Species monitoring: Arctic fox case study

Malin Larm, County Board of Jämtland

Eurosites workshop, October 1 2025

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Arctic fox

Foto: Rasmus Törnkvist, Svenska fjällrävsprojektet

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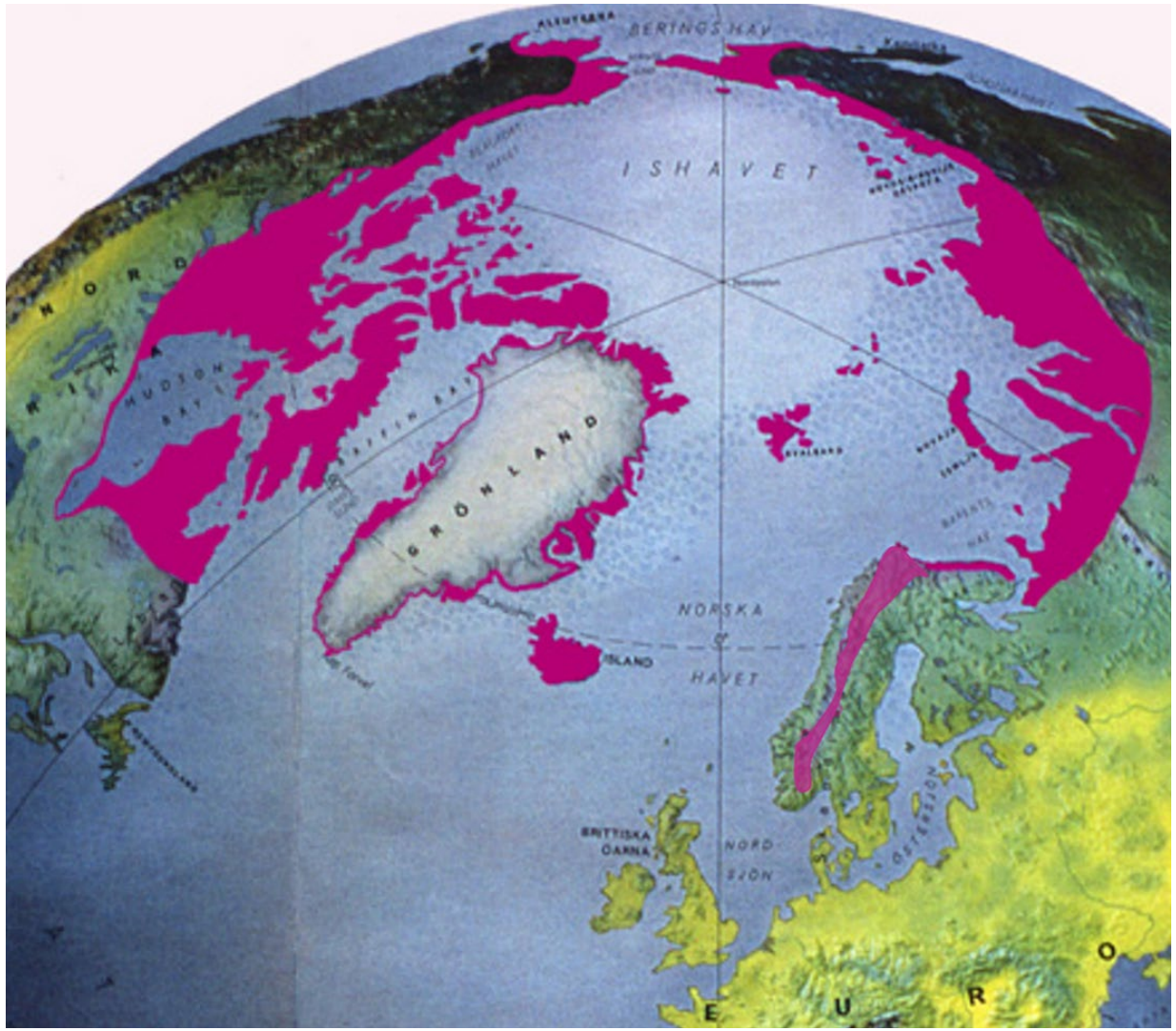
Arctic fox

- Circumpolar distribution

Conservation status

Globally - Least Concern (LC)

Sweden - Endangered (EN)
Norway - Endangered (EN)
Finland - Critically endangered (CR)



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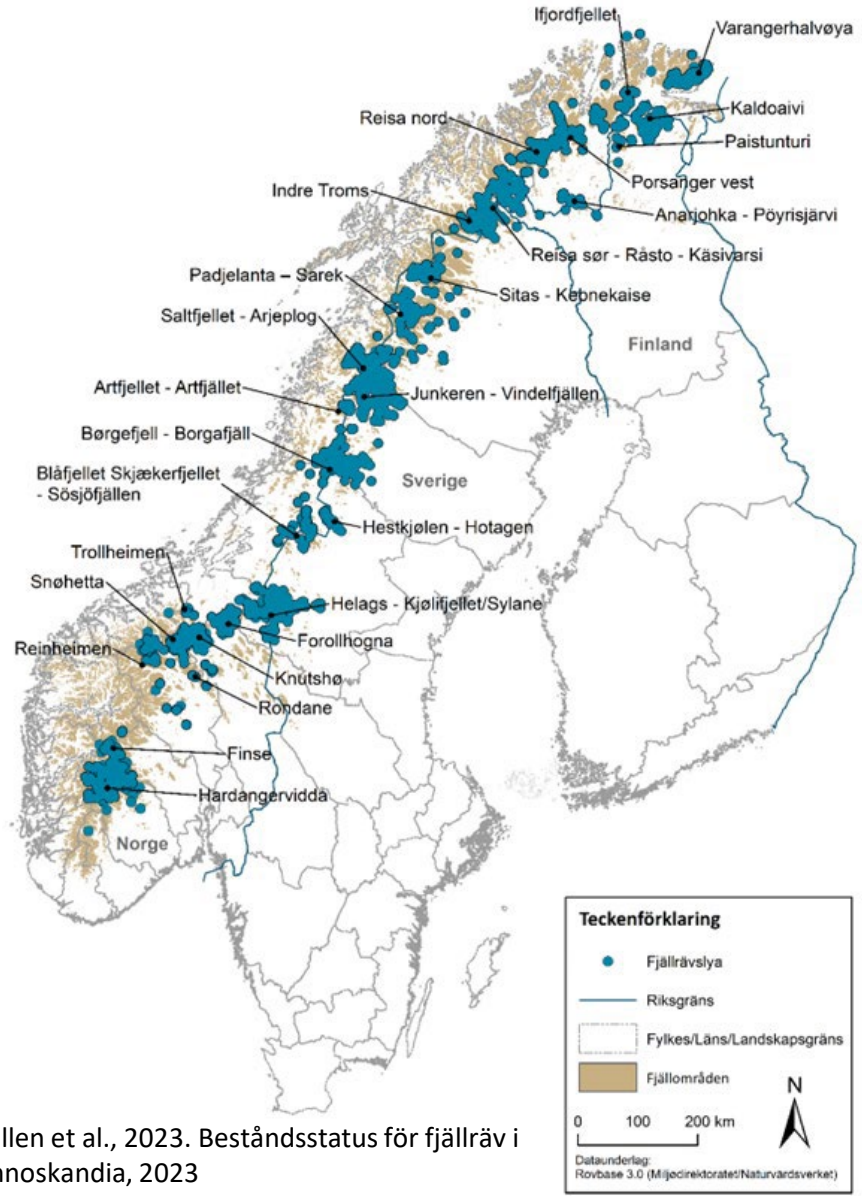
Arctic fox

- Hunted for fur during late 1800 – early 1900

Threats today:

- Climate change
- Irregular small rodent cycles
- Red foxes
- Smaller and fragmented habitats
- Inbreeding
- Diseases



Wallen et al., 2023. Beståndsstatus för fjällräv i Fennoskandia, 2023

Conservation partners

- Conservation and monitoring collaboration between Sweden, Norway and Finland, both nationally and locally.
- Joint action plan for arctic fox conservation (ÅGP)
- Conservation actions are connected to research institutions in both Sweden and Norway, as well as in a global perspective. A well studied species in many areas and aspects.

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Conservation goals

Short-term goal 2029

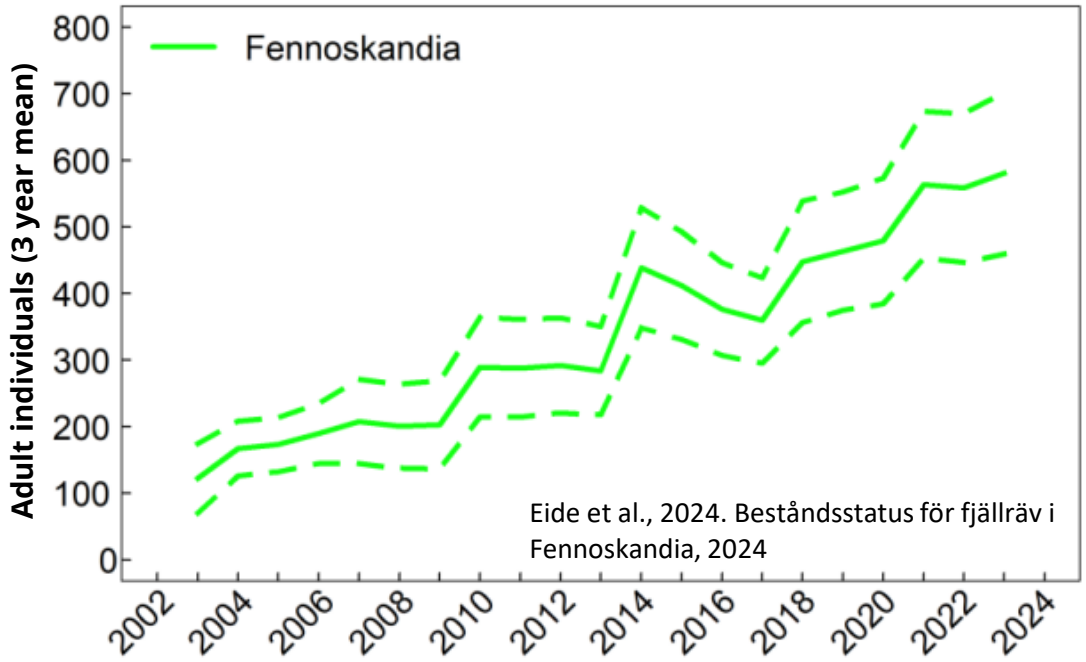
>750 adult individuals, **>200 litters** during good lemming years. Improved connectivity status in all targeted areas.

Long-term goal 2040

>1000 adult individuals, **>250 litters** during good lemming years. Improved connectivity and good health status in all subpopulations

Long-term vision

>2000 adult individuals, **>500 litters** every 3-5 years. High connectivity between subpopulations. Stable and viable popualtion.



Current status

Population estimate 2024:
582 adult individuals

Peak year 2022:
164 litters

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Conservation actions

- Since 2001, today in all inhabited areas.
- Combination of state funds for inventory/some actions and EU-financed LIFE and Interreg projects.

Actions include:

- Supplemental feeding
- Hunting of red foxes
- Stepping stone areas
- Disease survillance and treatment
- Captive breeding station (Norway)

Conservation actions

Interreg Felles fjellrev III – *Together for the arctic fox*

- Evaluate and develop feeding stations
- Develop contingency plan for potential disease outbreaks
- Campaigns for reduced littering
- Connecting to the sami communities
- GPS monitoring of released captive bred arctic foxes

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Foto: Jan-Erik NIlsson

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Monitoring

Inventory

- Yearly inventories in Sweden, Norway and Finland. Common instruction and joint yearly inventory report.
- County Boards are responsible in Sweden - observations during den visits, remote cameras, fecal samples

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Monitoring

Inventory

- Monitoring of den sites, a total of 479 known den sites in Sweden, >1300 in Fennoscandia.

Winter

- Monitoring of den activity, 1 March – 15 May
- Collection of fecal samples

Summer

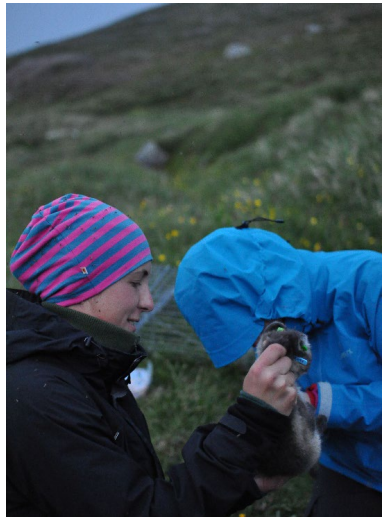
- Monitoring of den occupancy and number of litters, 20 June – 15 August

Foto: Rasmus Törnkvist, Svenska fjällrävsprojektet

Monitoring

Stockholm University – Arctic fox project

- Field work and inventories in some areas where they have ongoing research
- Ear-tagging of cubs for genetic studies and survival
- Small rodent abundance
- GPS tagging



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Thank you!

For more info:

- Åtgärdsprogram för fjällräv (SWE)
- www.fellesfjellrev.se (SWE, ENG, NOR, FIN, SAMI)

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