

# **Ecological corridors supporting sustainability and preserving biodiversity**

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# UNEP definition

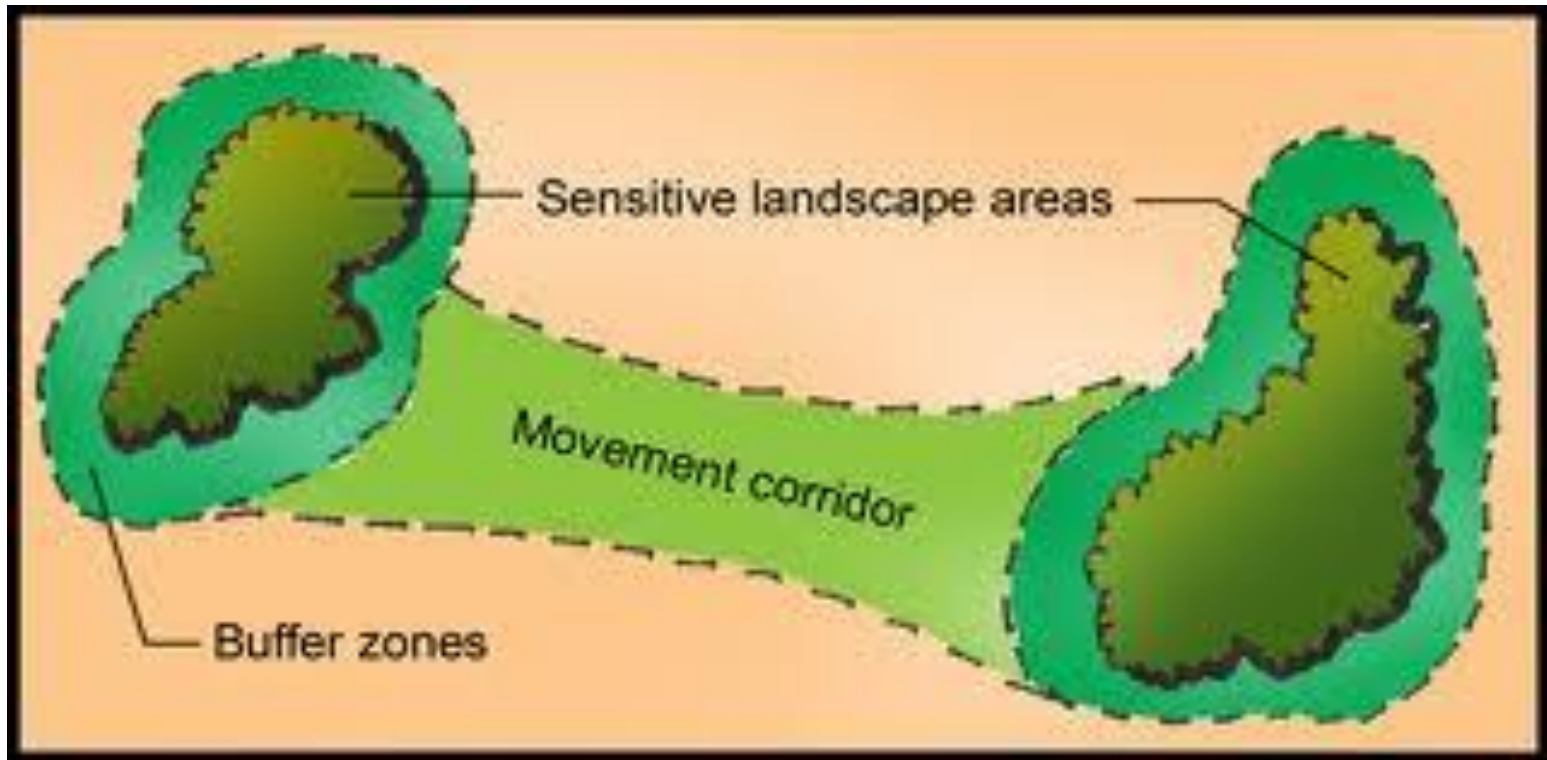
- Fragmentation and destruction of natural habitats is a primary threat for many species. Isolated species populations can result in inbreeding, reducing the fitness and hence survival of a species.

- Ensuring that landscape connections remain and are protected, can ensure the exchange of genetic material, and also ensure adequate feeding areas, breeding grounds and allow for migration.

- Therefore the idea of establishing and protecting ecological corridors, buffer zones and other connections between protected areas is crucial in allowing animals, plants and ecological processes to move from one habitat to another.

- In practice a comprehensive understanding of species is needed to ensure the use of connecting areas.

- The Convention on Biological Diversity's (CBD) Programme of Work on Protected Areas adopted in 2004 calls for the integration of protected areas into the wider landscape and the use of ecological networks where suitable

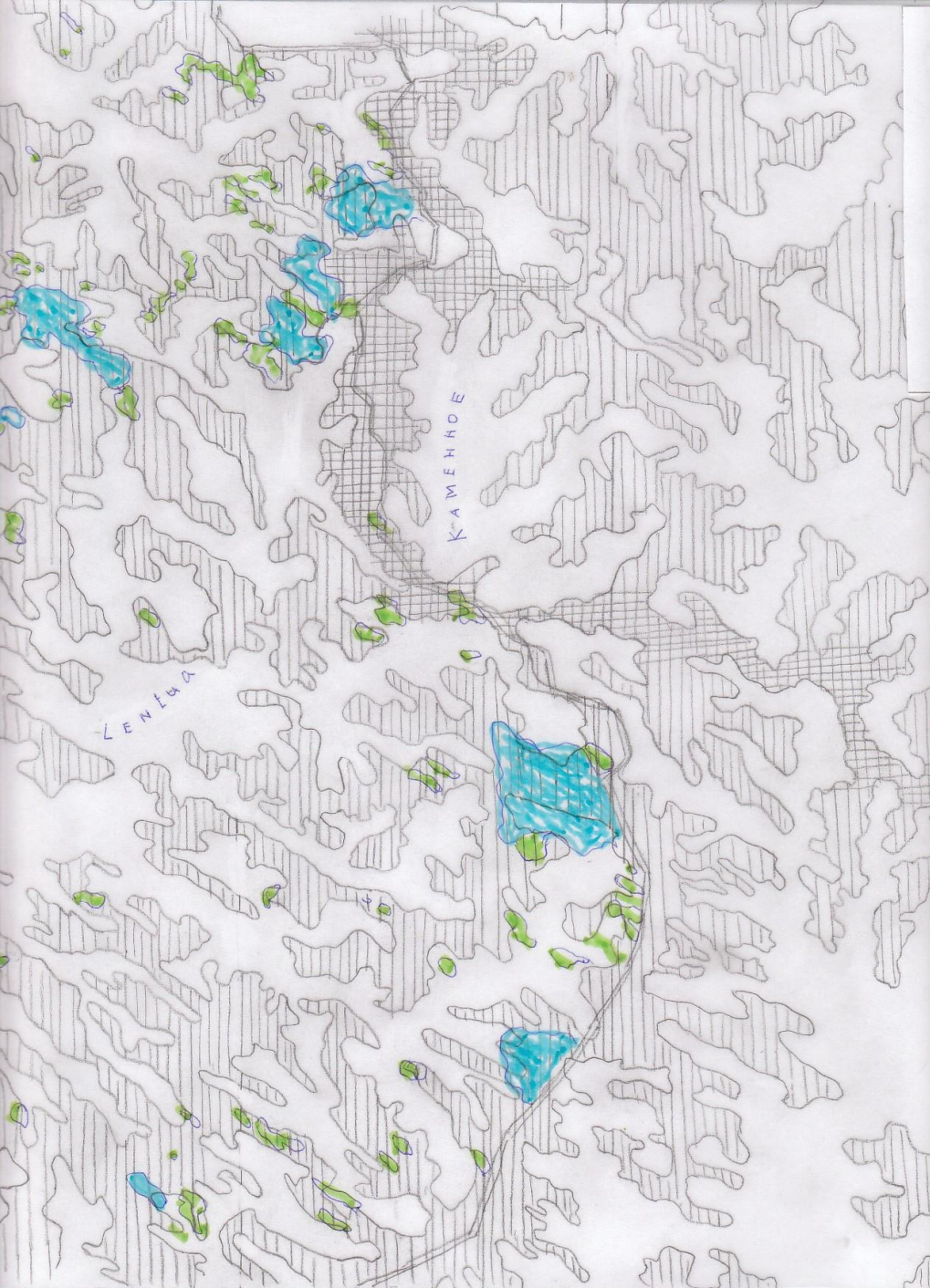


Principle of ecological corridors. The corridor must represent a habitat, which is suitable for species in the sensitive landscape areas



For example forests as protected zones along shorelines can act as ecological corridors





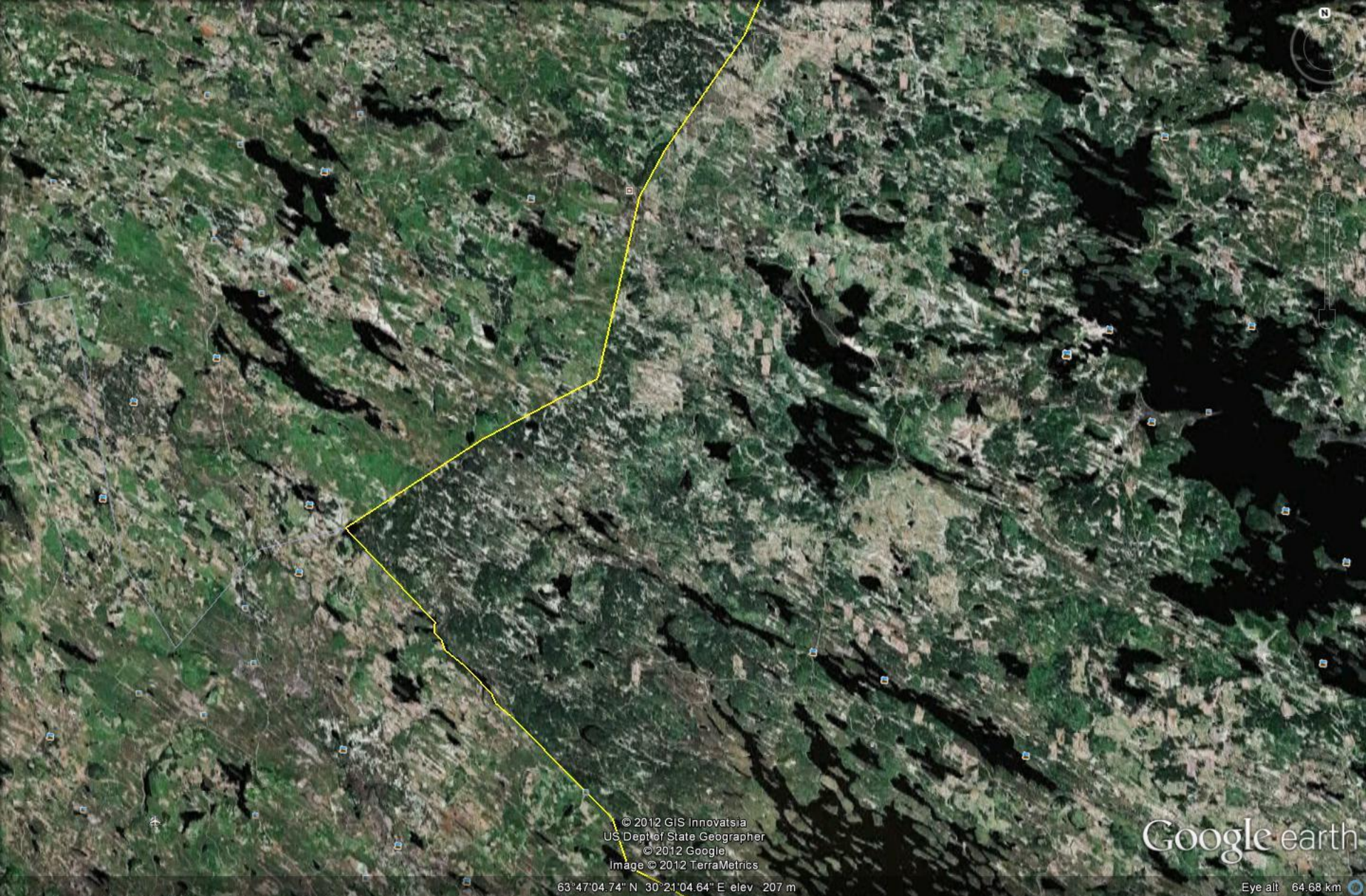
- An example from the project area. Blue areas are natural and valuable areas of mires. Green areas are less valuable but can act as corridors for e.g. willow grouse (*Lagopus lagopus*)

- On the Finnish territory of the Green Belt of Fennoscandia ecological corridors have been established in state forests in Landscape Ecological Planning since 1996
- Fragmentation of old-growth forests has made it difficult to find appropriate corridors for most threatened species between nature reserves

- For game animals old-growth forest corridors are not necessarily needed
- For example capercaillie (*Tetrao urogallus*) accepts forests at the age of approximately 60 years as corridors
- In mires in Finland forestry drainage has reduced the possibilities to establish corridors for e.g. willow grouse, which does not usually move more than 5 km from one mire to another

- It is obvious that on the Russian side there are better possibilities for establishing ecological corridors. They can also support the connection between Finnish nature reserves located near the boundary.





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63°47'04.74" N 30°21'04.64" E elev 207 m

Google earth

Eye alt 64.68 km





Thank you!