

## Management of tourism and recreation possibilities for the sustainable development of the north-western border region in Russia

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**Abstract:** This article gives an overview of the present and future possibilities for the development of tourism and recreation in North-West Russia. This area has substantial number large federal and national parks, especially the size of these protected areas differentiates them clearly from the network of protected areas in western Europe, also their northern and Arctic location in the last wilderness of Europe provides many opportunities for eco-tourism, nature recreation for both Russians and the international public. The so called Green Belt of Scandinavia, running north - south from the Arctic Sea along the border between Norway, Finland and Russia provides many opportunities to increase cross border tourism and in the same time improve the protection status of these areas. To benefit from these opportunities local infrastructure has to be improved, but this rising economic sector, e.g. the tourism industry might be of paramount importance to local and regional economies, and possibly to the whole of the Russian Federation.

**Keywords:** Eco-tourism, recreation, national parks, Green Belt, North-West Russia

### Introduction

The north-western region of Russia is a vast area, stretching from the northern Arctic islands in the Barents Sea, the continental regions of Murmansk and Arkhangelsk, to the temperate Leningrad, Pskov, Novgorod and Vologda regions. The region has an abundance of lakes and rivers, including Europe's largest lakes, Ladoga and Onega. The area has vast pristine wilderness areas including tundra, forest-tundra and forest, plains and mountain areas. North-western Russia borders with Norway, Finland,

Estonia and Latvia. Therefore this border region is strategically important for the sustainable development of Russia.

Although sparsely inhabited, the region is characterized by a number of large cities and small towns, which are of historical and cultural importance. The region possesses a relatively well-developed transport network and has sufficient labour resources. All these factors create favourable conditions for improving and promoting international and domestic tourism. The foundation of which are the development of recreational nature use and preservation of natural,

historical and cultural monuments. The implementation of effective management and strengthening the structure of tourism and recreation in the area may help turn this region into a new economic basis for the development of the currently economically depressed regions of North-West Russia. Of particular importance is cross-border cooperation in the region and the organization of a single ecological and economic space, being the basis of good neighbourliness and mutually beneficial economic sustainable development (Sevastiyarov 2010).

In the past three decades, the world has undergone marked structural changes in the implementation of regional patterns of nature use. Effective nature management focus on environmental and recreational aspects has lately become increasingly important, though also opposing tendencies can be observed regarding the development of recreation and tourism. On the one hand, there is a global spread of standardized high-tech tourist-oriented services necessary to meet the needs of mass tourism. On the other hand, there is a diversification of demand for different tourist offers, new tourist destinations, developing areas and forms of tourism, the demand for individual nature-oriented tours, and a growing interest in eco-tourism (Drozdo & Basanets 2006). According to experts, in the current economic crisis and the decline in the industrial development of many countries and regions of the world, the availability of rich environmental recreational resources stimulates the economic growth in the countries which are actively developing rational environmental

management and create a modern tourist infrastructure (Gunton 2003).

Ecological geography as an interdisciplinary geographical area of research includes in the sphere of its interests the study of different countries' and regions' experience in the field of recreational environmental management in order to spread positive examples of development and conservation of cultural and natural heritage (Sevastiyarov & Bocharnikov 2009).

Over the last decades, in many developed countries the recreational use of natural resources and the development of international tourism acquire great innovative significance. Despite the contradictions between economy and ecology, recreational nature use has become a leading economic sector, replacing traditional types, based on the extraction of natural resources (mining, forestry, agricultural land use and livestock farming) (Kurt 2003).

The experience of the Alpine region recreational development in Europe has shown how this mountainous area during the 20<sup>th</sup> century has transformed from an agrarian region with a predominantly mountainous farming into the centre of European and international tourism. According to experts, in the 21<sup>st</sup> century, use of traditional mountain natural resources has become unprofitable. The process of replacement of agriculture and forestry infrastructure by that of recreation and tourism is still taking place in the European Alpine region. Also other mountainous areas in the developed world are currently turning into a modern area of international tourism and recreation. The effects on

the landscape are noticeable, mountain meadows are being overrun by forest, on the slopes one can see a rapidly increasing number of lifts and well-equipped ski tracks. Also the number of hotels and restaurants for those who like winter and summer holidays in the mountains and foothills is increasing. Golf courses are invading the previous Alpine meadows and pastures, alongside the growing area of residential cultural landscapes (Kosovtsova 2010).

The analysis of the international experience shows that the development of a modern sector of tourism and recreational nature use fundamentally changes the value orientation of the population, especially in remote, border and often depressed regions of the world. At that, recreation and tourism requirements often begin to involve in the economic cycle of the natural, historical and cultural complexes and objects previously not used in the area. For example, scenic landscapes and local climatic conditions, springs and waterfalls, lakes and rivers, unusual landforms and landscapes, objects of historical and cultural heritage, such as ancient tombs, ruins of historical monuments, sacred sites and even local legends – all of them can become attractive elements of the territory to tourists and tourism businesses.

The manifestation of tourist interest to any natural, historical and cultural sites and the growing number of visitors entails, on the one hand, the need for its protection or restoration, and on the other hand, the emergence of new transport links, hotels, catering and entertainment facilities for the traveling people, thus contributing to the formation of a new

recreation cluster and the appropriate type of environmental management. The transition to recreational nature use and the desire to attract tourists contribute to the coordination of activities aimed at the preservation and even restoration of once disturbed primary natural conditions. This process will involve local residents in the recreational activities and will promote the development of local industries, means of communication and transport, which is definitely a promising way to sustainable development of the areas (Bocharnikova & Sevastiyarov 2011; Sevastiyarov 2012).

The countries of the Alpine region and northern Europe have been witnesses to the shift of interests from resource-extracting types of economy to regulated recreational nature management. There is a trend towards creating new *strictly protected environmental territories* (SPETs) called not only for protecting nature *from the people* (e.g., in biosphere reserves and nature reserves), but also for contributing to its preservation *for the people* (in national and natural parks).

In Europe, new environmental approaches to solve problems of combining environmental and economic needs of society have been implemented and a single international recreational space is underway. Various steps are being taken to serve the purposes of recreation and tourism development, among them mine and quarries reclamation, timber felling ceasing, conversion of derelict and held-depressed agricultural areas. Within the framework of the EU, the cross-border recreational space is being actively formed, adjustable to the common law practiced by the Union's member-states. In that area, proper recreational nature management contributes

to the preservation and restoration of primary conditions of the environment and proves to be one of the most effective ways of protecting nature and developing the EU countries' and regions' economies. That is especially characteristic of Norway, Sweden and Finland (Vihervaara *et al.* 2010).

## Eco-tourism in North-West Russia

Russia has every reason and a possibility of integration into the international tourist and recreational space of Europe, which is part of the global economic space. According to the *World Tourism Organization* (UNWTO), Russia has one of the most powerful eco-tourism potentials in the world, with its total space of *protected areas* (PA's) the resource base of nature-oriented tourism – of over 136.6 million hectares, i.e. about 12% of Russia (in 2010). Most of the national parks and national reserves of the north-western region of Russia have already gained popularity as actively visited tourist and recreation facilities. According to UNWTO in the last five years, the number of adherents to nature-oriented forms of tourism has been growing by seven percent per year. According to forecasts, by 2020, eco-tourism will be among the top-five strategic and fastest growing sectors throughout the world's tourism industry. However, today the share of eco-tourism in the modern world turnover of tourist capital is only 7–10%. This is due to the non-capital intensive character of nature-oriented forms of tourism, but it still reflects its social importance, as many people need a rest “in nature” (Sevastiyarov

& Korostelyov 2005). It may be noted that according to the experts of the Russian Union of Travel Industry (RUTI), “if Russia would get just one percent of the global tourism market, it will make a profit close to what the country's budget receives from gas and oil”.

The north-western region of Russia bordering to the countries of Scandinavia and the Baltic countries is rich in natural recreational resources similar to those of the neighbouring states. In the North-West Russia, mainly in the taiga region, there are ten national parks, 12 nature reserves and ten large reserves, covering an area of over five million hectares (Figure 1). These national parks provide the basis for the development of *nature-oriented forms of tourism*, such as ecological, ethnic and rural tourism, as well as cultural-educational and religious types of tourism.

For foreign tourists, the most important protected areas – e.g. nature reserves Kostomukshskiy, Kandalakshskiy, Laplandskiy and Pinezhskiy and national parks Kenozerskiy, Paanajarvi, Vodlozerskiy, Rusky Sever and Kalevalskiy – are situated in the Republic of Karelia along the border with Finland. These areas have now become popular parks in the North-West Russia (Sevastiyarov and Korostelyov 2005; Sevastiyarov 2012). In 2010, the network of protected areas in the region was complemented with a new national park Ruskaya Arktika and in 2012 the opening of the national park Ladoga Skerries and the state reserve Ingermanlandskiy on the islands in the Gulf of Finland were approved.

The *national park* (NP) Ruskaya Arktika has been created in the Arkhangelsk region,

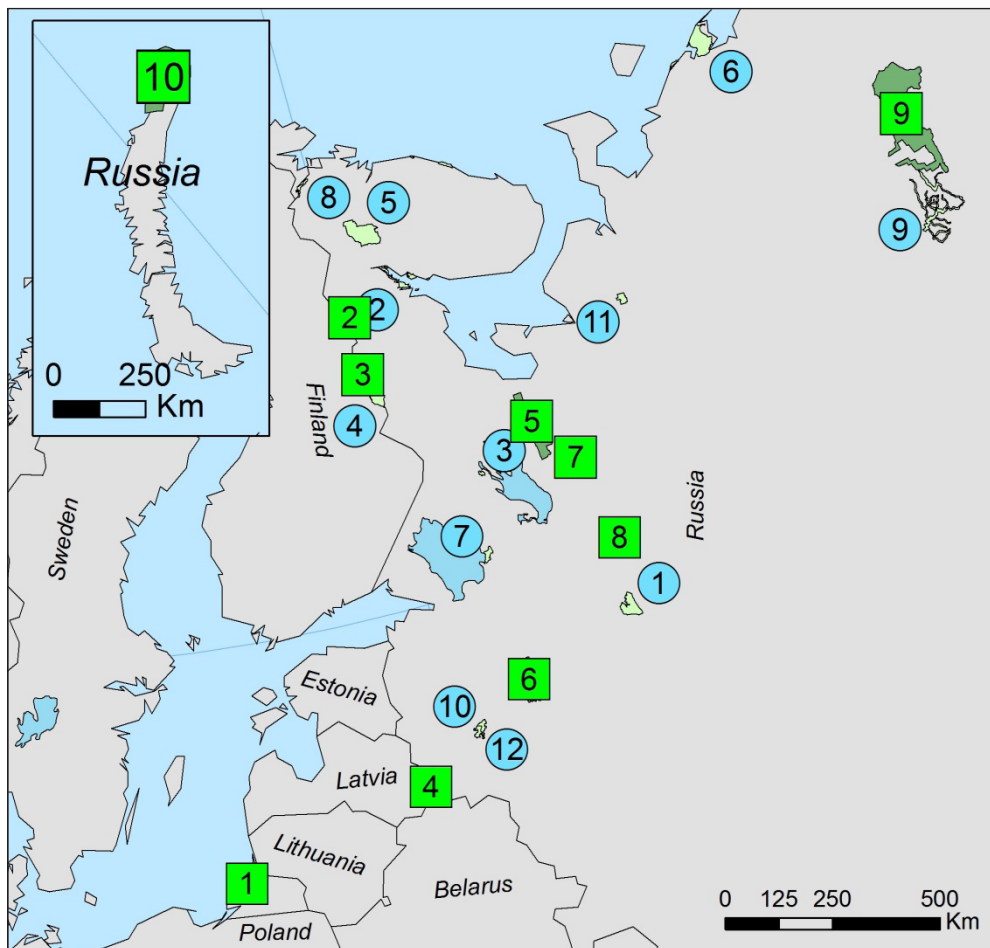


Figure 1. The largest protected areas in the north-western region of Russia. Federal Reserves (circle): 1. Darwinskiy, 2. Kandalakshskiy, 3. Kivatch, 4. Kostomukhskiy, 5. Laplandskiy, 6. Nenetskiy, 7. Nizhne-Svirskiy, 8. Pasvik, 9. Petchora-Ilychskiy, 10. Pinezhskiy, 11. Polistrovski, 12. Rdeyskiy. National Parks (square): 1. Kurshskaya Kosa, 2. Paanajarvi, 3. Kalevalskiy, 4. Sebezhskiy, 5. Valdaiskiy, 6. Vodlozerskiy, 7. Kenozerskiy, 8. Rusky Sever, 9. Yugyd-Wah, 10. Ruskaya Arktika.

in the northern part of the archipelago of Novaya Zemlya. This large national park located in the high-Arctic of Russia covering 1,426,000 hectares has immediately attracted the attention of hundreds of Arctic traveling fans coming from Russia and abroad. Tourism practiced in this national park has been supported by the activities of travel agencies not only of

Russia but also from the United States, Australia and Norway.

In the Arctic region, expeditionary-cruise tourism, including cognitive, scientific and environmental components, has been practiced; the main objects of tourist interest in the Ruskaya Arktika being arctic landscapes and polar phenomena. In 2011, among the objects were floating

ice fields and ice caps in the Arctic islands, glacial landforms, rock bird colonies and walrus rookeries on the Oransky Islands, geological features of the Champa Island, the sea ice fall in the Inostrantsev Gulf. All groups of tourists were accompanied by the park rangers. According to the park NP Ruskaya Arktika (2011), 11 cruises were made to the national park with 865 tourists on board. However, according to news agencies, this number of tourists is still too small for regular cruise trips (National Park Russian Arctic 2013).

It is important to note that in the north-western region of Russia there are many *border areas* with preserved pristine forests, taiga animals, an abundance of wild landscapes and rugged relief, with lakes and rivers attractive for tourism and recreation. There are a lot of deserted and derelict rural areas suitable for the creation of tourist infrastructure, and in the long run, for the formation of *cross-border recreational space*, free from industrial use. Preservation of forests in this location has been provided due to prolonged existence of a strict frontier regime on the Russian-Finnish and Russian-Norwegian borders.

At the moment it is important to prevent deforestation carried out under various pretexts. This can be achieved on the basis of border and cross-border cooperation of the Russian regions administrations and the neighbouring countries municipalities. Only the joint efforts will help to solve the problems of environmental protection and make proper arrangements for rational recreational nature use. The term *border cooperation* implies coherent actions of the authorities at various levels, legal and physical entities, non-governmental

organizations of neighbouring countries, undertaken in order to achieve sustainable development of the border areas, the well-being of the population, the development of international cooperation and strengthening of good neighbourliness (Zigern-Korn & Sevastiyanov 2009).

One of the urgent tasks of border cooperation in the north-western region is the expansion of protected areas, the creation of “buffer zones” and “ecological corridors” between the individual pre-existing nature reserves. This will contribute to the preservation of natural landscapes, the maintenance of biodiversity and ecological balance, the enhancement of the local tourism infrastructure and the redistribution of tourist flows, and in some cases, the reduction of overall anthropogenic pressure on ecosystems.

In Russia, it is the development of recreational nature use that has become an effective tool for putting the ecological imperative into practice and the formation of *ecological thinking* of the population and regional administrations. For the district administrations, it is manifested by the balance of interests in the economic activities: *economic* (benefit from the rational use of natural resources), *environmental* (understanding the importance of conservation and respect for the natural resources and natural and man-made objects) and *social* (the need to respect the public interest of survival – creating jobs and raising the standard of living of the population). For the local population, ecological thinking is expressed in recognizing the inherent value of residence and the emergence of the desire to preserve and enhance the attractiveness of the



surrounding landscapes (Schwartz & Shestakov 2002; Drozdov & Basanets 2006).

In the first stage, the creation of the border network of “locally bound” national parks, which lie on either side of the border of Karelia and Finland (Paanajarvi-Oulanka, Kalevalskiy-Kalevala), and the international park Pasvik-Inari (Russia-Norway-Finland, an area of 14.5 thousand hectares; under construction) gains particular importance for the protection of natural systems and for the development of international tourism. A second step should be the further development of an inter-regional system of protected areas in North-West Russia and eastern Finland and Norway, forming the *Green Belt of Fennoscandia* (GBF) as a cross-border recreational space. The planned Green Belt is a broad band of forest (30 to 80 km), extending along the Russian boundary with Norway, Finland and Estonia from north to south, from Murmansk on the Kola Peninsula to the Karelian Isthmus and islands in the Gulf of Finland in the Leningrad region. This GBF concept is part of a larger *European Green Belt* (EGB) idea, running from north to south from the Arctic Ocean, along the previous European-Soviet Union border to the Mediterranean (Terry *et al.* 2006; Kortelainen 2010). The Green Belt of Fennoscandia includes the management system as well as other planned multi-purpose protected areas. This multi-purpose system of protected areas is its ecological and recreational frame. The leading role here belongs to national parks serving as a basis for attracting tourists. Effectiveness of the organizational and tourist activities will become a catalyst for

the development of local infrastructure and socio-economic revitalization of the population of municipalities and protected areas on both sides of state borders (Gromtsev 2009; Colpaert 2012).

Because of the increasing attractiveness of natural forest areas it is necessary to review the strategic development goals and the existing approaches to the evaluation of protected areas network formation as an environmental priority in the North-West of the Russian Federation (Titov *et al.* 2012). Since the largest forest tracts in the region remain in the territory of Russia, this border zone may become not only a valuable reserve of taiga forests and biodiversity, but also an attractive tourist region on a European scale. Besides, the preserved zone of taiga forest is a natural ecological corridor between the largest protected areas in North-West and protected areas of Finland and Norway (Figure 2).

One of the most significant aspects of the Green Belt is the inclusion of the territory of the NP Ladoga Skerries as one of the most important parts of the planned international environmental and tourism and recreation structure. The project of its creation was approved by the Ministry of Nature of the Russian Federation back in 2009, but a number of problems concerning the organization of this national park have not been resolved at the regional level yet.

It is important to note that the president of the Russian Federation has endorsed and supported the *RF Government Decree* of 22.12.2011, № 2322-р (Moscow), *On the Development of Specially Protected Natural Territories* and *The Concept of Development*

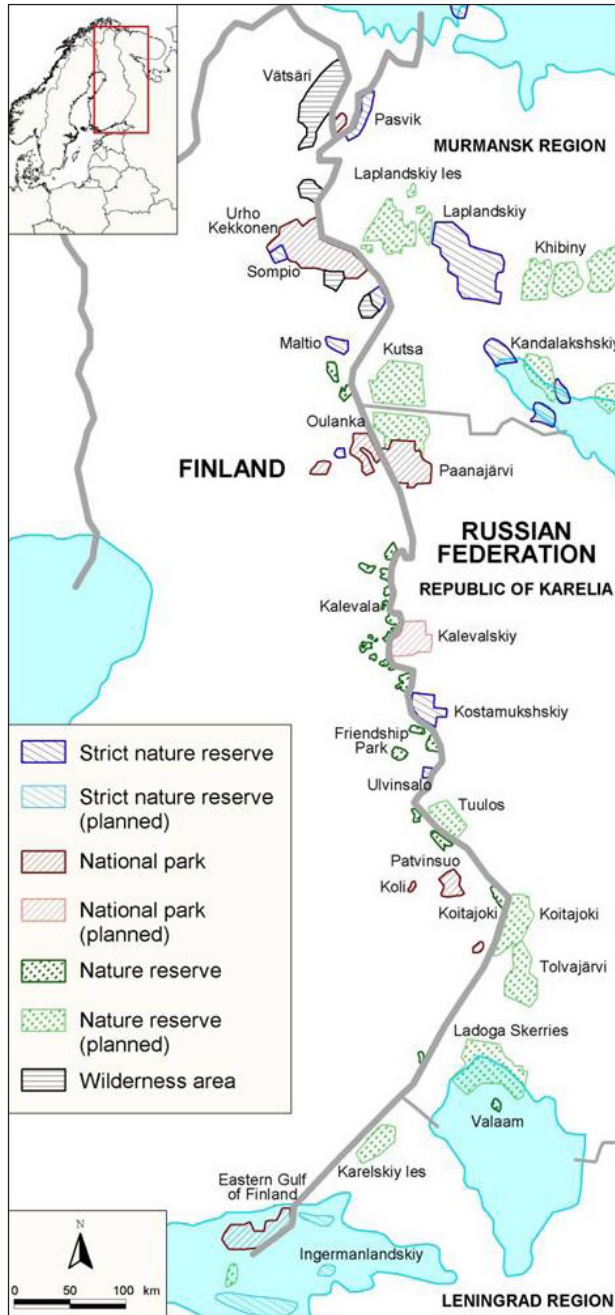


Figure 2. Ecological framework of the “Green Belt of Fennoscandia” protected areas stretching along the Russian-Norwegian-Finnish border (Colpaert 2012).



of *Federal Protected Areas for the Period up to 2020*, including an action plan for the development concept implementation. This plan provides for the creation in Russia of 20 new national parks and 11 new nature reserves by 2020, including Ladoga Skerries (Republic of Karelia) and Onega Pomorje (Arkhangelsk region), as well as a new reserve Ingermanlandskiy (on the islands of the Gulf of Finland in the Leningrad Oblast).

However, despite the above-mentioned *Government Decree of the Russian Federation* and other environmental declarations, the embodiment of decisions taken on paper is far from being turned into life yet. In particular, one cannot help but notice the lack of coherent environmental policy and necessary coordination between the administrations of the Leningrad Region and the Republic of Karelia in relation to the basin of Lake Ladoga and the lake itself. It takes too much time to solve urgent environmental problems associated with anthropogenic pollution of the lake water; the solution of legal problems related to land use issues and unauthorized construction on the banks of Lake Ladoga and other lakes has been inhibited. For many years, under various pretexts, the actual creation and opening of the NP Ladoga Skerries has been postponed.

In connection with the above, a very important initiative launched by the director of the Institute of Limnology of the Russian Academy of Sciences, Academician Rumyantsev should be noted. He proposes that Europe's largest Lake Ladoga is given a special status of a protected natural site, similar to Lake Baikal; that a Federal Law *On Protection of Lake Ladoga* is adopted and

a *Federal Targeted Program (FTP)* providing for specific measures for the conservation of Lake Ladoga as Europe's largest natural reservoir of fresh water, supplying water to over six million people, is developed. It should be taken into account that Lake Ladoga has a great socio-economic and tourist-recreational value for St. Petersburg, the Leningrad Oblast and the Republic of Karelia. Academician Rumyantsev came up with a proposal of setting up a special economic zone of Lake Ladoga tourist recreation, *The Ladoga Necklace*.

Undoubtedly the implementation of this proposal will be an important step in solving the environmental problems of Lake Ladoga and a number of economic and social problems in the Leningrad Oblast and the Republic of Karelia. Together with the international project *Green Belt of Fenno-scandia*, in the north-western region of the Russian Federation there should appear the Ladoga Skerries National Park as an important link in the chain of protected areas that make up the Ladoga Necklace. This conservation and recreation cluster will be presented by such protected areas as Nizhne-Svirskiy National Nature Reserve, Valaamskiy Archipelago Nature Park, Otradnoje Dendrology Park and 14 state reserves.

There is no doubt that the emerging recreational area, NP Ladoga Skerries, will soon become a very popular area for recreation and tourism. It will be attractive not only for the residents of St. Petersburg, other towns of the Leningrad Oblast and the Republic of Karelia, but also for tourists from Finland and other countries. As soon as the rational organization of tourist infrastructure in the NP Ladoga Skerries

has been developed, a sound base for cruise and yacht tourism on Lake Ladoga will be created, a large number of new jobs will appear and the maintenance of this national park will prove to be profitable.

The border location of the north-western region determines its position in the contact zone of interaction between different peoples and cultures. In this regard the potential importance and effectiveness of different types of tourism development in this region should be noted. The region may develop not only ecological, scientific and cultural tourism on the basis of national parks and nature reserves, but also ethnic tourism in combination with other areas and types of recreation. Interests in ethnic tourism, the main resource of which are minority ethnic groups that differ from the dominant people, are associated with their relatively compact areas of settlement. One can mention the Sámi ethnic groups living in the Murmansk region, Ingermalandians, Vepsians, Izhora, Vod in the Leningrad region, Seto in the Pskov region, etc. In addition, in the Leningrad and Pskov regions and the Republic of Karelia widely practiced is “nostalgic” tourism, oriented to Overseas and Ingrian Finns, formerly inhabiting these areas, as well as to their descendants, who want to visit the places of their ancestors’ former residence.

It is extremely important that the prospects for conservation, tourism and recreation activities in the north-western area recognized and supported by the leadership of the Russian Federation. Their understanding of the strategic role played by these activities should go hand in hand with the purposeful development of the region infrastructure covering the

road network, the hotel industry, catering and trade, means of communication and the range and quality of services provided. These requirements are the foundation for a successful tourist activity.

It should be understood that the remaining parts of the indigenous forest and unique natural landscapes in North-West Russia, with unspoiled lakes and rivers are no less valuable and attractive to foreign and domestic tourists than the historical and cultural monuments and works of art that can be found in the museums of St. Petersburg, Novgorod, Staraja Ladoga, Pskov, Petrozavodsk and other settlements in the region. In the near future, the unique natural features and pure natural water in the region, regarded as “ecosystem services”, will bring the country’s population no less economic benefit than oil and other mineral resources, the deposits of which are being exhausted.

## **Conclusions**

In conclusion, it must be emphasized that the north-western region of Russia is a border area requiring science-based territorial organization and the inclusion of depressed areas in the sphere of rational recreation management and international tourism. Balanced coordination of tasks and goals of the socio-economic development, on the one hand and environmental management, on the other is a path to sustainable development of inland areas and the region as a whole. At the same time, the importance of scientific organization of the protected areas network in the north-western region of Russia should not

be overlooked. For a new impetus to the region's economic recovery, it is necessary to support the programs of international and regional cooperation in the field of environmental protection, recreational nature management and international tourism. The Russian Federation should adapt to the European system of measures aimed at supporting investments in tourism infrastructure (tax breaks, credit and investment policies, etc.). There is every reason to claim that recreational nature management is an important sector of the region's economy. The development of a cross-border network of protected natural areas is now becoming an important factor in the preservation of natural and cultural heritage, rational territorial organization of society and an important condition for the development of international tourism and socio-economic stability of the regions. Further development of partnership throughout border areas of Norway, Finland, the Leningrad Oblast and the Republic of Karelia opens up new prospects for enhancing socio-economic development of the neighbouring territories.

The development of the network of national parks and protected areas of North-West Russia can be of crucial importance to the development of a viable and profitable eco-tourism industry. Nature based recreation and tourism can provide the means for local and regional sustainable growth. The potential to attract foreign and domestic tourists is substantial, as the area is rich in wilderness areas, rare and endangered species of plants and animals, historical and pre-historical sites and many picturesque villages.

To develop the potential for both economically and socially sustainable tourism much new infrastructure has to be developed, the road network has to be improved, hotels and restaurant, telecommunications, in short the entire sector has to be developed. However, many problems are still to be overcome, logistic, and economic obstacles, administrative obstacles, and a lack of financial resources all hamper the implementation of new parks and proposed reserves. In the long run the protected areas on North-West Russia will be a wilderness treasure which will prove to be of huge value to both Russia and western Europe, as the need for eco-tourism destinations will increase as the amount of natural space diminishes elsewhere.

## References

- Bocharnikova, M.V. & D.V. Sevastiyarov (2011). Modern recreational nature management in the countries and regions of the world as the direction of balanced development of nature and society. *In Proc. 2nd All-Russia Scientific and Practical Conference*, 267–277. Chelyabinsk.
- Colpaert, A. (2012). Green Belt of Fennoscandia as a model region for ecosystem services and the European green infrastructure. *In Proc. International Scientific and Practical Conference, Leningrad State University n.a. Alexander Pushkin*, 19–24. St. Petersburg.
- Drozдов, A.B. & L.P. Basanets (2006). Tourist natural management, environmental imperative and Russian potential. *Nature management and sustainable development. The world's ecosystems and the problems of Russia*, 332–341. KMK Scientific Press Ltd., Moscow.

- Gromtsev, A.N. (2009). Interregional conjugation systems of protected areas. Green Belt of Fennoscandia. *Scientific rationale for the development of a network of protected areas in the Republic of Karelia*, 70–77. Karelian Research Centre of RAS, Petrozavodsk.
- Gunton, T. (2003). Natural Resources and Regional Development: An Assessment of Dependency and Comparative Advantage Paradigms. *Economic Geography* 79:1, 67–94.
- Kortelainen, J. (2010). The European Green Belt: Generating Environmental Governance – Reshaping Border Areas. *QUAESTIONES GEOGRAPHICAE* 29:4, 27–40.
- Kosovtsova, T.I. (2010). Transformation of the cultural landscape in the European regions. *Geography and regional studies in sustainable development issues in the world today*, 130–135. BBM, St. Petersburg.
- Kurt, W. (2003). Sustainable tourism development from an international perspective. Tourism in mountain regions: the path to sustainable development. *In Proced. Int. scientific and practical conference*, 16–28. Maikop.
- National Park Russian Arctic, Ruskaya Arktika (2013). Available at <http://www.rus-arc.ru> (accessed 14. Jan 2014)
- Schwartz, E. & A. Shestakov (2002). Protected areas: a contribution to the sustainable development of Russia. Transition to sustainable development: global, regional and local levels. Foreign experience and problems of Russia. *Sustainable Development: Challenges and Prospects* 1, 287–292.
- Sevastiyarov, D.V. (2010). Organization of single recreational space and border cooperation as a tool for sustainable development of the regions of Russia. Innovative Developments for Services and Tourism. Innovative Developments for Services and Tourism. *In Proced. 2nd International Scientific and Practical Conference, Leningrad State University n.a. Alexander Pushkin*, 18–25. St. Petersburg.
- Sevastiyarov, D.V. & V.N. Bocharnikov (2009). Environmental geography as an interdisciplinary research area. *Vestnick of St. Petersburg University* 7:3, 111–123.
- Sevastiyarov, D.V. (2012). Natural and cultural heritage and the formation of geo-cultural space in the European North of Russia. Natural and Cultural Heritage: interdisciplinary research, preservation and development. *In Proced. International Scientific and Practical Conf. Herzen State Pedagogical University*, 142–147, St. Petersburg.
- Sevastiyarov, D.V. & E.M. Korostelyov (2005). National Parks of North-West Russia as recreational and tourism objects. *Regional Ecology* 1, 74–83.
- Terry, A., K. Ullrich & U. Riecken (2006). *The green belt of Europe: from vision to reality*. IUCN, The World Conservation Union, Gland, Cambridge.
- Titov, A., A. Kryshen & A. Gromtsev (2012). Creating the environmental framework of northern regions based on the concept of the Green Belt of Fennoscandia. *In Pearls of the coniferous forest. North Karelia Biosphere reserve conference*, 24–25. Joensuu. Available at [http://www.kareliabiosphere.fi/in\\_english/conference/](http://www.kareliabiosphere.fi/in_english/conference/) (accessed 15. Jan 2014)
- Vihervaara, P. & T. Kumpula, A. Tanskanen & B. Burkhard (2010). Ecosystem services. A tool for sustainable management of human-environment systems. Case study Finnish Forest Lapland. *Ecological Complexity* 7:3, 410–420.
- Zigern-Korn, N.V. & D.V. Sevastiyarov (2009). Formation of a common recreational space and border cooperation. *Izvestiya of RGO* 141:4, 74–80.