



species factsheet

| species introduction |

Common name: Forest reindeer

Scientific name: *Rangifer tarandus fennicus*

Several subspecies of the genus *Rangifer* have been described that mostly differ in morphology of antler shape, body size and coat colour. In Europe three existing wild subspecies are recognized: 1) mountain reindeer, 2) Svalbard reindeer and 3) forest reindeer, none of them to be confused with the semi-domestic form which descends from the mountain reindeer.

The body structure of the forest reindeer is adapted to a life in dense taiga forests, as opposed to the domestic reindeer, which is adapted to an open terrain. Forest reindeer have 15-20cm longer legs than the domestic reindeer which can be seen as an adaptation for deep snow cover. The hooves are broader than those of any other cervids making it easier for the animal to move in deep snow and on peat lands. The antlers are adapted to a life in dense forests and although they are somewhat larger than those of the semi-domestic form, they are slimmer and more erect which facilitates movements in dense forests. The pelage is a more uniform dark brown compared to the semi-domestic reindeer which varies from almost white to dark brown. Like all members of *Rangifer*, both sexes have antlers.



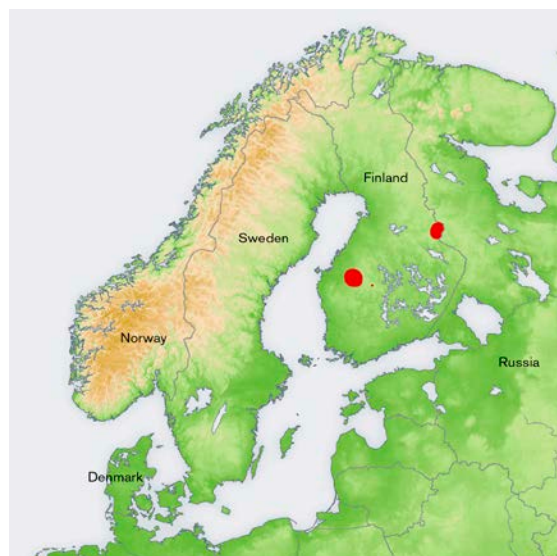
| status in the wild |

Finland is the only EU country with a wild population of forest reindeer. The history of forest reindeer is well documented from Finland where it was widely distributed throughout most of the country three centuries ago. Due to excessive hunting the population declined and

although the species was given full protection as early as 1913, the forest reindeer was already considered extinct from the Finnish fauna at that time. Fortunately, small remnant populations survived on the Russian side of the border and in the 1950s single individuals were occasionally observed in eastern Finland. In 1958, the first post-war reproduction took place on Finnish territory and, thanks to intensive protection efforts, the species was re-established as a part of the native fauna where it started to expand in the 1970s.

The current population in Finland is divided into two isolated sub-populations, one in the eastern part of the country close to the Russian border and another isolated in central Finland descending from translocated animals. The two populations have been strictly monitored and the eastern population in the Kuhmo area expanded from 700 animals in 1992 to 1,700 head in 2001, while the translocated population in mid-Finland increased from slightly more than 160 animals to 800 during the same period. The positive development has since levelled off in both areas and the eastern population has been in decline since 2003 when the surveys revealed an annual reduction of 9% per year. In 2012, both populations counted not more than a total of 1,700 animals.

The forest reindeer was the first mammal species put under full protection in Finland. Despite its legacy, it disappeared from the country in the early 20th century and was therefore classified as **Extinct (EX)** during the first 50 years of the last century. Thanks to the conservation efforts which resulted in two quickly expanding natural populations, the forest reindeer has been downgraded to **Near Threatened (NT)** in the Finnish fauna. The species is also included in the Berne Convention, Appendix II and in the EU's Habitats & Species Directive, Annex II.



| species reproduction |

The forest reindeer is a seasonal breeder, calving in spring after mid-May. Twin calves have not been reported and 60% of the calves are able to survive the next winter. Females are regarded as fully grown at the age of three years, while bulls reach adulthood one year later.

| species habitat |

Seasonal movements take place during spring and autumn migrations along familiar routes to summer and winter habitats. The summer biotopes are a mosaic of waters, bogs, pine and spruce forests, whereas winters are preferably spent on lichen heaths.

| species food |

Their main nourishment is lichen on the ground, in both winter and summer. Forest reindeer are able to dig for lichen under a snow cover of more than 80cm deep. Additional summer nourishment consists of hay and grasses, like bog beans and sedges and the leaves of deciduous trees.

| threats |

According to field observations, human actions, such as logging, traffic accidents and poaching, especially on the Russian side of the border, seems to be the most severe threats to the current population. Increasing large carnivore populations in eastern Finland also take a significant toll of forest reindeer. Extensive logging and clear-cutting has reduced the age structure of forests creating favourable pasture lands for moose which has attracted even more carnivores. The species' status in Russia is poorly known and earlier population estimates seem to be overestimated. Recent surveys indicate, however, that on-going declines have taken place in areas where forest reindeer earlier occurred.

| conservation |

Initiated by the Finnish National Board of Forestry and supported by several NGOs, two males and eight females, six of which were pregnant, were captured in eastern Finland in the late 1970s to establish a backup population of forest reindeer. The animals were transferred 500km to a fenced area in Salamajärvi National Park in mid-Finland. These animals founded the breeding pool that in the early 1980s produced a total of 21 surviving calves in the fenced area. All animals were released and formed the base of the current population in mid-Finland.

As the area of forest reindeer in eastern Finland partly overlaps the semi-domestic reindeer management area, the purity of the eastern population has been considered at risk. In 1993, Finland started to build a barrier fence to prevent intermixing of forest reindeer and semi-domestic reindeer populations. The 80km long fence was completed in 1993 and hybridisation is thus no longer considered a severe threat to the eastern population.

During recent years a large number of animals have been provided with GPS collars which have provided useful information not only on calf mortality, but also on the species' reproductive potential and habitat preferences. Forest reindeer have been kept in zoos since the early 1970s and in 2001, the forest reindeer were upgraded to European Studbook (ESB) status. Currently slightly more than 100 animals are kept in less than 20 EAZA Member zoos. As the Finnish Action Plan for the species has recommended establishment of additional sub-populations in Finland, animals from the captive population are planned to be used for additional restocking attempts. Restocking plans have also been discussed in the Russian parts of Karelia, close to Finland.

| find out more |

Blomqvist, L. (2012): *European Studbook for Forest reindeer, Rangifer tarandus fennicus, 2011.*
Nordens Ark Foundation

Blomqvist, L. (2013): *2012 Census for captive forest reindeer. Nordens Ark Ann. Rep. 2012: 26-28.*
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