

КРАТКИЕ СООБЩЕНИЯ

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ON THE BOUNDARIES OF THE GREEN BELT OF FENNOSCANDIA

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We substantiate the demand for delineation of the Green Belt of Fennoscandia (GBF) and consider the various approaches to and options of drawing the boundaries. The ecosystem-based (biogeographical) approach is suggested as the one that best suits the environmental and socio-economic goals of GBF development. Using this approach the boundaries of GBF on both the Russian and the Finnish side have been described relying on the hydrographic network, and the map showing the main protected areas (PAs) and the GBF boundaries resulting from the application of the formal and the ecosystem-based approaches is provided.

K e y w o r d s: Green Belt of Fennoscandia, boundaries of the Green Belt, Finnish-Karelian border

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Обоснована необходимость определения границ Зеленого пояса Фенноскандии (ЗПФ) и рассмотрены различные подходы и варианты их установления. Экосистемный (биогеографический) подход предложен авторами как наиболее соответствующий природоохранным и социально-экономическим задачам развития ЗПФ. На его основе с упором на гидрографическую сеть дано описание границ территории ЗПФ как с российской, так и с финляндской стороны, а также приведена карта с указанием ключевых охраняемых природных территорий (ООПТ) и местоположения границ ЗПФ, проведенных по формальным и экосистемным принципам.

К л ю ч е в ы е с л о в а: Зеленый пояс Фенноскандии, граница зеленого пояса, граница Финляндии и Карелии.

Since the early 1990s, Russian and Finnish scientists have taken much effort to set up the Green Belt of Fennoscandia (GBF) and study it. The progress of the activities has been reported in many publications [Hokkanen et al., 2007; Титов и др., 2009; Боголицын и др., 2011, etc.]. As more data have been accumulated, the GBF idea went far beyond the scope of science, expanding i.a. to the sphere of governmental and intergovernmental relations, and covering various

dimensions of international and interregional cooperation. An event of paramount importance in this sense was the signing of the Memorandum of Understanding between the Ministry of the Environment of the Republic of Finland, the Ministry of the Environment of the Kingdom of Norway and the Ministry of Natural Resources and Environment of the Russian Federation on cooperation on the development of the Green Belt of Fennoscandia in February 2010.

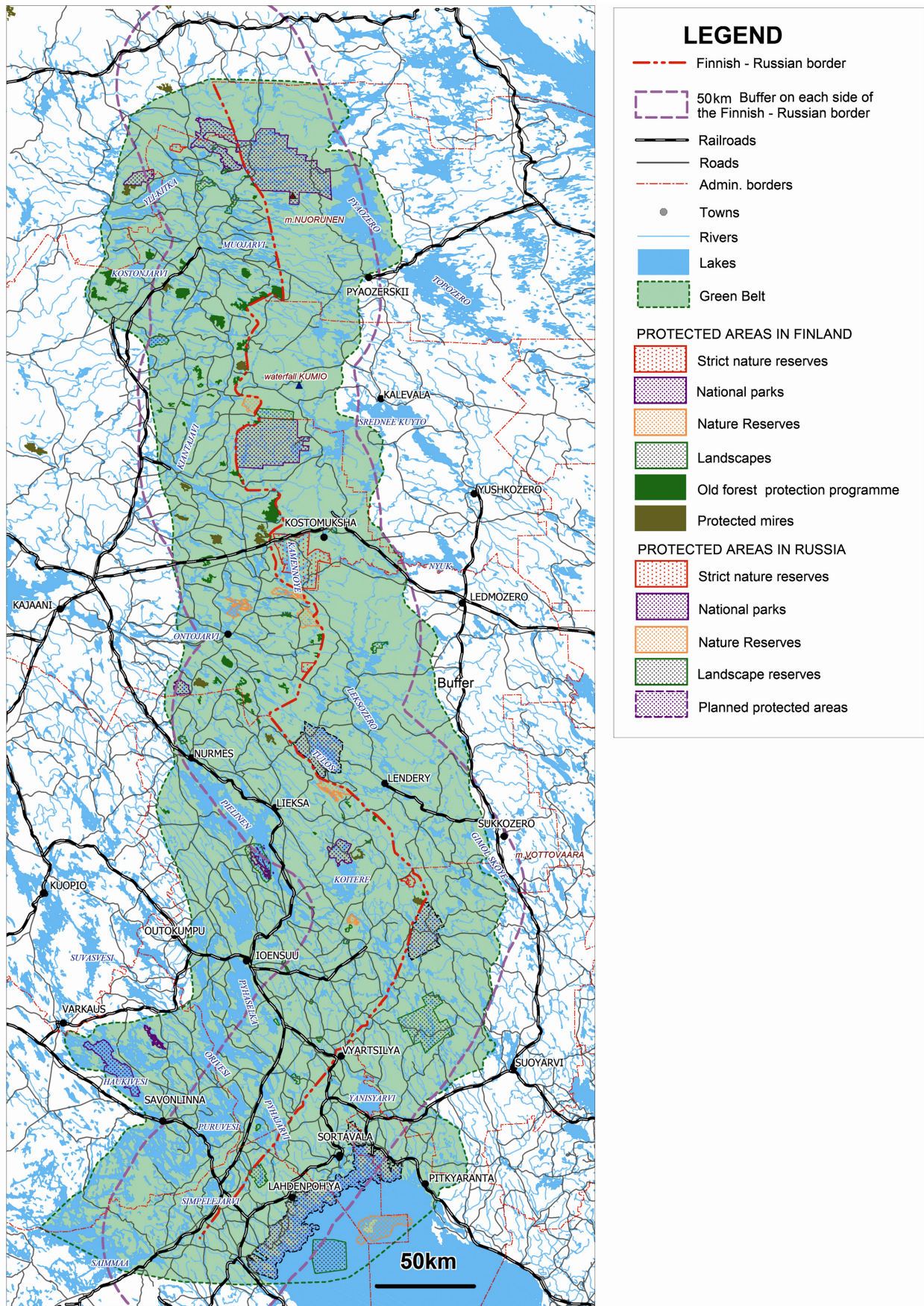


Fig. 1. Boundaries of the Green Belt of Fennoscandia

In spite of all that, a fundamental question remains: what is GBF in reality? The common understanding of the concept is that of a network of protected areas (PAs) of different status and subordination along the Russian-Finnish and Russian-Norwegian national borders [Титов и др., 2009]. This is how GBF is defined in the above-mentioned Memorandum. On the other hand, the resolution of the GBF Conference, which took place in Petrozavodsk in 2008, claimed that “GBF will facilitate the generation of a **holistic environmental-economic domain** where the aim of conserving unique northern nature shall take historical and cultural characteristics of local people into account and be integrated with the targets of economic development of respective administrative districts, municipalities and settlements” [Научно-практический семинар ..., 2009 p. 138]. Both Karelian and Finnish scientists stressed that this integrated approach to GBF organization was a cornerstone, conveying the ideal to strive for. Yet, the first thing to do when organizing any space, including GBF, is to delineate, i.e. actually establish its boundaries. Quite obviously, they are essential not only for the environmental, but also for the social and economic goals of borderland development.

As of now, three major approaches to delineation of GBF boundaries have taken shape. The first one is a “formal” approach – GBF covers a 50 km strip on each side of the national border. No doubt, this approach is plain and convenient, but not being based on either economic or ecological grounds it can only be adopted as a temporary option. It suffices to say that in this case the GBF borderline would cross several operating PAs, run across a number of large waterbodies, and so on (Fig. 1).

The second approach proceeds from the need to administrate the development of tourism and other economic activities, as well as the conservation of cultural heritage. It suggests that GBF boundaries are drawn along administrative borders (districts, municipalities). However, border districts and municipalities in both Karelia and Finland differ in size so that the distance from GBF boundary to the national border would vary widely, sometimes reaching 150 km or more. There is another important consideration. Firstly, the original and major objective of GBF establishment is nature conservation, and we must not let the natural formations be subordinate to administrative ones. Secondly, administrative borders tend to be changeable.

We suggest a different approach, which focuses on the original aim of GBF establishment – preservation of ecosystems in

the border area in their natural state. This is an ecosystem-based approach to the organization of certain spatial complexes, and unit boundaries are drawn along clearly identifiable natural formations. Hence, this approach can also be defined as “biogeographical”. Its biological component consists in conservation tasks, and the geographical one – in setting the reference points for drawing lines on the map – in Fennoscandia that would be, first of all, rivers and shores of large lakes, because they are numerous and have different orientations. Besides, it is rivers and lakes that often lend their names to settlements, localities and protected areas in both Finland and Karelia.

The conservation task behind GBF foundation calls for another requirement to its boundaries: where a PA exists or has been planned in the immediate vicinity of the provisional GBF boundary this PA must be comprised within GBF bounds.

Thus, the following three basic items determining the location of the GBF boundary are to be taken into account:

1. Distance to the national border should be around 50 km.
2. GBF boundary should be drawn along riverbanks and lakeshore, including waterside protection zones (the hydrographical principle).
3. PAs in the immediate vicinity of GBF boundary should be included in GBF.

In view of the above, we suggest drawing the GBF boundary in Karelia as follows (north to south, Fig. 1):

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 Pistojoiki 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.

The proposed boundary in Finnish territory is the following:

(western boundary of the Fennoscandian Green Belt from north to south)

1. the upper branches of the Oulankajoki River

2. along the eastern shores of Lakes Ala-Suolijärvi and Ylä-Suolijärvi in the Iijoki River basin

3. from the western periphery of Lake Yli-Kitka 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 Pesijärvi, including Iso Ahvensuo mire reserve

6. from Lake Pesijärvi 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 old-growth 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 Kajojärvi

11. from Lake Kajojärvi to the western shore of Lake Viinijärvi including Hanhisuo mire reserve

12. from Lake Viinijärvi along the western shore of Lake Heposelkä and Lake Savonselkä to the northern periphery of Lake Kolovesi, including Kolovesi National Park

13. from Lake Kolovesi to the northern shore of Lake Haukivesi and further along the western shore of Lake Haukivesi

14. from Lake Haukivesi along the western shore of Lake Pihlajavesi to the western shore of Lake Lietvesi and Lake Saimaa

In this paper we have briefly formulated some principles for GBF delineation, with primary considerations for its nature conservation mission and the demand for socio-economic development of border areas. Naturally, both the boundaries and the territory of GBF need to be more thoroughly studied and described, and so they shall be. This communication was meant to draw attention to the challenge of GBF boundary-setting and provoke a discussion. The authors realize there may be other approaches too, but they are subject to discussion to ensure that the final decision is optimal from a variety of viewpoints.

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