Nature knows no national borders. The natural habitats of various species may exist in several countries, and the borders mark lines in the ecosystems. Various species will also move across national borders when they seek new habitats in the changing climate.

Old biologically diverse forests, mires, and water systems exist in the vicinity of the borders of Finland, Russia, and Norway.

Some of these have maintained their natural state as they are not actively used due to their remote location. Today, many valuable nature areas are protected on all sides of the borders. However, there are valuable habitats even outside such protected areas.

Nature needs protection

Changes in land use and other kinds of human activity weaken the habitats of various species. There are many threatened biotopes and species in eastern Fennoscandia. Nature’s ability to produce versatile benefits to humans is also weakening.

The effects of the loss of natural biodiversity have been compared to climate change.

Ecological corridors are vital

Many of the nearby nature areas function as part of ecological corridors across borders, which ultimately connect to extensive forest areas in Russia. The spread across borders applies to mammals as well as micro-organisms and poly- pores in decaying wood. Finnish nature can benefit significantly from the diversity of species and vitality of nature areas behind national borders.

The environment connects

In border areas, safeguarding natural biodiversity meets the values and expectations of several countries for nature and the use of natural resources. Even the administrative priorities, resources, and operating methods vary between countries. The objectives and means for securing biodiversity on both sides of each border must be reconciled through dialogue.

Environmental cooperation often acts as a channel for neighbours with different cultures to cooperate and reach common goals. The environmental cooperation between Finland and Russia has continued regardless of the general political situation between the EU and Russia.


Green Belt of Fennoscandia

The Green Belt of Fennoscandia is a chain of existing and planned nature protection areas in the border areas of Finland, Norway, and Russia. The countries cooperate to develop connectivity between the protected areas.

The cooperation is based on the memorandum of understanding signed by representatives of the countries, and is included in the implementation of the UN Convention on Biological Diversity.

The cooperation aims to make the Green Belt into a model of cross-border nature conservation cooperation and increase the national and international awareness of the area. The Green Belt of Fennoscandia is the northernmost part of the Green Belt of Europe.

www.europeangreenbelt.org
Nature conservation across borders in the changing climate

Climate change creates risks to the nature protection area (PA) network, but at the same time the reserves offer possibilities for adaptation. The sustainability of the use of natural resources also plays an important role in biodiversity conservation.

The core of the Green Belt which runs along the border of Finland, Russia, and Norway is created by the network of existing and planned PAs. The northern location of the network makes it and the species in it vulnerable to the warming climate.

Therefore, the PA network and its functionality must be re-examined and developed in order to adapt to climate change. The development of the network may also alleviate the negative effects of climate change on Finnish nature.

Note on ecological connectivity

International agreements such as the UN Convention on Biological Diversity obligate the signatories to form versatile and extensive natural reserve networks. In Finland, such a network has been developed through voluntary forest protection (the METSO Forest Biodiversity Programme). The state has also founded new PAs in its own land.

Nature protection areas are often small in area. In order to secure the habitats for various species, the areas outside the PAs should also be considered, and the ecological connections between reserves developed.

Versatile range of means

Based on the information collected from forests and nature protection areas in Sweden, Finland, and northwestern Russia, experts have drafted recommendations for protecting the remaining high conservation value forests. The most significant forest areas are recommended to be included in nature reserves.

The living conditions of various groups of organisms outside the PAs can be maintained or improved through improved planning of forestry management measures. For example, imitating forest fires may create habitats favourable for certain species.

However, species are different. Much more information is required on the habitat requirements of various species and the significance of ecological cross-border corridors, for example, in order to achieve sustainable solutions. Finnish-Russian research cooperation is important, and both countries have plenty of research materials yet unutilised.

Research needs from climate change

The changing climate also creates challenges for the network of reserves. In order to secure the functionality of the network, more information is needed on the following topics, for example:

- How well do cross-border ecological corridors function as channels of movement and spreading of various groups of species in the changing climate?
- How well connected are the ecological corridors, and for which groups of species?
- What are the possible bottlenecks in the spreading of species?
- How well do the cross-border ecological connections work in the protection of the variety of species in old high conservation value forests?
- Where along the Green Belt of Fennoscandia should the foundation of new reserves or the restoration of existing ones be prioritised, where is more information needed for land use planning?

Biodiversity supports sustainable development and well-being

Finnish and foreign tourists alike are drawn to the Green Belt near the border by the tranquillity of nature, amazing landscapes, and versatile camping opportunities, as well as the forests full of berries and mushrooms, and the fishing and hunting possibilities. The cultural heritage of the border areas also has a strong connection to nature in the area.

Means of livelihood based on nature employ the local people and offer them new business opportunities. The sustainability of nature tourism in the state’s reserves in Finland is actively secured.

The regional economic effects of nature protection areas on the Green Belt in Finland, 2017

<table>
<thead>
<tr>
<th>Nature protection area</th>
<th>Gross income effect (MEUR)</th>
<th>Number of visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiidenportti national park</td>
<td>0.6</td>
<td>12 300</td>
</tr>
<tr>
<td>Hossa national park</td>
<td>5.6</td>
<td>124 000</td>
</tr>
<tr>
<td>Eastern Gulf of Finland national park</td>
<td>0.7</td>
<td>16 400</td>
</tr>
<tr>
<td>Koli national park</td>
<td>21.5</td>
<td>203 400</td>
</tr>
<tr>
<td>Linnansaari national park</td>
<td>2.6</td>
<td>33 000</td>
</tr>
<tr>
<td>Oulanka national park</td>
<td>18.8</td>
<td>199 000</td>
</tr>
<tr>
<td>Patvinsuo national park</td>
<td>0.3</td>
<td>14 200</td>
</tr>
<tr>
<td>Petkeljärvi national park</td>
<td>0.8</td>
<td>16 200</td>
</tr>
<tr>
<td>Pyhä–Luosto national park</td>
<td>13.3</td>
<td>149 100</td>
</tr>
<tr>
<td>Repovesi national park</td>
<td>4.2</td>
<td>172 000</td>
</tr>
<tr>
<td>Riistunturi national park</td>
<td>4.9</td>
<td>33 000</td>
</tr>
<tr>
<td>Urho Kekkonen national park</td>
<td>36.6</td>
<td>334 700</td>
</tr>
<tr>
<td>Valkmusa national park</td>
<td>0.1</td>
<td>169 00</td>
</tr>
</tbody>
</table>

**Total**: 110.0 1 324 200

The local financial effects and numbers of visits of national parks within the Green Belt in 2017 (Metsähallitus 2018).

The strategy includes six goals

1. The network of nature reserves and the ecological connectedness have been developed on the zone within three countries in order to secure biodiversity and a sufficient level of connectedness in the north to south and east to west directions.

2. Trilateral research cooperation for studying the natural biodiversity, climate change, culture, and social well-being within the Green Belt has increased.

3. Financial and regional development, based on the utilisation of people’s resources and ecosystem services on the Green Belt, has been strengthened and made increasingly sustainable.

4. Means of livelihood based on the nature and cultural heritage on the Green Belt have been strengthened.

5. Cross-border cooperation in the Green Belt network has been accelerated.

6. All of the actors are well aware of the unique nature and geological diversity in the Green Belt area, and the related protection required.
Recommendations for mainstreaming the protection of natural biodiversity on the Green Belt

- The building of trust in relationships across borders must be supported and fostered.
- Participatory practices, such as workshops, must be developed and applied for committing local organisations in the operations.
- Trilateral coordination must be secured for the operations in the Green Belt, and the networking of the operators must be supported.
- The cooperation of research, the business sector, and authorities must be developed in order to promote the sustainable use of natural resources on the Green Belt.
- The use of the existing means for biodiversity conservation must be emphasised in the vicinity of recognised cross-border ecological corridors.
- The knowledge base related to nature must be strengthened and the research results communicated, mapping methods and data should be unified, and funding directed for monitoring and evaluation projects related to nature.
- The objectives of cross-border nature conservation cooperation must be recognised, and their implementation supported in decision-making processes and the allocation of funding.
- The varying and shared values and opportunities of sustainable utilisation in the Green Belt must be recognised and made known to different kinds of audiences.

The recommendations were produced in the Nature on the border workshop (Luonto rajalla) on 11 December 2017.

The publication has been compiled based on the Nature on the border seminar and workshop organised by the Finnish Environment Institute, the Ministry of the Environment, and Metsähallitus on 11 December 2017. The speakers at the event were Bo Storrank and Eeva Primmer (SYKE), Otso Ovaskainen (the University of Helsinki), Joel Erkkonen (Metsähallitus), Juha Rannine (Ministry for Foreign Affairs), Petri Haapalainen (Ministry of Agriculture and Forestry), Ville Brummer (CMI), Päivi Lundvall (Finnish Association for Nature Conservation) and Alexander Kryshen (Karelian Research Centre). The publication was compiled by Aino Rekola (SYKE).

Other sources:
Kuhmonen, A. et al., (editors) 2017 Protected areas and high conservation value forests in the Barents Euro-Arctic Region – Sweden, Finland and Russia. The Finnish Environment Institute (SYKE).
Parks & Wildlife Finland (2018). Local Economy Impacts of Visitors’ Spending in 2017 in Finland’s National Parks, National Hiking Areas and Other Protected and Recreational Areas.

More information:
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