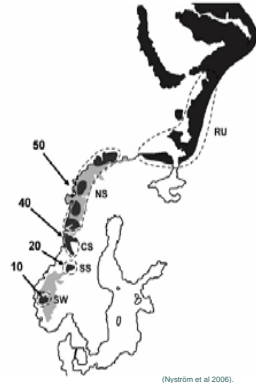


The Norwegian Arctic Fox captive breeding programme

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CRITICALLY ENDANGERED

In Fennoscandia the Arctic fox *Vulpes lagopus* is critically endangered. The arctic fox was a common species in Fennoscandia until end of 1800. The sudden population decline overlapped with strong hunting pressure, and the species was protected in all Fennoscandian countries around the 1930ties. Despite protection the population has continued to decline. Two local populations in the southern parts of Norway have gone extinct over the last 15 years. The arctic fox population is now split in 5 isolated subpopulations, having lost 25 % of the genetic variation.



WHY NO RECOVERY?

The reason for no recovery despite 80 years of protection are probably several and compound. Human activity and management has lead to large changes in the alpine landscapes and ecosystems, acting both on structure and dynamics:

- Changes in lemming cyclisity
- Eradication of large carnivores
- Global warming
- Fragmentation and human development
- Expansion of the red fox population
- Isolation and genetic degradation

It is clear that both environmental and demographic factors are working on the arctic fox population.



8 pens 50 x 50 m in a high alpine landscape. Each pen has 2-3 artificial dens with continuous video monitoring, constructed boulders for variation and hiding. Fences 4,5 m high.

CAPTIVE BREEDING COULD RESQUE THE ARCTIC FOX IN FENNOSCANDIA

A captive breeding programme based on wild born cubs was initiated in 2000. The initial fur farm design gave no reproductions and a breeding station in arctic fox habitat was established 2005. The station have eight 0.25 ha large enclosures with artificial dens and video-monitoring. One of 5 pairs bred in 2006 and 4 of 6 pairs in 2007. Litter size varied from 2–9 cubs. Seven captive born cubs were kept in captivity for breeding, whereas 17 were used in release trials. Released animals are followed by telemetry, photo-boxes, transponders and genetics. They are released on old primary reproduction den sites, supported with a known artificial den site and a feeding station with dog food (see photos below). 16 foxes were released autumn 2007, of these one group established at the release site, one group established in the open pen in the captive breeding station, while the third group were moving more around. All three groups had more than 50 % survival over the winter. The pair establishing in the open pen got 5 cubs, which now are out in free. 28 arctic foxes were released autumn 2008. The captive breeding program holds 9 couples of arctic fox. Genetically they represent the whole Fennoscandian arctic fox population.

The ultimate goal is to re-establish and strengthen small populations of the endangered arctic fox.

The goal is to release 50 foxes per year and a 25 % survival on average.

