

# Analysis of natural prerequisites for the development of ecological tourism in the Belgorod region

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**Abstract.** The tourism industry is related to entertainment, leisure, new impressions, emotions and pleasure. Tourism liberates people from a sense of fatigue by a specific change of environment and activity. Eco-tourism today is becoming one of the most promising developing sector of tourism business. Ecotourism is something average between the measured leisurely walks and extreme sports. It is contemplative and moderately informative at the same time, usually sporty and mobile, quite impressive. Analysis of natural prerequisite for the development of ecological tourism is one of the stages of site assessment as natural resources are one of the important determinants of its use. The Belgorod region has high recreational and touristic potential. On its territory there are unique natural and recreational resources. Exposing, analyzing tourist recreation resources to tourism development in the Belgorod region, want to pay attention to the large potential of this field in the region.

## 1. Introduction

Many people connect the tourist industry with the entertainment, leisure, new impressions, emotions and pleasure. Tourism exempts people from a sense of fatigue by a specific change of atmosphere and activity. The tourism industry firmly is established in human life with its natural tendency to discover and understand the unexplored countries, monuments of nature, history and culture, customs and traditions of different countries. The last decade was marked by intensive development of tourism and recreation sphere because of the economic, environmental and social needs of the society. The economic component determines the high profitability of this activity, the possibility of obtaining investment for starting a business, small costs while opening new work places; ecological – the need to restore the health and vitality of people in environmentally clear conditions through the reduction of threat of the living space; social – population growth of the planet, its cultural level, prosperity, expansion of the range of needs that include the desire for a healthy lifestyle, active recreation [1, 2].

Appearance and development of ecological tourism was preceded by different kinds of background. Among them, a significant role increases due to the large number of tourists, the anthropogenic workload on natural, cultural and historical tourism objects [3, 4].

Ecotourism today is one of the most promising developing sector of tourism business. Environmental journey makes to follow certain rules and obligations of travel behavior and the voluntary acceptance of certain obligations towards the tourist area. Ecotourism is something average between the measured leisurely walks and extreme sports. It is contemplative and moderately informative at the same time, usually sporty and mobile, quite impressive [5].



## 2. The research problem

One of the problems of ecological tourism is to teach people to love, to honor and adore nature, to understand its principles, to handle it economically and with care. Tourist hotels, campgrounds, resorts, which are located between the plots of undisturbed wilderness, where pay homage to the lessons of ecology, preservation of natural and cultural heritage, are becoming more fashionable and entice even the experienced, trained and environmentally conscious travelers.

Ecotourism appeared on the basis of the demand for organic, untouched corners of nature. It is a journey in to places with relatively untouched, pristine nature. The main purpose of ecotourism is understanding the natural, cultural and ethnographic features of the territory, without disturbing the integrity of natural ecosystems. Such economic conditions, in which protection of nature is profitable to the local population, must be created.

Ecotourism includes several key criteria that are the most enticing for travelers. Most important for travelers in the survey area are the native plants, animals, natural landscape, geological rarity; and the next largest components are the features of the cultural environment, where the emphasis is made on the study and understanding of resources, the activities of tourists and other participants of the company have a sparing effect on the physical and cultural environment in the attended region [6].

Ecotourism should be linked with the concept of sustainable tourism, should not exceed the recreational capacity of the visited territories, to be acceptable to local communities and to support them. The difference of ecological tourism from other leisure activities is that it satisfies a desire and encourages communication with nature, prevents and reduces the adverse impact on natural objects and culture, and encourages tour operators and tourists to promote the protection of nature and socio-economic development [7].

Ecotourism has long been separated and became an independent kind of tourist industry. This component has natural, historical and cultural potential for the territory or region, including natural features, socio-cultural component to the traditions and customs, peculiarities of the household and economic activities [8, 9].

Analysis of natural prerequisite for the development of ecological tourism is one of the stages of site assessment as natural resources are one of the important determinants of its use.

Since resources that can be used to meet the population's needs for recreation and tourism, are allocated on the planet surface unevenly, a growing number of people travels with recreational purposes and motives. As a rule, recreational resources determine the formation of tourism potential in a particular region. Nature and traditional culture of the Russian Federation has great potential for development of recreational tourism.

## 3. Results and discussion

The Belgorod region is not exception and refers to Chernozem recreation region. Climatic conditions are relatively fair and are characterized as moderately comfortable. The region is rich in recreational potential, stable political environment, diversity of historical and cultural heritage, which contributes to the development of ecological tourism [10].

The Belgorod region has high recreational and tourist potential. There are unique natural and recreational resources, objects of national and cultural and historical heritage on its territory [11]. Important economic, cultural, social and sporting events are given here. Subjecting the analysis of tourist recreation resources and tourism development in the Belgorod region we want to pay attention to the large potential of this field in the region. The Belgorod region has rich origins of spiritual, moral, aesthetic and artistic culture. The cultural heritage of the Belgorod region was created over several centuries: accumulating, enriched, passed down from generation to generation. The region occupies the sixth place in ten of the best Russian regions with high living standards, and is an attractive Russian region in terms of tourism development. The tourist base on the territory of Belgorod region counts more than 2 000 monuments of culture and history, including 908 monuments of archeology, 245 monuments of architecture, 745 monuments of military glory, 35 of them are

monuments of history and culture of Federal significance. Unique natural areas of the Belgorod region are united in the wilderness area [12].

According to health and climate characteristics the Belgorod region is belonged to the developing the health effect.

The rocks, composing the surface, exposure of slopes, cross-country territories for tourism routes and tourist transport, mostly do not prevent the installation of transmission and in practice have no effect on the permeability of the territory. Composition of rocks and terrain are often the sources of natural attractions that are in the tourist industry are used as objects of natural excursions, and they are a powerful factor that controls land use.

The same amount of territory has a considerable weight in the formation of the tourist environment and largely determines its quality. Ecological and landscape conditions of the Belgorod region provide an opportunity for development in this area these types of basic recreational classes of permanent and temporary activities, such as cycling, hiking, skiing and sledding with the use of natural topography, equestrian walks, amateur and sport fishing, tours on inland waters. Along with the natural landscapes, which area takes about 9% of the region territory, agricultural and mining landscapes, which are recently recommended for use as objects of ecological tourism.

Belgorod is a region of water-shorts, but inland waters are widely used in tourist activities and contribute to the development of the recreational structures near the water reservoir. Rivers and large reservoirs are applicable for recreational purposes associated with the use of swimming facilities in a greater degree. Currently they are used for organizing and conducting various types of basic recreational activities, from swimming and relaxing in the warm season, relaxing by the water during the cool period associated with the contemplation, riding on boats, pleasure boats, jet skis, motor boats, water bicycles, water skis. There are the mineral waters in the region, which are the hydropathical resource. Hydrochemical composition of common mineral deposits makes the region promising for the development of territorial recreation systems.

The flora and fauna of the region determine the diversity of types of tourist and recreational classes and crafts. Native vegetation determines the aesthetic value of the territory. In the Belgorod region are growing the most attractive russian birch and oak forests, pine forests, feather-grass steppe and mixed grass meadows. Vegetation cover is an important factor in tourism, providing a huge impact on the permeability of the area. In the Belgorod region, road and path network is in a satisfactory condition. Representatives of the local flora and fauna, causing huge scientific and educational interest relating to rare plants, animals, and plant communities represent a resource base for eco-tourism. There are primarily protected areas. Maintaining biological diversity is an important aspect of sustainable tourism development in the region.

In order to preserve the specific natural systems and objects, to maintain the biological diversity and general ecological balance, in accordance with the Federal law "On specially protected natural territories" and the decree of the President of the Russian Federation and the decree of the head of administration of the region created a network of specially protected natural territories. It included the earliest existing reserves as well as the newly created protected areas. The largest number of protected areas was declared in Central, Alexeyevsky, Volokonovsky, Yakovlevsky, Valuysky, Starooskolsky areas. Today, protected areas are natural complexes that have environmental, cultural, and aesthetic and recreation importance and a special protection regime. The system of specially protected natural territories of the Belgorod region was formed mainly in 1991-1995. The initial point in creation of the special protected natural territories of region can be considered the establishing of the state natural reserve "Forest on the Vorskla" in 1924 on the territory of the former Sheremetev's "Zakaznaya small woods".

There is a network of specially protected natural territories in Belgorod region. It includes a state nature reserve "Belogorie" and regional protected areas.

Natural areas with the possibility of establishing conservation territories include: tracts "Borky", "Gorodishche" and "Snowy Alps" in Valuyskiy region, tracts "Gniloye", "Kamennoye", "Pozharishche" in Veydelevsky region, steppe plots and chalky rock exposure along the river Aydar of

Rovensky region, etc. Prepare the materials for the creation of new nature reserves and nature parks ("Prokhorovsky", "Gubkinsky"), the protected area "Aydarsky", and also protected areas around health-improving areas and mounds.

Currently, the area of specially protected natural territories in Belgorod region reached 51074 hectares, which is 1.9 % of its territory. Protected areas of regional importance 210 nature reserves with a total area 34498 hectares, 13 therapeutic areas with a total area of 328 hectares, 138 natural monuments with a total area of 96 hectares, 2 parks, nature area of 12,000 hectares, 1 dendrological Park and a Botanical garden with an area of 82 hectares, 2131 hectares are areas of the reserve "Belogorie", which has a Federal status [13].

The objects are placed in the region unevenly.

**Table 1.** Specially protected natural territories of Belgorod region

No.	Region	Protected natural areas of the region		
		Quantity	Area, ha	The share of the relevant area, %
1	Alekseevsky	18	802,24	0,45
2	Belgorod	13	15815,5	10,72
3	Belgorodsky	5	1502,5	9,81
4	Borisovsky	14	2457,83	3,78
5	Valuysky	29	2467,97	1,31
6	Veydelevsky	5	75,01	0,06
7	Volononovsky	20	468,15	0,36
8	Graivoronsky	8	268,74	0,31
9	Gubkinsky	12	1150,03	0,75
10	Ivnyansky	9	535,04	0,61
11	Korochansky	8	55,08	0,04
12	Krasnensky	5	115,03	0,14
13	Krasnogvardeysky	82	2692,22	1,53
14	Krasnoyarskiy	5	184,1	0,38
15	Novooskolsky	6	1017,04	0,73
16	Prokhorovsky	12	72,08	0,05
17	Rakityansky	11	296,02	0,33
18	Rovensky	9	1338,1	0,98
19	Starooskolsky	17	1588,01	0,94
20	Chernyansky	13	1341,06	1,09
21	Shebekinsky	29	1242,96	0,67
22	Yakovlevsky	22	763,14	0,70
Belgorod region		352	51074	1,9

After analyzing these tables we can conclude that the leaders in the number of objects of protected areas are Krasnogvardeysky (82), Valuysky and Shebekinsky (for 29 units). But among the specially protected natural territories the leaders are Belgorod (about 15800 ha), Krasnogvardeysky (about 2700 ha) and Borisovsky (about 2500 ha) areas.

Analysis of landscape and natural recreational potential for development of ecological tourism in the area allows to highlight areas of high and medium potential to meet the needs of the population in natural environment.

The region can highlight areas of high environmental and potential for recreation and tourism. The first category – the Borisovsky region, the second – Belgorod, Yakovlevsky, Prokhorovsky, Gubkinsky, Chernyavsky, Novooskolsky, Krasnogvardeysky, Valuysky and Rovensky regions, the

remaining territory of the region according to the degree of satisfaction of population needs in the environmental relaxation can be attributed to the third category.

Complex (landscape) reserves are aimed to protect both flora and fauna of the territory; they can also include separate monuments of nature. Among the most unique we can list the following: tracts "Borky", "Gorodishche" (Valuysky region) – marmots colony, chalky rock exposure and outcrops, relict communities; "Bolshoy log" (Krasnensky region) - relict plants and spring.

Botanical reserves reflect a representative floristic composition of the region and are the most studied ones. The greatest interest is Botanical reserves with calciphyte flora and relict species: "Becarukovsky Bor" (Shebekinsky region), the number of areas in Valuysky, Veydelevsky areas; areas of forb-meadow and forb-feather grass steppes: "Hvoshchevatoye" (Krasnensky region), "Gniloye" (Veydelevsky region), etc.; the groves: "Cherepennoye" (Gubkinsky region), "Korabelnaya oak-wood" genetic reserve of pedunculate oak (Alexeevsky).

There are 352 of specially protected natural territories in Belgorod region. There are no specialized entomological sanctuaries in the area. There are various groups of invertebrates living on the specially protected natural territories: steppe, forest, oak-wood, the number of species of relict and endemic. From this point of view, any of the categories of especially protected natural territories can be attributed to the category of complex protected territories. As an example: "Korabelnaya oak-wood" is only known in the region as the habitat of wingless locust; "Solomenskaya oak-wood" – a number of species which are protected at the federal and regional levels.

It is important to note the existence of monuments of nature. There are the smallest protected areas. The vast number of monuments of nature is taken by the springs, karst springs, and long-living oaks (400 years). These objects can be named as symbols of Belgorod region [14].

Represented in the network of specially protected natural territories, objects reflect fairly representative group of unique areas: the karst funnel "Gornyashka" (Sary Oskol); geological profile of the Chalky career of Belgorod Plant of building materials; "Monastic cavern" (Valuysky region); old estate (Stankevich, Boldyrev, etc.) and the Park "Arkhangelsky" (Gubkinsky region); burial mound "Sciffskoye gorodishche" (Borisovsky region); underground monastery "Cholkinskiye caves" (Chernyansky region). This kind of protected areas has significant development potential.

We should also note the importance of parks and green areas. They are concentrated mainly around the regional centers. These include the artificial planting of pine and oak forests – the largest specially protected natural areas of region.

#### 4. Conclusions

After analyzing the territory of the Belgorod region, we can assume that tourists suggest a visit of ecological routes and paths. For the design and justification of ecological routes, modern techniques are currently used to create training and educational ecological paths and routes. In the region there are already a number of popular ecotourism routes, which, unfortunately, have a lack of information. As a rule, these tours are a mix of educational, popular-scientific and thematic tours, which run on a specially equipped ecological trails.

For the design and justification of ecological routes, modern techniques are currently used to create attractive tourism products that meet the preferences of target consumers (coordinated solutions in terms of assortment, quantity, completeness and level of service of the tourist product). In the development and design of environmental routes various factors are taken in account: physical-geographical and socio-historical properties of the area, within the tourism product is developed, age, professional, ethnic and psychological criteria of the group, which is focused on the tourism product, qualification of guides, investment opportunities of ecotourism development. In the region, there are already a number of popular ecotourism routes, which, unfortunately, have little demand and a lack of information.

Evaluation of objects and phenomena of cultural and historical heritage suggests the possibility of development of cultural-educational, religious, pilgrimage, rural, ethnographic, ecological and

scientific tourism on the territory of Belgorod region. Thus, the Belgorod region has a rich and diverse recreation potential conducive to development of ecological tourism.

Now travel agencies offer a variety of routes, including an all inclusive environmental scientific-popular weekend tours that cover all the splendor of nature Belgorod region, where the journey will be momentous trip – a discovery which will stimulate the development of tourism in the region and to solve the problem of unilateral approach of travel companies.

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