

Boundaries of Green Belt of Fennoscandia





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Early in the 1990s, scientists from Karelia and Finland put forward the idea of the "Green Belt of Fennoscandia"





The baseline of the idea was to create and develop the network of protected areas (with focus on PAs in the border area) with detailed management plans meeting the demands of sustainable development (interests of nature conservation, society and economy combined)





Integrity of nature in border areas of Karelia





Quite low industrial use of the territories along Russian-Finnish border, and well-preserved natural complexes, historical and cultural monuments

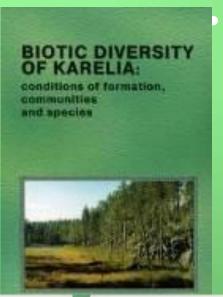
Low industrial pollution

Low population density



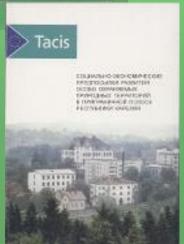
20 years of large-scope multifaceted scientific research





Extensive material on GBF nature, history of settlement and land use in the territory, social & economic problems of communities has been amassed and needs to be summarized





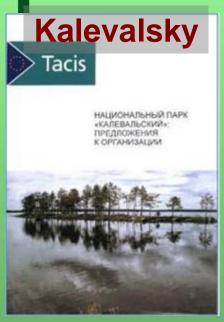






Feasibility studies for designation of PAs







НАЦИОНАЛЬНЫЙ ПАРК «ЛАДОЖСКИЕ ШХЕРЫ»: предложения К ОРГАНИЗАЦИИ



Koitajoki - Tolvajärvi

НАЦИОНАЛЬНЫЙ ПАРК «КОЙТАЙОКИ-ТОВЕСЯРВИ» ПРЕДПОЖЕНИЯ K OPTAHMBAGKIN





НАЦОНАЛЬНЫЙ ПАРК «ТУЛОС» предложения К ОРГАНИЗАЦИИ









WEB-resources (http://green-belt.krc.karelia.ru)





What is GBF nowadays? Chain of PA's:



- 1. Pasvik zapovednik
- 2. Laplandsky zapovednik
- 3. Kutsa nature reserve (zakaznik)
- 4. Paanajärvi NP
- 5. Kostomukshsky zapovednik
- 6. Kalevalsky NP with Voinitsa landscape reserve (LR)
- 7. Tulos LR
- 8. Koitajoki LR
- 9. Tolvajärvi LR
- 10. Ladoga Skerries NP
- 11. Iso-Ijärvi LR
- 12. Karel'sky Les LR
- 13. Prigranichnyi LR
- 14. Ingermanlandsky zapovednik

There are also some small-size LR: Podkova, Kumiporog, PAs of Karelian isthmus, etc.

Финляндия

Total area of the above PAs is more than 800 000 ha



What is GBF nowadays? Chain of PA's:





Small fragments of nature protected in Finland along the Karelian border in a strip of 50 km from the border. Large protected areas only in Lapland along the border with Murmansk Region and Norway



What is the object of determination of GBF boundaries?







Green Belt of Fennoscandia seminar in Petrozavodsk (June, 2008)











Russian-Finnish project «Green Belt of Fennoscandia»

 One of the first steps of realization seminar decisions was organizing of Russian-Finnish project "Developing of the GBF" (2009-2010)





GBF issues were presented in

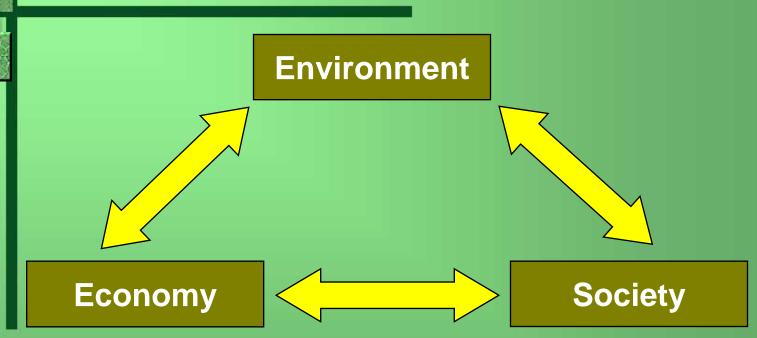


- Petrozavodsk, June 2010
- Arkhangelsk, June 2010
- Sundswall, Sweden, August 2010
- Kem', September 2010
- Kuhmo, October 2010
- Syktyvkar, November 2010
- Helsinki, December 2010
- Petrozavodsk, June 2011
- Petrozavodsk, June 2012
- Kotka, Sweptember 2012
- Joensuu, October 2012
- Bodo, June 2013 ...





GBF programme objective



Research into natural complexes on both sides of the Russian-Finnish border, and preparation of scientific substantiation for organizing integral environmental-economic space in order to conserve unique northern nature and develop the territories with regard to historical and cultural features of the peoples living there



How to draw the line?

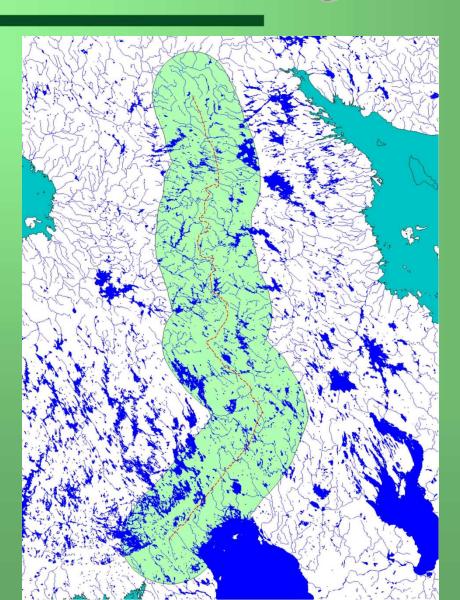


- 1. According to administrative-territorial division
- Along the borders of PAs and connecting PAs
- In parallel to Russian-Finnish border 50 km far from it
- 4. Based on ecosystem (biogeographical) approach
- 5. To keep in mind all (maximum possible) mentioned approaches



50 km line along the border







Administrative-territorial approach









Administrative-territorial approach



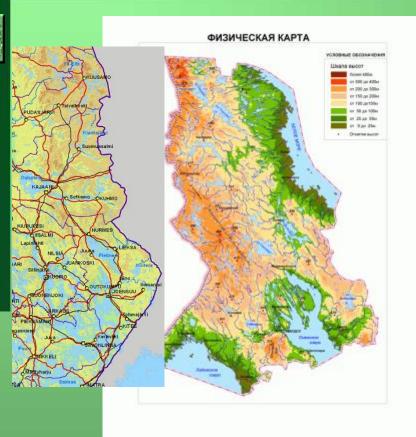


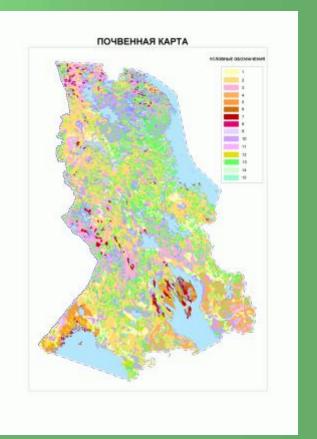
- The provinces of Finland:
- Lapland, North Ostrobothnia, Kainuu, North Karelia and South Karelia have connection to the Green Belt, but do not form a sensible Green Belt



Ecosystem (biogeographical) approach







Boundaries should be orographical: relief reflect geological features and determine soil properties

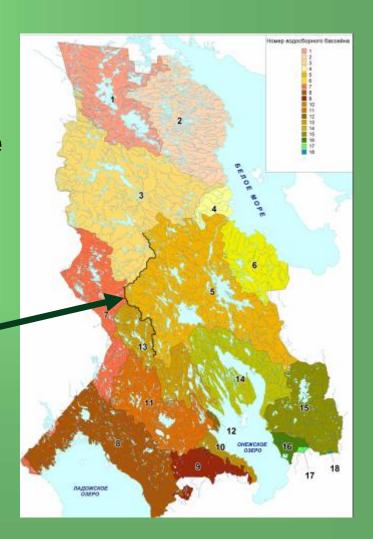


Watershed divides



- 1. In Fennoscandia watershed divides can be clearly determine in nature
- 2. Fully agree with ecosystem approach

In Karelia watershed divides can be used for delineation approximately of 1/3 of GBF border.

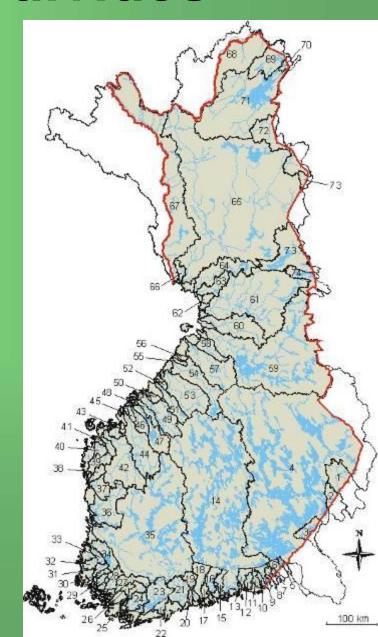






Watershed divides

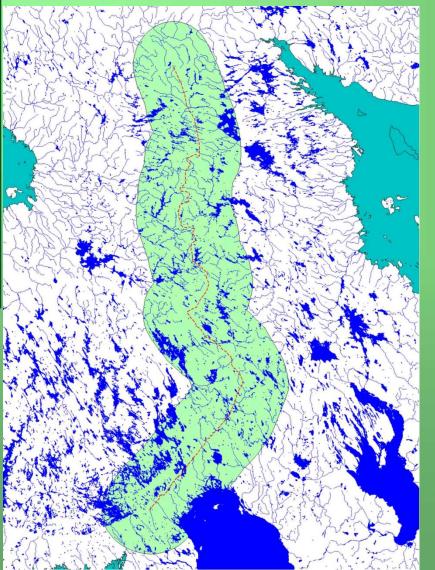
In Finland watershed divides cannot be used for the delineation of GBF border as much as in Karelia.





Large rivers and lakes





Another well marked nature lines are banks of rivers and lakes.

It is important to include water protected zones of lakes and rivers into the GBF territory as ecological corridors.



Waterside protection buffers



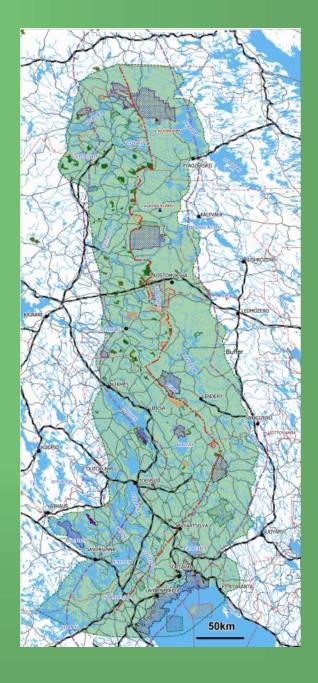




Karelian part of GBF boundaries



1. western shore of Lake Ruvozero; 2. eastern shore of Lake Pyaozero, excluding Lake Topozero; 3. towards the neck between lakes Upper and Middle Kuito, including the Pistojoki River system of lakes; 4. western shore of Lake Alajärvi; 5. along the Kento River, including all lakes it runs through or along, to the eastern shore of Lake Koivas; 6. from Lake Koivas to the western shore of Lake Nyuk; 7. from the western shore of Lake Nyuk along the Pertijoki River to the western shore of Lake Tikshozero; 8. from the western shore of Lake Tikshozero, including lakes Hedo and Muj, along the Kivioja River, excluding Lake Hovdojärvi, to the western shore of Lake Voloma; 9. from the western shore of Lake Voloma, including the western chain of ridges of the Maanselkä SE spurs to the western shore of Lake Sukkozero: 10. from the western shore of Lake Sukkozero along the western shore of Lake Gimolskoye southwards, including lakes Megrijärvi, Vegarusjärvi to the western shore of Lake Salonjärvi; 11. from the western shore of Lake Salonjärvi along the Sarijärvinjoki River and the Uksunjoki River (incl. Lake Salmenjärvi) to Lake Ladoga.

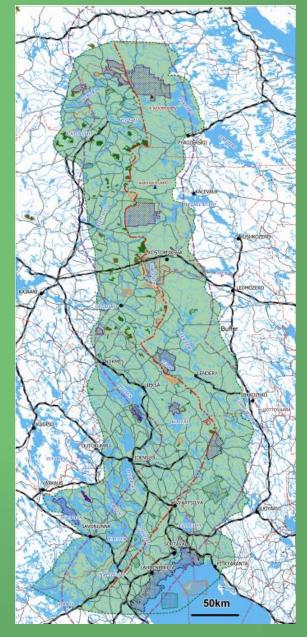




Finnish part of GBF boundaries



1. the upper branches of the Oulankajoki River 2. along the eastern shores of Lakes AlaSuolijärvi and YläSuolijärvi in the lijoki River basin 3. from the western periphery of Lake YliKitka to the western shore of Lake Kostonjärvi, including Lakes Livojärvi and Kuusijärvi 4. from the western periphery of Lake Kostonjärvi to the western shore of Lake Tyräjärvi, along the Kostonjoki River, including Lake Jokijärvi and further to the western shore of Lake Korvuanjärvi 5. from Lake Korvuanjärvi to the eastern shore of Lake Pesiöjärvi, including Iso Ahvensuo mire reserve 6. from Lake Pesiöjärvi to the western periphery of Lake Luvanjärvi via the eastern end of Lake Sakaranjärvi 7. from Lake Luvanjärvi to the western shore of Lake Kellojärvi, including Kinnussuo and Rimpisuo mire reserves and Pellinkangas oldgrowth forest reserve 8. from Lake Kellojärvi to the western periphery of Lake Ontojärvi and further to the western end of Lake Pieni Tipasjärvi 9. from Lake Pieni Tipasjärvi to the northwestern end of Lake Pielinen following the Sivakkajoki River, including Hiidenportti National Park 10. from the northwestern periphery of Lake Pielinen to the western shore of Lake Vaikkojärvi and further to the western shore of Lake Kajoonjärvi





Ecosystem (biogeographical) approach



Why? More arguments, please!

Ecosystem (biogeographical) approach is agree with some others strategic concepts of nature protection in Northern Europe





- We do not consider the Green Belt of Fennoscandia separately from the PA systems of Karelia and Finland as well as systems of Arkhangelskaia obl., Murmanskaia obl., Vologodskaia obl., Leningradskaia obl. and St.-Petersburg.
- We believe that interstate and interregional continuity of PA systems very important



System of Green Belts





Ecosystem (biogeographical) approach fully agreed with Green belts as the base of ecological frame nature protecting in Northern Europe



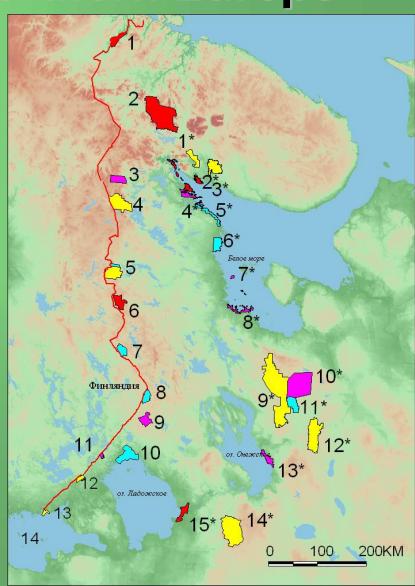
Green Ring of Fennoscandia can act as the framework of nature protection in Northern Europe



To strengthen GRF:

 To save waterside protection zones

 To save ecosystems of taiga corridors



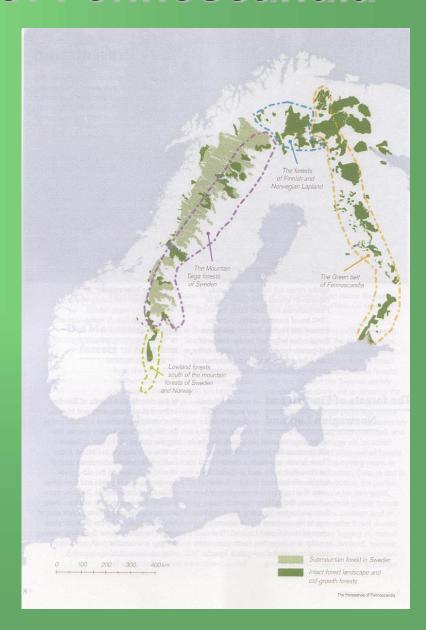


The Horseshoe of Fennoscandia

A corridor for the long-term survival of old-growth forest dependent species in Norway, Sweden and Finland

Rein Midteng

And Russia?





TAIGA CORRIDORS



Fennoscandia is connected with Eurasia through three stretches – "Taiga corridors"

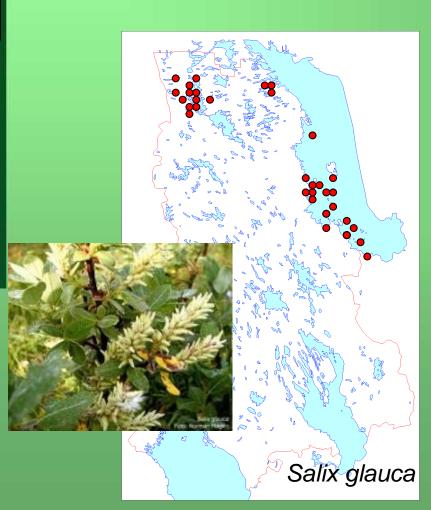


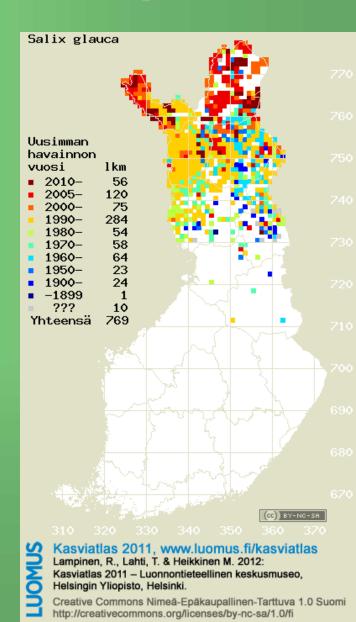
- 1. South taiga corridor 50 km
- 2. Middle taiga corridor 120 km
- 3. North taiga corridor 150 km



Distribution of rare species











We also believe the ecosystem-based approach rests on the most solid scientific grounds for delineation of the territory where environmental and socio-economic issues would be addressed.

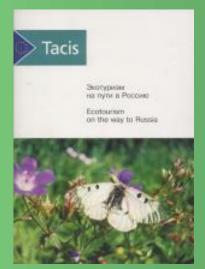
A next step in GBF development could be its tourism branding, given the assumption that tourism will be a key economic activity in border areas.



Tourism







The Master Plan of siting tourism objects and infrastructure in Karelia through year 2025 distinguishes 12 tourism zones, of which nearly a half (5) fall in GBF territory



Cultural Heritage





Study of the land use history, investigation of the effect of PA establishment on socio-economic development, detection of the areas most promising for cultural tourism development, identification of potential spheres of cross-border cooperation







1. The GBF concept has now firmly established not only in scientific discourse but also in official documents and life of the society;

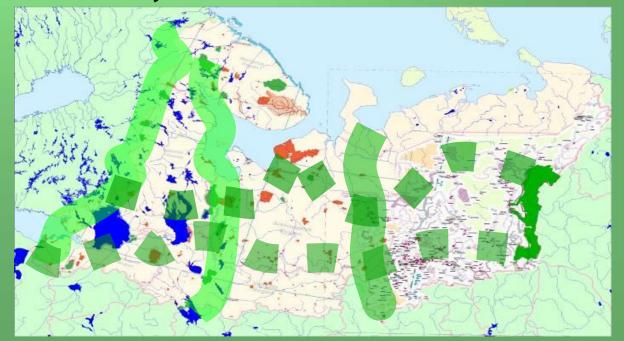


MOU about the cooperation in Green Belt of Fennoscandia developing





2. GBF is a key element of the environmental framework of Northern Europe that is being formed;







- 3. Its crucial role in shaping the system is due also to the fact that while promoting international cooperation it also contributes to economic development of border areas and conservation of the cultural heritage;
- 4. Viewing GBF as nothing but a chain of nature reserves and national parks along the border would narrow its role and significance. We believe GBF is a holistic area that must have scientifically grounded boundaries to operate full-scope;
- 5. The current practice of establishing green belts has no background of scientific developments for their delineation;





5. The current practice of establishing green belts has no background of scientific developments for their delineation;







6. In this presentation we considered several potential approaches to defining GBF boundaries, and we think the most suitable one is the ecosystem-based approach as it takes all envisaged GBF functions into account (conservation of natural and cultural heritage, socio-economic development).





Thank you!







