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Wild Forest Reindeer: Suomenselkä, Finland

Migration Description

In the early 20th century, wild forest reindeer (i.e. European or Finnish forest reindeer) were hunted to extinction in Finland. However, reindeer from Russian Karelia naturally returned to Finland in the 1950s, establishing a permanent population in east-central Finland during the 1960s. In the early 1980s, managers reintroduced around 12 reindeer to the species' historical range in west-central Finland (Suomenselkä region) and since then, the population has increased to approximately 2,000 individuals. As the population grew, reindeer expanded their range and developed a clear migration pattern by the late 1990s or early 2000s. Today, Suomenselkä reindeer make annual migrations along consistent corridors. In the spring and fall, the reindeer frequently forage in agricultural grasslands and lichen areas. In the summer, the population's range spans 40,000 km². Reindeer typically breed and raise their young in pristine taiga forest habitat with marshlands and lakes. During the fall, the reindeer form small groups for the rut, but by late fall or early winter, these groups can increase to nearly 100 individuals. As winter progresses, reindeer once again migrate to forage in lichen-shrub rich areas and aggregate in larger herds covering a smaller winter range than during the summer months. Reindeer have been incrementally lengthening their migrations, moving farther each year in response to resource depletion and shifting lichen abundance.

Threats to Migration

The Suomenselkä reindeer have shown great flexibility in their migration patterns. Each year, the reindeer have shifted their wintering areas further to the southwest of their summer range. In their current year-round range, there are relatively few fenced roads and other infrastructure, meaning connectivity is largely intact. And though the reindeer usually avoid large bodies of water, high density human settlements and large agricultural areas, they are able to migrate relatively unhindered through most of their range, typically using forested areas for migration. However, the management area for domesticated reindeer limits the wild herds' migration and breeding range expansion to the north. Climate change, along with habitat change and loss via forestry and planned industrial development such as windmills, present the most serious threats to this population of migratory wild forest reindeer. However, research will be needed to understand how reindeer respond behaviorally to large windmill development, specifically during migration and the calving season. Unsustainable predation, hybridization and genetic introgression with domesticated mountain reindeer also threaten the long-term viability of reindeer in central-west Finland.

Local Population Facts

Migration



Threats



Species Facts

Common name: Wild forest reindeer (Finnish forest reindeer)

Species name: *Rangifer tarandus fennicus*

Range: Finland, northwestern part of Russia (Russian Karelia and western Arkhangelsk' Oblast)

Diet: Mixed-feeder herbivore

Global population: ~5000–6000

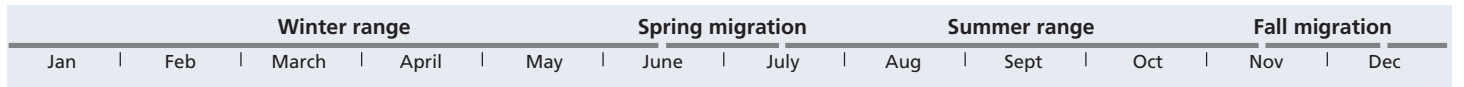
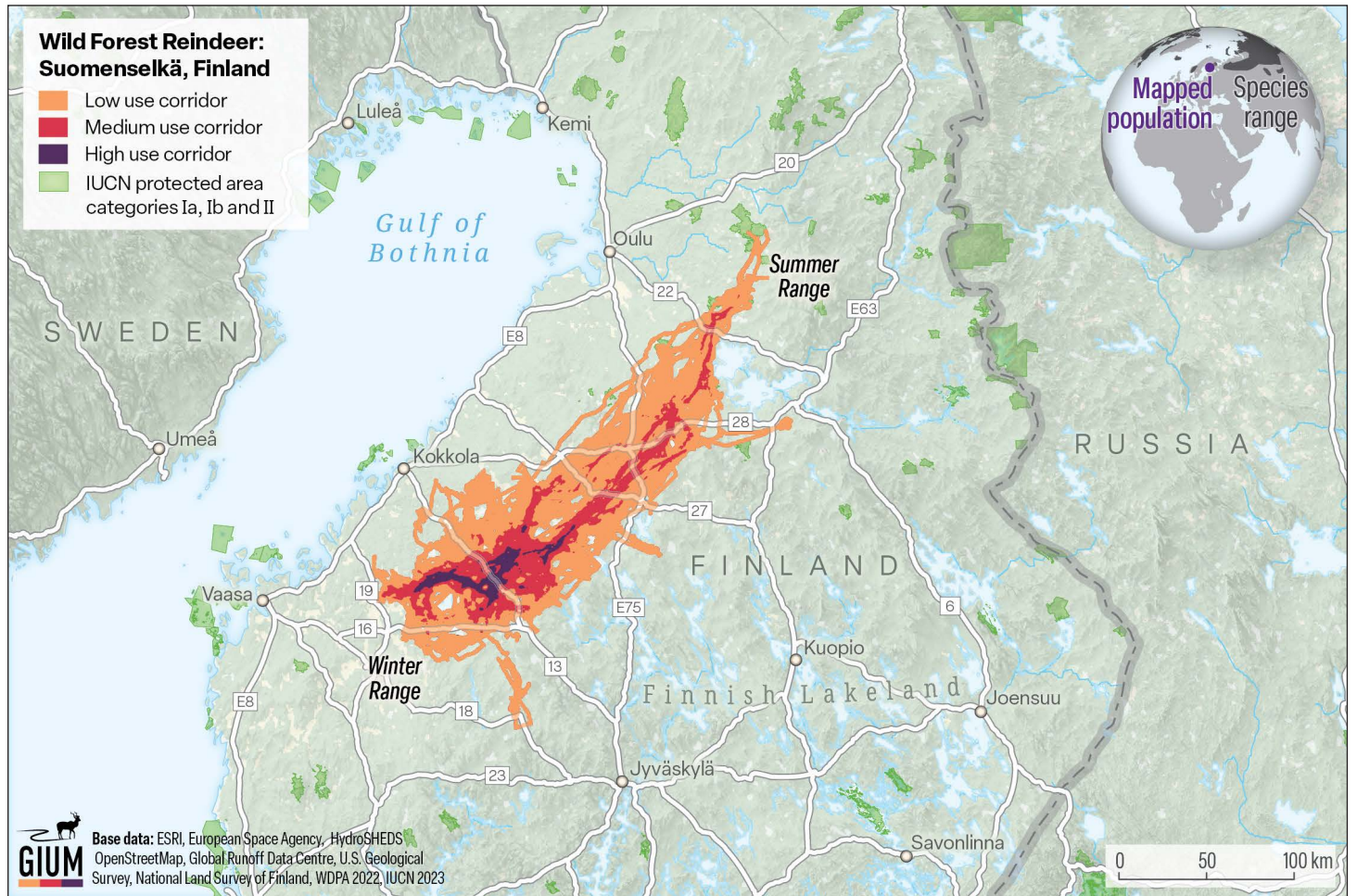
IUCN Conservation Status

VU Vulnerable

CMS Status

Not listed

Wild Forest Reindeer Migration



Study Information

Sample size

90 individuals

Relocation frequency

~ 4 hours

Project duration

13 years between 2010–2022

Data Analysis

Delineation of migration periods

Net squared displacement to delineate migration between winter and summer ranges

Models derived from

Line buffer method (width = 2km)

Route Summary

Migration start and end date (median)

- Spring: April 4–May 8
- Fall: October 9–October 25

Average number of days migrating

- Spring: 31.8 days
- Fall: 21.3 days

Migration route length

- Min: 12.7 km
- Mean: 105.6 km
- Max: 287.2 km

Data Providers

The data was collected by Antti Paasivaara of the Natural Resource Institute Finland in collaboration with the Ministry of Agriculture and Forestry of Finland and the European Union LIFE-funding instrument during the Wild Forest Reindeer LIFE project (LIFE15 NAT/FI/000881). The Wild Forest Reindeer LIFE project was led by Parks & Wildlife Finland.

In partnership with:



The Convention on the Conservation of Migratory Species of Wild Animals (CMS), also known as the Bonn Convention, is an environmental treaty of the United Nations that provides a global platform for the conservation and sustainable use of terrestrial, aquatic and avian migratory animals and their habitats.



GIUM www.cms.int/gium

The Global Initiative on Ungulate Migration (GIUM) was created in 2020 to work collaboratively to: 1) create a Global Atlas of Ungulate Migration using tracking data and expert knowledge; and 2) stimulate research on drivers, mechanisms, threats and conservation solutions common to ungulate migration worldwide.



View and Download
Map Data from the
GIUM Migration Atlas

Paasivaara, A. 2024. Wild Forest Reindeer: Suomenselkä, Finland. Global Initiative on Ungulate Migration, editors. *Atlas of Ungulate Migration*. Convention on the Conservation of Migratory Species of Wild Animals.