

Monitoring Geese in Estonia

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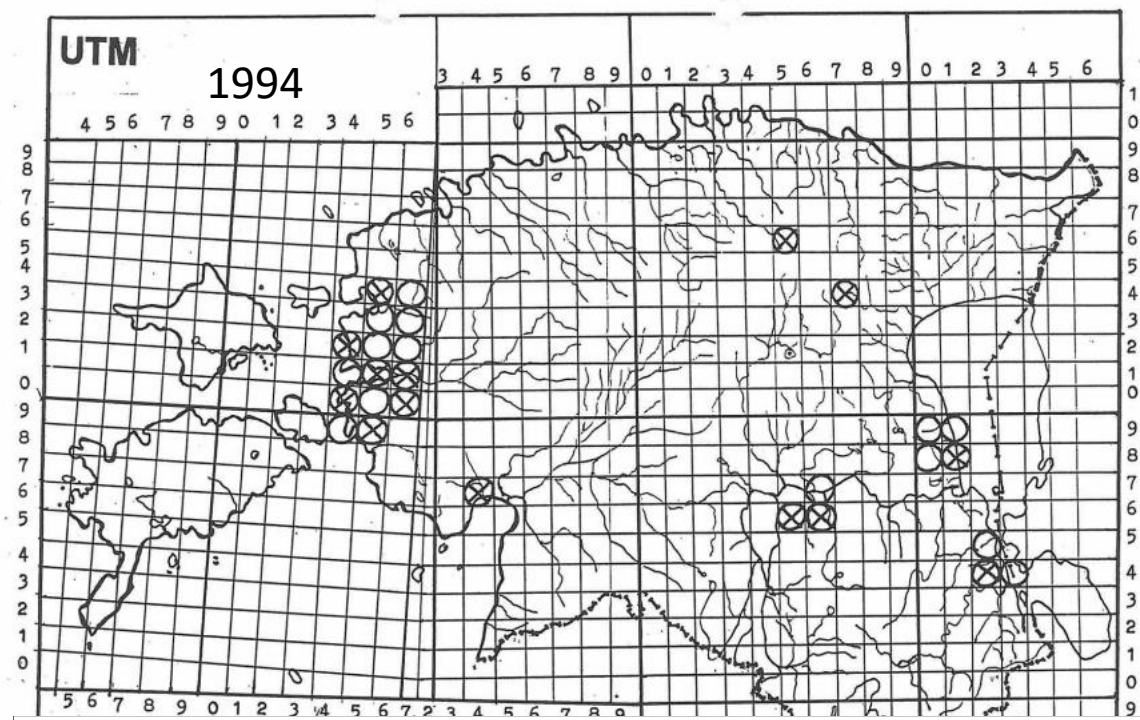
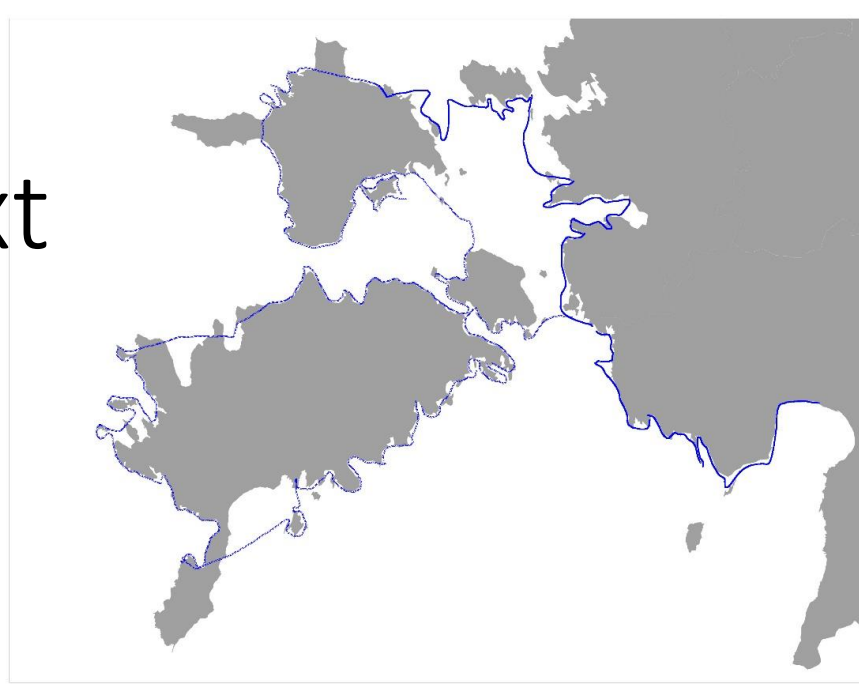
Estonian University of Life Science

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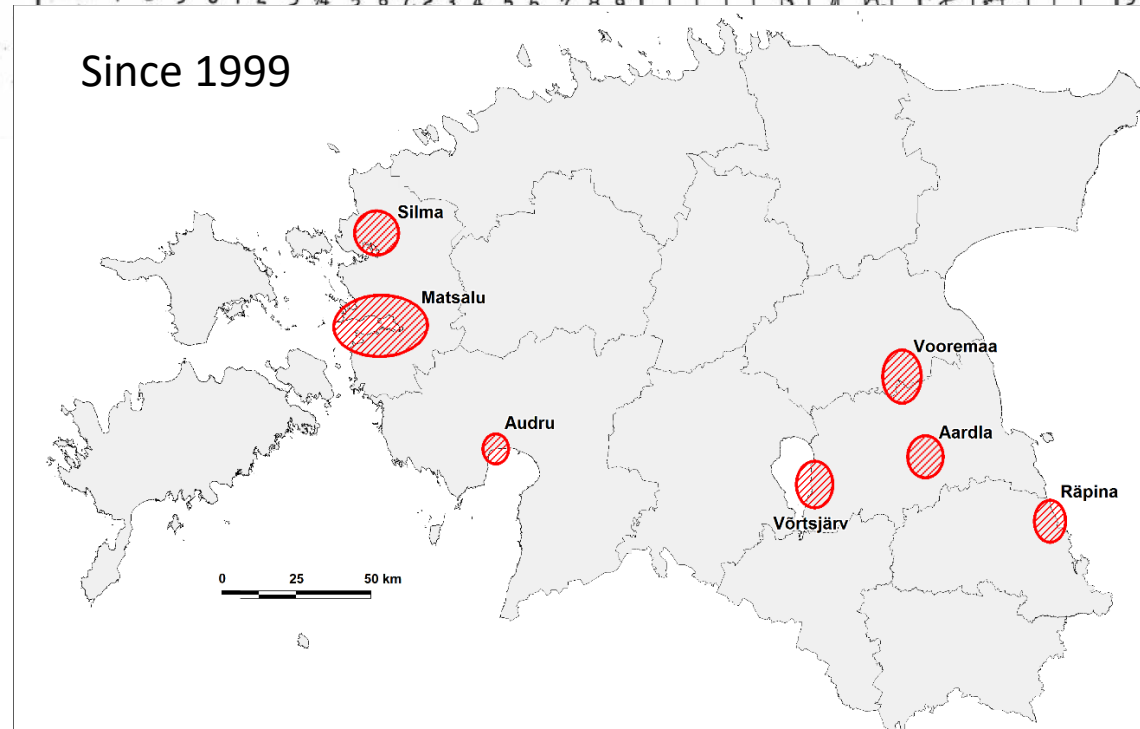
EGMP Goose monitoring Workshop



Context



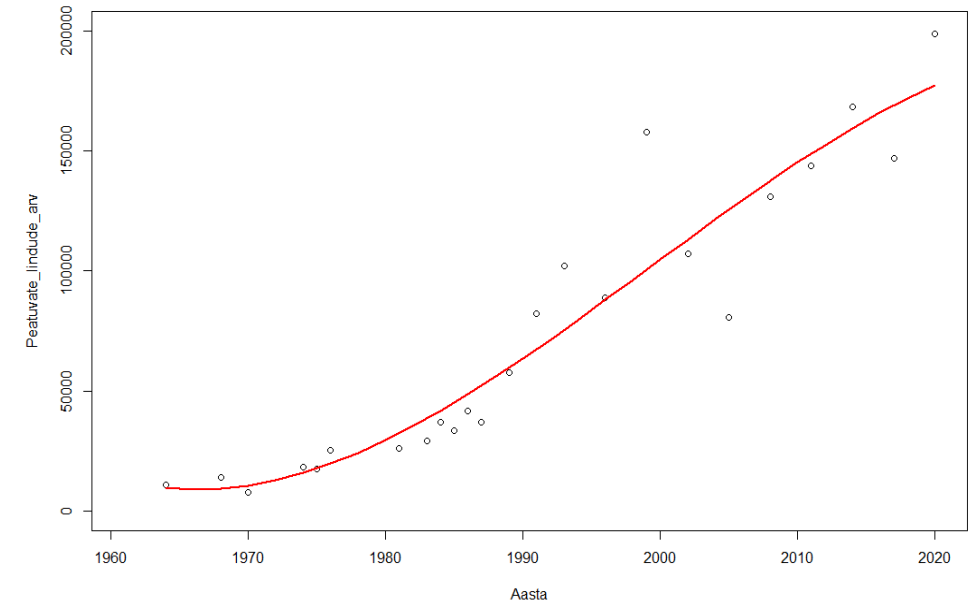
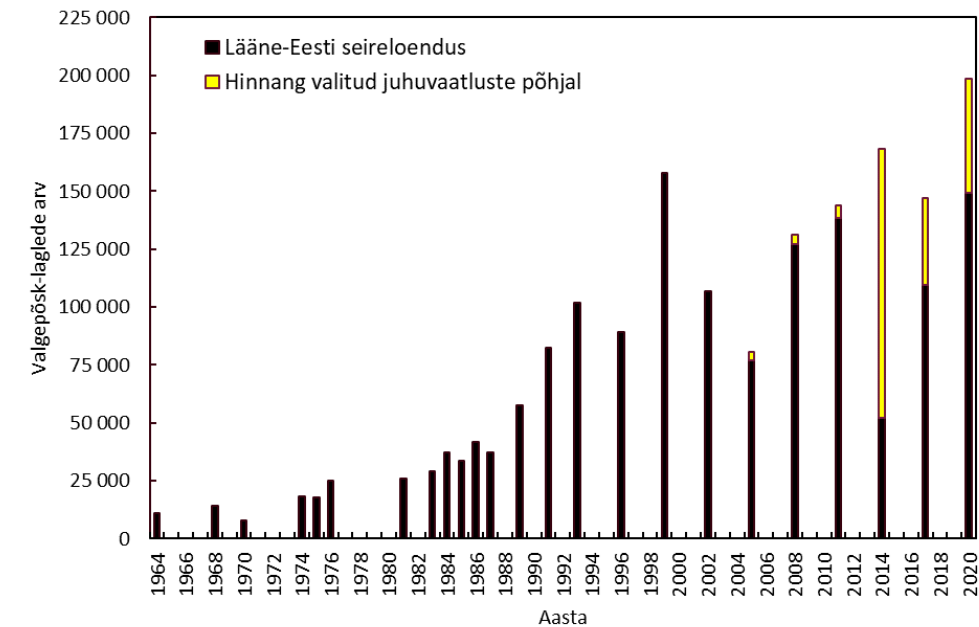
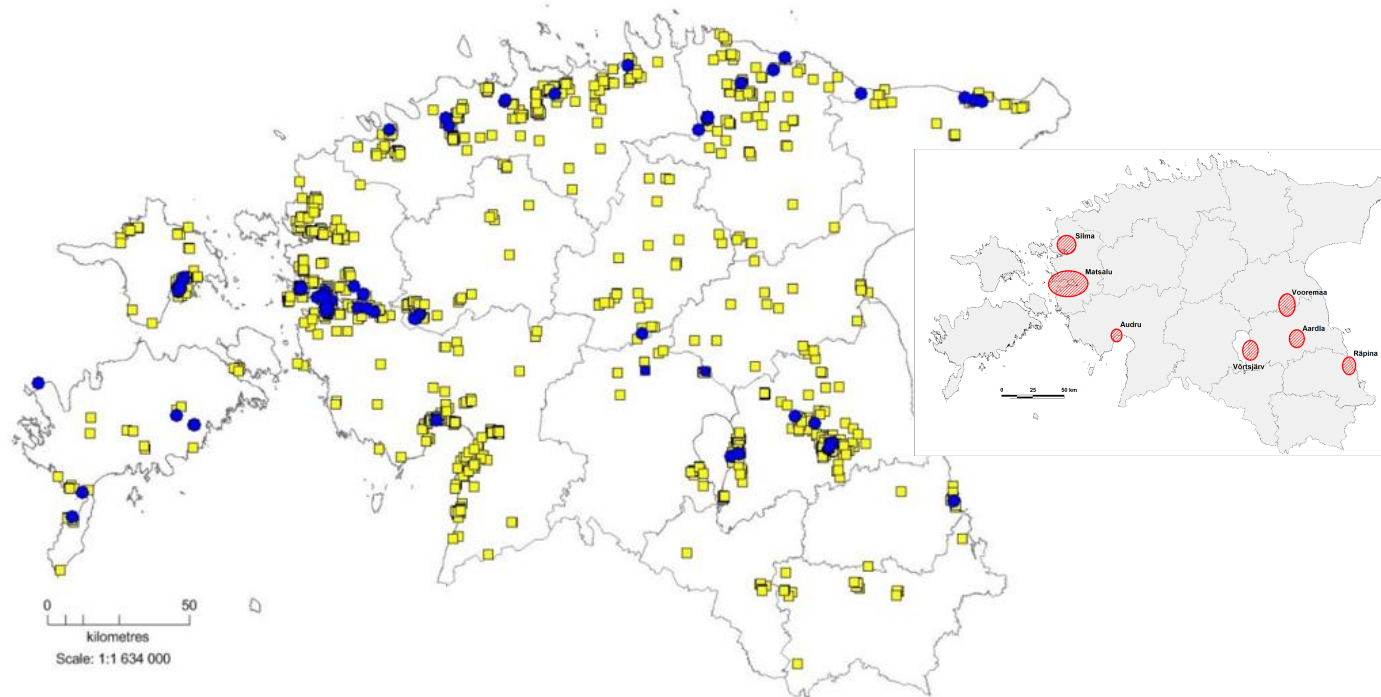
- Goose monitoring is part of national environmental monitoring programme since 1994
- Monitoring every 3rd year
- Goose monitoring was organised and coordinated by Aivar Leito until 2018.



Methods

- Species
 - White-fronted Goose, Bean Geese and Barnacle Goose – April–May
 - Greylag Goose – September
- Mainly roost counts in the evening or early morning but also during midday when geese return to roosting areas.
- For Barnacle Goose the aerial count is organised along the West-Estonian coastline during first decade of May
- As there is a mix of species at the roosting sites, the geese are identified and counted in the field to determine the proportion of each species at the roosting sites.
- Counts take place 3 times in the spring (for example in 2023):
 - 10 - 15 April
 - 24 - 29 April
 - 8 - 13 May
- Greylag goose counts have so far been carried out in two-weekly periods since mid-September. We hope to be able to carry out the next Greylag goose census in early August.

- Fieldwork is done by professional counters but also by some volunteers
- Since 2024, 5 additional monitoring sites will be established in North Estonia, where the monitoring will be carried out yearly, like Barnacle Goose aerial counts in West Estonia.
- Citizen science data are collected by volunteers to the local database <https://elurikkus.ee/en> and used if needed
- Goose monitoring data are usually validated and available in November



Joonis 2. Olulisemad hanede peatuspaigad Eestis juhuvaatluste baasil perioodil 2011–2020 (andmed: eElurikkus). Tähistus: kollane ruut – üksikvaatlus, mil loendati 1000 ja enam hane, sinine ring – üksikvaatlus, mil loendati 10 000 ja enam hane.

Joonis 6. Eestis kevadrändel peatuvaatluste valgepõsk-lagledete korrigeeritud arvukuse dünaamika. Tähistus: punane trendijoon – 3. astme polünoom, $R^2 = 0,874$, $p < 0,001$. Andmed: Leito 2017, Ojaste 2020, <https://elurikkus.ee/>.