy, S., Lewis M. (Compilers) 2018.  
 AEWA Technical Series No. 70. Bonn, Germany.



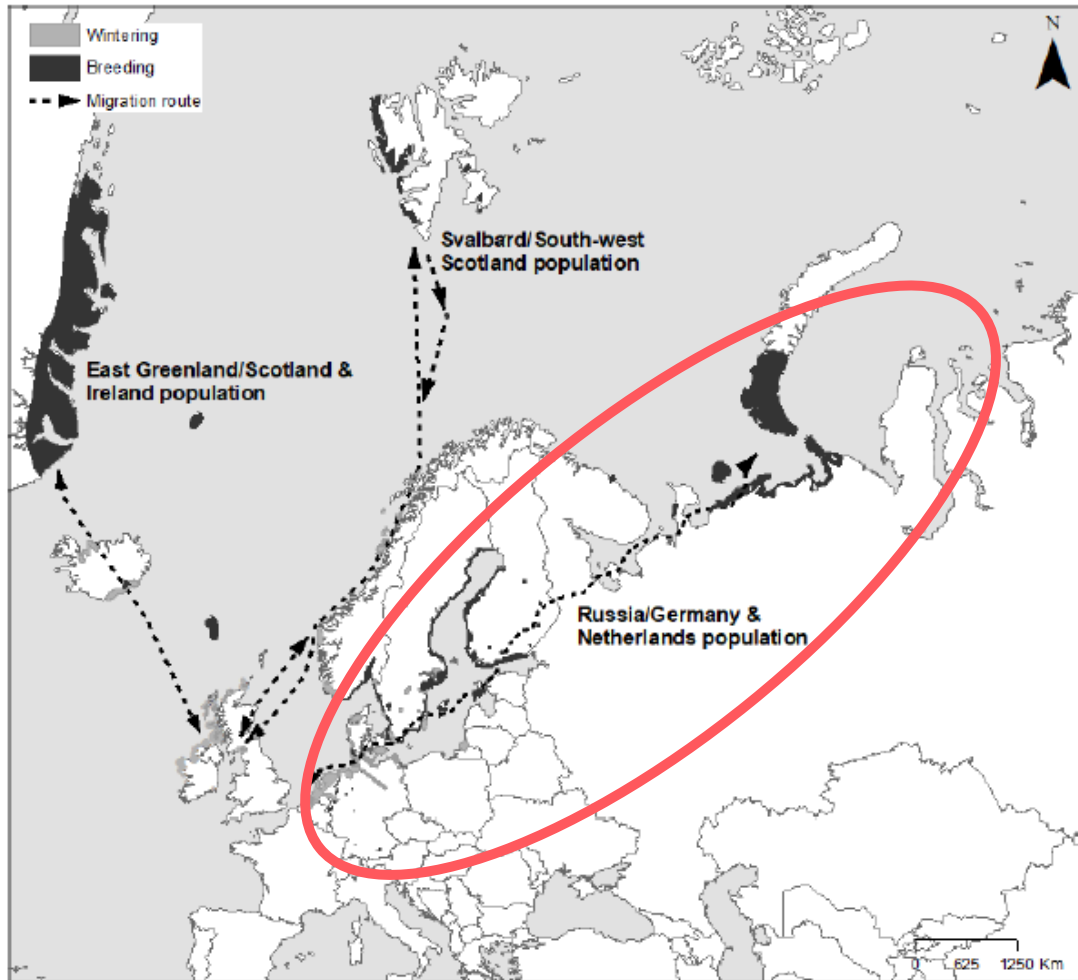


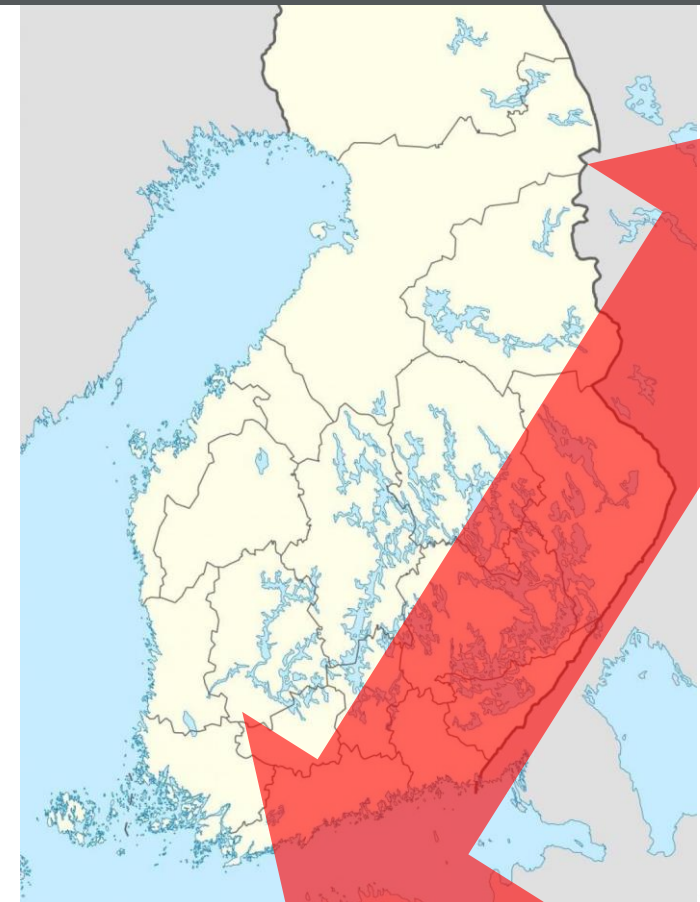
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Since 2006

400 000 – 700 000 barnacle geese stage and migrates through Finland



2020: 3.8 M € (mostly spring damage)

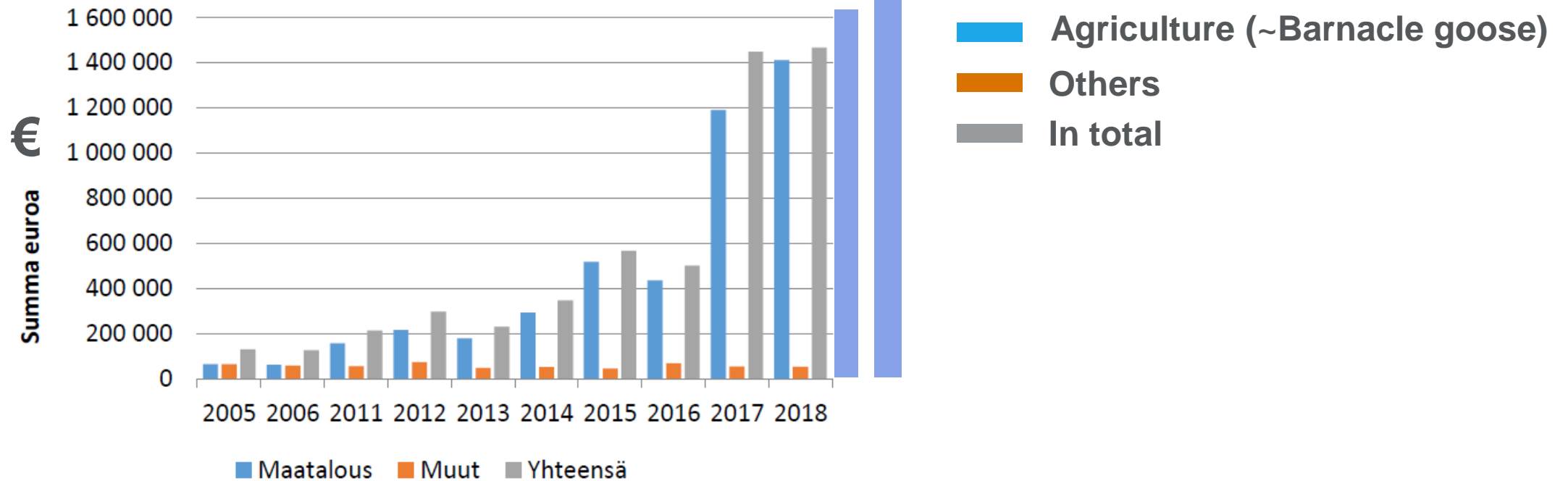
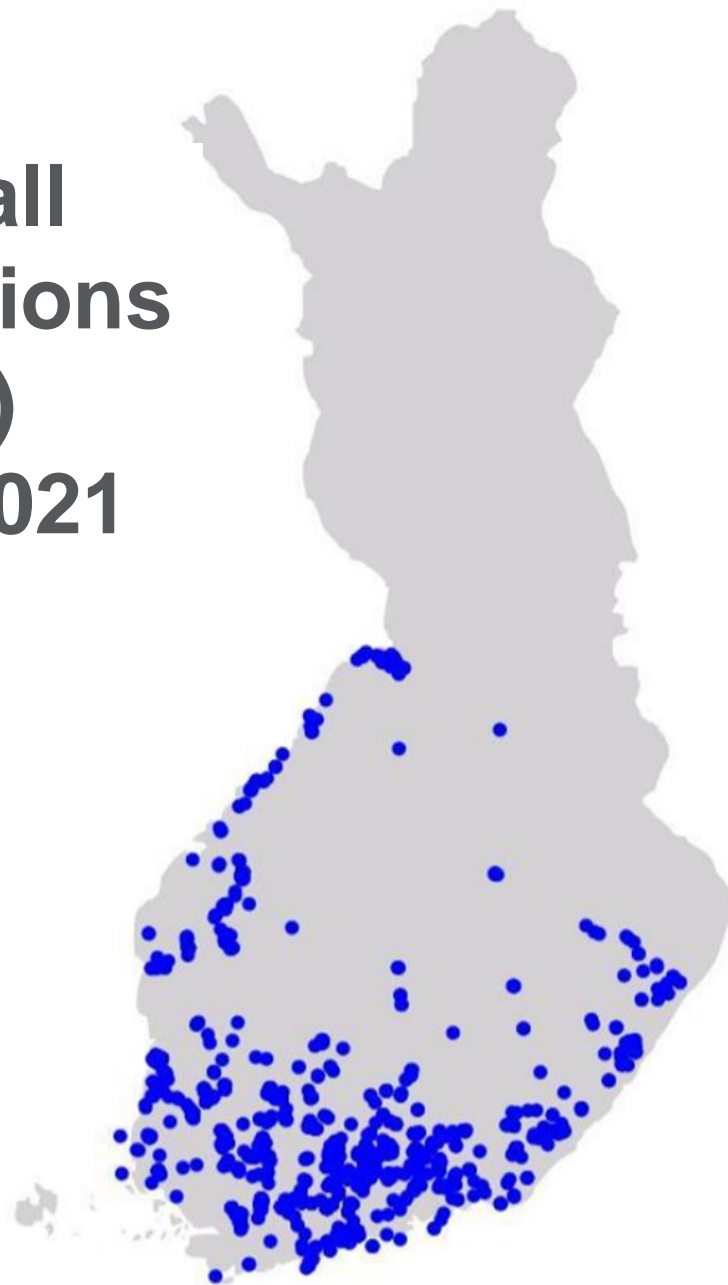


Fig 2. Compensation of the damage caused by the protected bird species in Finland.

# Where does the damage occur?

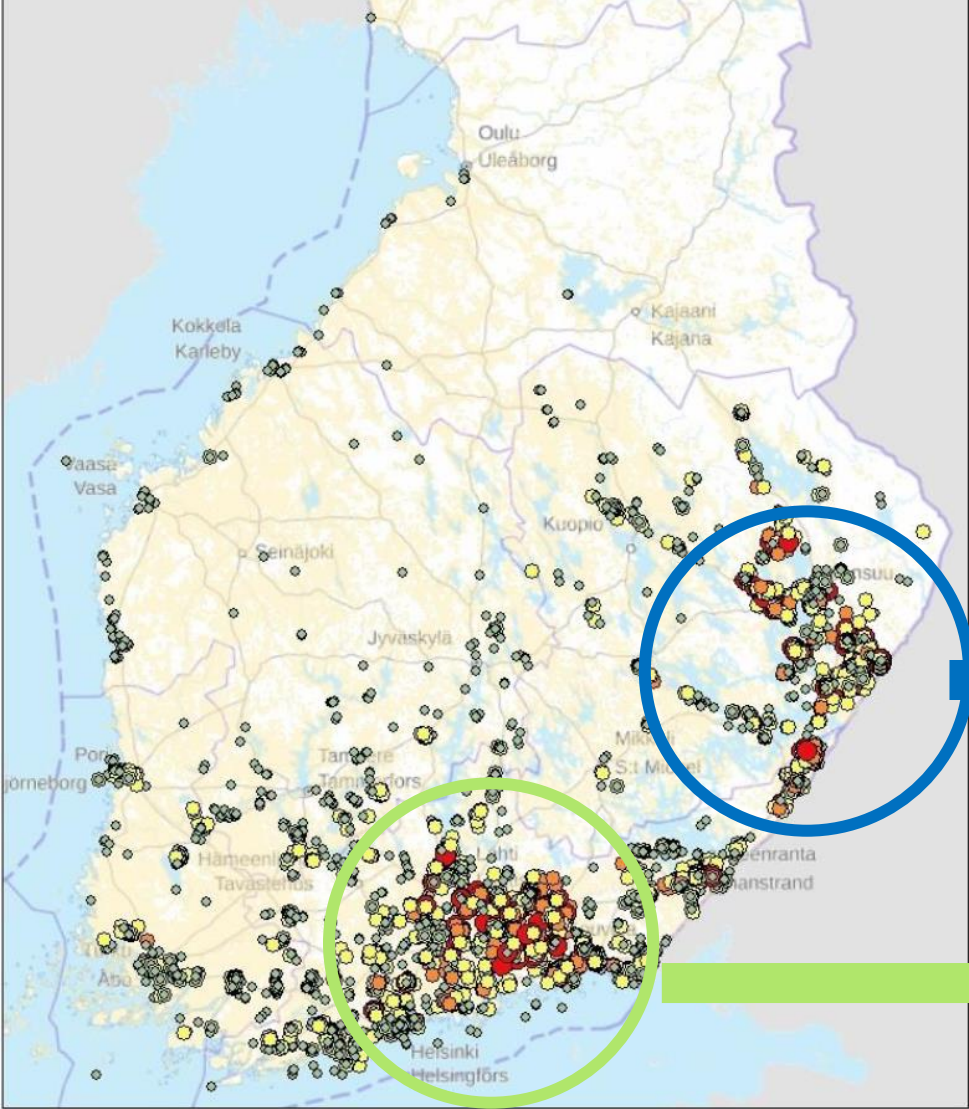
# Distribution of all goose observations (minimum 1000) during spring 2021



S Y K E



# Concentration of barnacle flocks in 2020



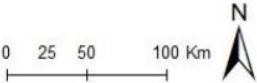
Damage area up to 7 000 ha  
(30% of the agricultural area)

Damage area up to 2 500 ha

## Size of the barnacle goose flocks

- ◆ 1 - 100
- 101 - 1000
- 1001 - 5000
- 5001 - 20 000
- 20 001 - 150 000

■ Pellot

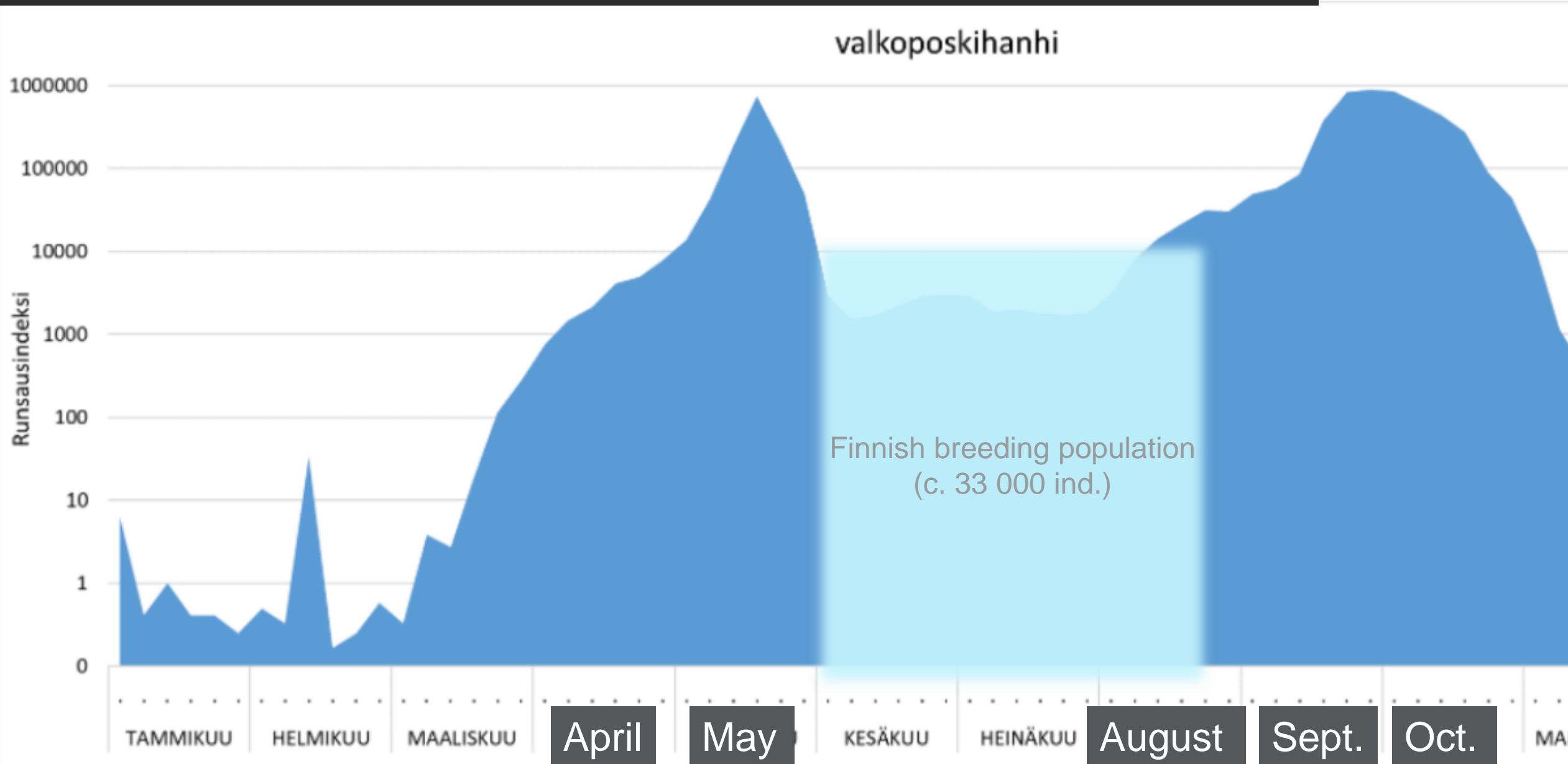


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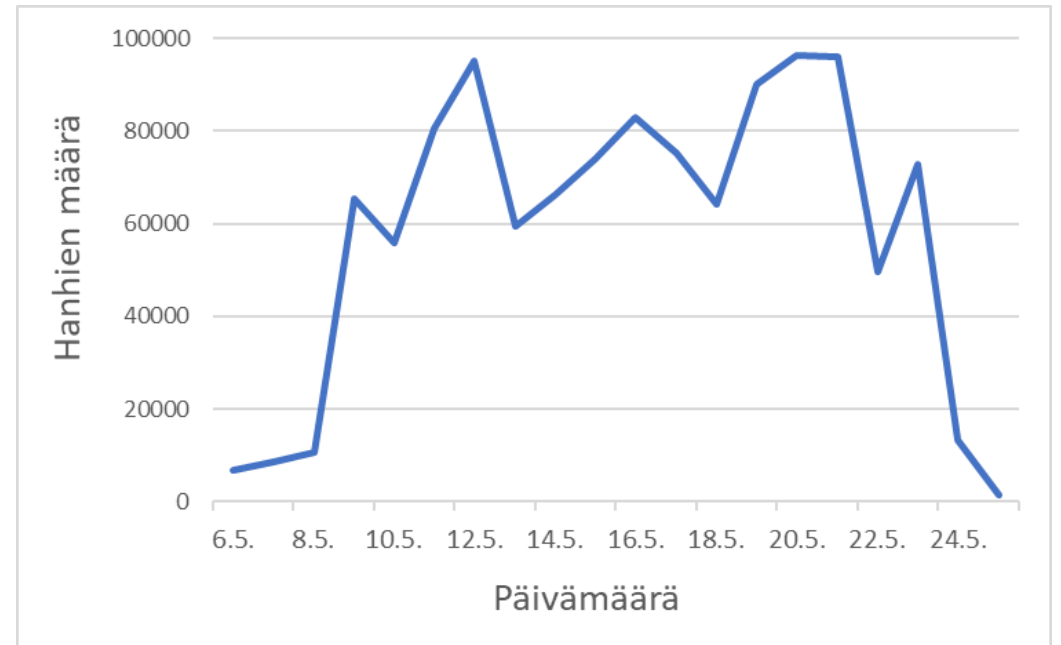
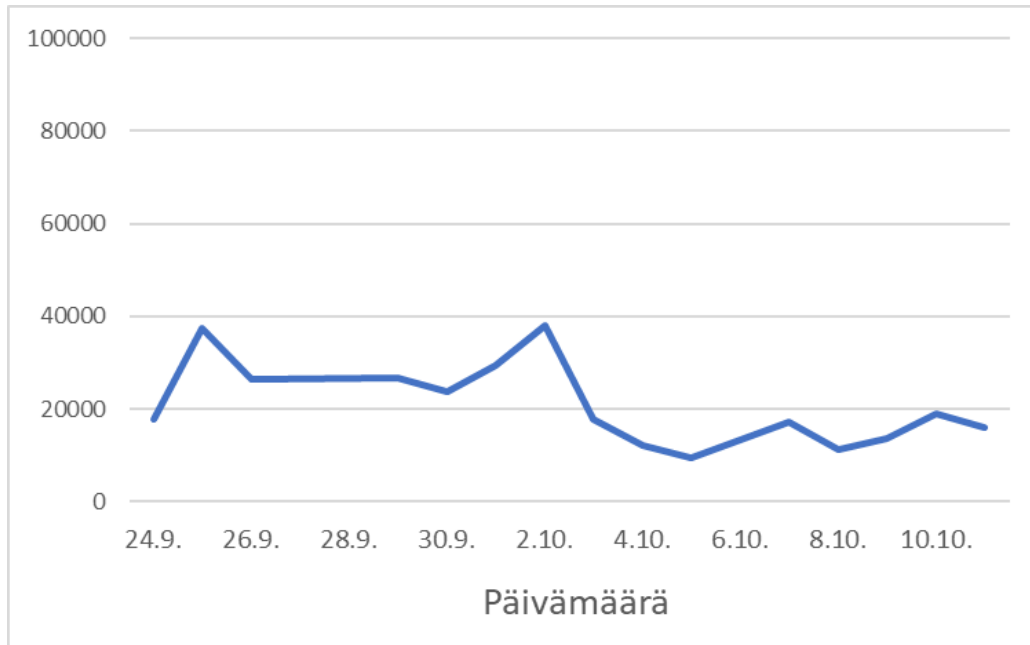
When does the damage occur?

3.6.2021

# Monthly abundance index for barnacle goose in Finland



## Barnacle geese numbers in North Karelia study areas in fall 2019 and spring 2020



# The most serious damage occurs in spring.



# What is damaged?

# Crops damaged by Barnacle Geese

- No comprehensive overview which crop types are most affected by geese
- Damage depends on the regional crop type availability:
  - Grass (feed for cattle)
  - Pea
  - Autumn wheat, rapeseed, rye
  - Cumin, timothy seed, feed barley
- Largest damage to **spring grass crop** in eastern Finland, which is crucial for dairy farms
- Cease of sowing autumn crops in eastern Finland

# Thank you!

