

## **Problems of Recreational Use of the World Natural Heritage Territories (Ubsunur Hollow Example)**

**Elena Petrova**

PhD, Senior Researcher, Faculty of Geography, Moscow Lomonossov University,  
119899 Moscow, Russia

Email: [epgeo@mail.ru](mailto:epgeo@mail.ru); [epgeo@geogr.msu.ru](mailto:epgeo@geogr.msu.ru)

**Abstract:** Six Russian territories are included already into UNESCO World Natural and Cultural Heritage List. Several more territories have to be included into the List in the near future. The Ubsunur Hollow that is situated in the very center of Asia on a border between Russian Republic of Tyva and Mongolia will be among them. This place is probably the only one in the world where almost all the Earth nature zones (including the northernmost deserts and southernmost tundra) are met on a relatively small by size territory. Besides one can meet here the unique historical monuments – numerous burial-mounds and stone steles from 2–1 Millenniums B.C. The traditional nomad stockbreeding as well as ecological tourism can develop on this territory as main types of nature use. The tourists could visit the Reserve cluster plots where they could acquaint themselves with the popular traditions and enjoy the nature. Unlike the homelike European regions the nature of the Ubsunur Hollow has been preserved for the present in practically untouched condition. The remoteness and hard accessibility of this territory don't contribute to the mass tourist flows attraction. In the future it is planned to organize here the recreational use by small tourist groups that will observe the strict rules of behavior. Large hotels and other massive constructions of the tourist infrastructure won't be built here. The tourists will move mainly by horses or by feet using the existing roads and paths and will live in tents and yurts. The definite flow of the financial sources will be possible together with the pure educational effect.

### **INTRODUCTION**

6 Russian territories are included already into UNESCO World Natural and Cultural Heritage List: Virgin Komi Forests, Baikal Lake, Volcanoes of Kamchatka, Golden Mountains of Altai, Western Caucasus and Curonian Spit. Such unique territories as Ubsunur Hollow, Valdai Upland, Green Belt of Fennoscandia, Delta of the Lena, Putorana Plateau, Magadan Nature Reserve, Commander Islands, Vrangal Island, Daurian Steppes, Central Sikhotealin. Bashkirian Urals, Kuril Islands will be included into the List in perspective.

Ecological tourism has to become the main possible type of use on those territories. It allows managing the tourists' flows helping them not only to receive knowledge about nature and to gain skills of communication with it, but also influence it in a minimal way.

### **MONITORING AND MANAGEMENT OF VISITOR FLOWS ON THE TERRITORIES OF WORLD NATURAL HERITAGE. ECOLOGICAL TOURISM.**

The majority of the researches understand the ecological tourism as an organized type of tourism combining the rest with the receiving of knowledge about the concrete territory and about the questions of relations between man and nature as a whole.

Ecological tourism determines its main goal as the awakening of interest to the Nature, creation the sense of respect for it, education of a careful attitude to it, the man's understanding of the responsibility of environment preservation for the forthcoming generations. The eventful development of this kind of tourism during last years is connected in many countries of the world with the intensification of the society's attention to the solving of the ecological problems that were met by the Earth's population.

There exist several types of the ecological tourism: scientific, excursion, walking-cognitive, educational, individual and others. However all of them assume the execution of the definite and rather hard rules of behavior in nature. It means that the tourist has not to make the unfavorable influence to the nature complexes of the territory where he spends his free time. As soon as the ecological tourism is characterized with the lowest influence on the environment in comparison with the other types of nature resources use including different recreational activity types, it has to have the preference during the process of choosing of the possible variants of development on the territories of World Natural and Cultural Heritage.

One of the most effective methods of monitoring and management of visitor flows on the World Natural Heritage territories is the use of ecological routes organized as the so called

Educational Nature Paths. This comprehension appeared at first in the beginning of the XX Century in the USA. The first Educational Nature Path had been opened in 1922 as a pedestrian path via the Appalachian ridge thanks to the forester Benton MacKey's proposal. It was named by him «the Reserve for the Pedestrians» and became very popular rather soon. Later on such paths appeared also in other regions of the USA and in many other countries of the world (V.P.Chizhova, E.G.Petrova, A.V.Rybakov, 1985).

The pedestrian path created in Crimea in 1916 in 7 Km from Sudak city could be counted as a first path of this type in Russia. It received a name of "Golitsynskaya" because its construction had been done due to the instructions of the Prince L.S.Golitsyn. However that path had been created mainly for the admiring of the natural objects and for active leisure and is closer by its character to the tourist paths than to the educational ones (V.P.Chizhova and others, 1989). The natural paths received their real wide spread in Russia only beginning from the 1970s. The Staff members as well as the students of the Faculty of Geography of the Moscow State Lomonossov University also took an active part in their construction.

The Educational Nature Paths are in reality the special tourist routes. From one side they allow to show the visitors the nature of the particular territory in all its beauty and peculiarity, to acquaint them with the local nature sights and to give them the necessary ecological knowledge. From the other side they are constructed in such a way that the most vulnerable parts could be protected from the undesirable invasion. That's why the Educational Paths answer to the ecological tourism goals in the whole sense. It is very important to include into such paths the most typical for the region and the most interesting and informative objects during a process of choosing. At the same time the path has to go round, for example, the habitat places of the rare animals, the nesting places of birds with the purpose of not trouble them. The information about the path and about the represented objects on it could be placed either on special information billboards placed directly on the path or in booklets. The detail path plan with all the points-stops as well as the necessary explanations are placed in the booklets. The tourists receive such a booklet and walk by path independently or accompanied by the instructor.

According to the different ecological tourism types the Educational Paths with different functions and level of complexity (for specialists, students, pupils, parents with children, pensioners and so on) could be created. The whole chain of such paths' use on a concrete World Natural Heritage territory helps to regulate the recreational load on it. The visitors' monitoring is conducted by their registration on entrance or in the starting point of the path. Simultaneously not only the visitors' number but also their arrival purpose and choosing

category of the route are fixed. In a case of reaching of the maximum possible load on any of the paths the visitors are offered to use another route or they are stopped in the starting point. In necessity the recreational capacity could be raised with the help of the Educational Paths. It could be reached by the improving of the paths, by growing of duration and extension of the routes and by the widening of the paths network.

#### UBSUNUR HOLLOW EXAMPLE

Ubsunur Hollow is situated in the very center of Asia on a border between Tyva Republic and Mongolia (between 48-50 degrees North Latitude and 91-99 degrees East Longitude) (Figure 1). It is probably the only one place in the world where almost all the Earth natural zones are met on a relatively small territory (the extension of the hollow from North to South is just about 160 km, from West to East – 600 km). The hollow bottom (1000 m above the sea level) is occupied by sand and clay deserts. They are changed by sandy and dry steppes. Higher by the mountain slopes they change into forest steppes and on the heights of 1500-2300 m – to the forest belt. The different types of forests are presented in it: on the North slopes there are mixed forests, in the river valleys – larch, spruce, poplar forests, in other places – cedar forests. In the high mountain belt the mountain tundra predominate. The meadow vegetation develops in the places where snow is collecting and the ground waters are coming out. And at last higher in the mountains one can observe snows and glaciers.

Such a landscape diversity appearance is obliged to the unique geographical position of the hollow. From all sides it is surrounded by mountains: from the North – by the East and West Tannu-Ola ridges and by Sangilen Plateau; from the South – by Bulan-Nuru and Khan-Khukhey ridges; from the West – by Tsagan-Shibetu ridge and by Turgen-Ula Massif (Mongolian Altai); and at last from the East the hollow is closed by the watershed with the Delger-Muren river valley. The role of the "inner sea" that receives all the waters from the mountains is played by the salty lake of Ubsunur, that gave its name to the whole hollow. The closed character of the hollow stipulates its microclimate: the warmth and humidity are spread unevenly. The bottom is warming by the sun larger than slopes and summits of the surrounding mountains. At the same time they receive the larger precipitation amount.



Figure 1. Study area: Ubsunur Nature Reserve. Cluster Plots: 1. Mongoon-Taiga; 2. Ubsunur; 3. Oruku-Shinaa; 4. Aryskannyg; 5. Yamaalyg; 6. Ular; 7. Tsuger Els (S.Mikhailov & E.Petrovskaia / Greenpeace Russia).

Except the natural originality the Ubsunur Hollow is a monument of the historical and cultural heritage. People started to settle this territory beginning from the early Pleistocene (there is a data about discoveries dated at the period of 350 thousand years ago). Till nowadays the majority of the very interesting archeological monuments, such as sacrificial-commemorative burial-mounds from the Neolith epoch, burial-grounds and “prayer stones” from the Skiffs epoch, the large number of steles, stone man statues as well as rock carvings and the ancient people encampments are preserved here. Only in the Tyvinian part of the hollow 15,000 burial-mounds were discovered and described under the governance of Pr. V.Bougrovsky (Global..., 1996).

The nature reserves with cluster (isolated) structure were created in 1992 – first in Russian and then in 1993 – in Mongolian parts of the Ubsunur Hollow. The Russian Ubsunur Nature Reserve consists of seven plots that present most brightly the main types of the region ecosystems. Five of them are of great interest for the ecological tourism.

The westernmost, the most remote and the most hardly accessible plot have the name of Mongoon-Taiga. The eternal snow and large glaciers (the unusual phenomena for such an arid region) are lying here on a height of 3970 m. Lower than glaciers one can find the Alpine moss-lichen meadows, and in valleys – forests created by dwarf birch and palmate bush. Such a rare species as snow leopard has been preserved here as well as Siberian roe, Altaian argali (the largest sheep in the world), and gray marmot. Among birds the most interesting species are Altaian snowcock, Alpine ptarmigan, black vulture and banded goose.

The Aryskannyg-Khem cluster (with the plots of mountain tundra, sub alpine meadows, mountain taiga and forest steppes in lower places) is situated on the southern slopes of the East Tannu-Ola ridge. The typical tundra animal and bird species, such as wild reindeer, ptarmigan and Mongolian plover as

well as taiga species (Siberian deer, brown bear, lynx, wood-grouse and tawny owl) inhabit those places.

The Ular cluster with the taiga, forest tundra and tundra (the southernmost tundra in the world) vegetation groups, is situated in the eastern outskirts of the Sangilen mountain massif. The animal hood here differs by richness and diversity. Snow leopard, brown bear, wild boar, glutton, wolf, lynx, otter, marten, sable, badger, Siberian weasel, musk-deer, Siberian roe, Siberian deer, reindeer, as well as wood grouse, hazel grouse, black grouse among birds are met there.

The northernmost sandy deserts in the world are represented in Tsuger-Els cluster. It is possible to observe here the whole complex of sand dunes beginning from those that completely lost the vegetation and blow with the wind till the dunes fixed with elm and other desert plants. The inhabitants of those places: steppe hare, rough-legged jerboa, Jungarian hamster and such rare species as Roborowski hamster and long-tailed gopher, among reptiles – variegated agama, small sandy boa, among birds – steppe and bearded partridges, bustard. Midday sandy snake could be met on the unfixed sands. In some places one can find tarbagan that became rare. The real birds’ kingdom or fresh water lake Tore-Khol is situated in the buffer zone of that plot. The nesting places of red hawk, black kite and gray heron are located on its shores, as well as many species of the water birds as swans, been and gray geese, cormorants, lake and gray gulls are met there. From time to time the great black-headed gulls were marked. During the flight period the egret, gray crane, different kinds of sandpipers are rather usual.

The Yamaalyg cluster represents the peculiar granite island among wavy steppe lowland. The ornithological complex of the Outlier Mountains and rocks is also rather rich. Such rare birds of prey as falcon-hobby, falcon-saker, peregrine, shot-toed eagle are of special value. The kestrel and long-

legged buzzard are widespread there. The steppe horned owl and eagle owl are not rare. The whole complex of the cultural-historical monuments is located in the southern part of the massif. The compact burial place with about 350 burial grounds and stone steles from 2-1 Millenniums B.C. was discovered there (Petrova E.G., Petrov A.V., 2000).

If the Ubsunur Hollow will be recognized as the World Natural and Cultural Heritage territory, the intensive economic activity will be excluded here completely. The traditional nomadic cattle breeding as well as the above-mentioned ecological tourism could develop on this territory as the main types of nature use.

The nomadic cattle breeding remain the main economic activity in the Ubsunur Hollow for more than two and a half thousand years. It is most adapted to the local natural peculiarities. Mainly sheep, as well as goats, cattle, horses and yaks are bred here. One can find there also the camels that normally were bred by Tyvians at grass all the year round. For their winter camps the nomads traditionally choused steppes and southern slopes of the forest belt, for spring camps – the good heated slopes with southern exposition. The upper part of the mountain steppe belt and Alpine zone as well as upper reaches of larger rivers served as summer pasture grounds. The hollow bottom with rich grasses and good watering places served as autumn pasture grounds. The seasonal pasture changing helped not only to provide animals with feed better, but also gave the possibility for vegetation to restore, made lower its treading by cattle as well as the soil compression, didn't lead to the development of the erosion processes.

Nomad cattle-breeders depended very much from nature. That's why they treated to it with care from the ancient times. They probably were faced with the ecological problems more than once and for centuries developed the definite ecological culture of a balanced co-existence with the environment. Tyvians had the rituals of worship to the sky, water, fire and wood. Many lakes and springs, mountain tops and passes, as well as ancient monuments – steles, burial-grounds were sacred for them and had the cult importance. It contributed to the preservation of the steppe ecosystems, conservation of many plants and animals' populations, that are rare and small in number in other regions (Global..., 1996). That is why the conservation and rebirth of the popular traditions in Nature Reserve is not contrary to the nature preserve status of the territory and contributes to its maintenance.

The unique natural peculiarities of the Ubsunur Hollow, existence of historical, archeological and cultural monuments, traditional nomadic way of life, its ethnographical peculiarities, popular home crafts give the wide opportunities for development of different kinds of ecological tourism in the Hollow: 1) proper ecological tourism; 2) ethno-ecological tourism; 3) scientific tourism. Ethno-

ecological tourism implies not only research of the natural peculiarities of the territory but also the acquaintance with traditional way of living of the local population. Scientific tourism may be divided into observation and photographing (video shooting) of birds, small mammals, insects, plants, nature sights as well as of archeological monuments.

Unlike the lived-in regions of Europe, the nature of the Ubsunur Hollow has been preserved for the present in practically untouched condition. Remoteness and hard accessibility of this territory create the natural obstacles for the mass tourism development here. Therefore the territory does not have a task of tourist flows limitation for a while yet. On the contrary the territory possesses the task of tourists attraction here. At present the amateur tourism now exists in a stage of development and industrial tourism – in a stage of formation. Institute of Geography of Russian Academy of Sciences together with Greenpeace Russia and Faculty of Geography of the Moscow State Lomonosov University elaborated the scheme of the ecological tourism development in the hollow and conducted an expedition via possible routes.

Problems of Tourism Development:

- Lack of tourism development plan for the hollow territory;
- Difficulties of tourists delivery (lack of direct flights to Tyvian capital city Kyzyl, lack of regular bus communication between Kyzyl and Erzyn – the administrative center of the Nature Reserve);
- Insufficient development of the recreational infrastructure: there is no auto transport for traffic operations, lack of tourist bases;
- Lack of local tourist companies and economic possibilities;
- Lack of necessary management level of tourism development.

However, the originality of these places, their obvious value as for scientific research as for the purposes of the ecological education and training will undoubtedly contribute to the ecological tourism development here in the near future. Nature Reserve leaders and local administration are concerned with this process. Tourists including foreigners will be able to arrive here individually or in small groups being accompanied by guides from the number of local inhabitants (Nature Reserve staff) to visit all the main cluster plots of the Reserve as well as those interesting places, that were not included yet into the protected natural territories composition.

The recreational use by small tourist groups (4-10 persons) is planned to be organized here in the future with maintenance of strict rules of behavior in the natural environment by them. The numerous routes with different duration (beginning from 4 days till 3 weeks) are worked out. The tourists will move mainly by horses and by feet using the

existing roads and paths (some water and bicycle routes are also planned), to live in tents and yurts. The use of the preserved popular traditions with recreational purposes (in particular, the Khoomey guttural singing as well as the existing elements of shamanism) looks very important.

The definite inflow of the financial sources that could be used for the Nature Reserve development and in perspective for the whole hollow territory will be possible together with pure educational effect. In conditions of rebirth of the traditional nature use and ecological tourism development in the Ubsunur Hollow it will be quite possible to decide the main existing problems of nature use. The illegal hunting for argali, snow leopard, Siberian deer, roe, some species of predatory birds (for example, falcon-saker), water birds as well as collecting of antlers are among the main existing troubles. The violation of pasture grounds rotation, intensive cattle pasture in river valleys and in the foothills, especially near the settlements and in watering places, lead to the degradation of steppe and meadow eco-systems. Forest and steppe fires also cause a great damage.

Strengthening of the existing recreational infrastructure as well as the creation of its new objects are necessary for the development of the valuable ecological tourism. Big hotels and other large constructions of the tourist infrastructure will not be built there. However the Visit-Center organization (Center of ecological education) in Erzin on a base of the Nature Reserve Headquarters answers to the aims of the ecological tourism development. It will be necessary also to equip the stationary places for tourist stops in some of the cluster plots and in their buffer zones. First of all the equipment for tents, fire places, toilets and dust-heaps need to be built on a shore of the Tore-Khol Lake that undoubtedly is the most attractive place for such purposes. It will be necessary to equip more thoroughly the stop places for the ecological tourists at the downhill of Oulug-Khaiyranan-Dag Mountain. One can find the sacred spring for Tyvinians and definite infrastructure objects that exist there already. It is essential to think about the equipment of the stationary stops and in the most remote Mongoon-Taiga cluster plot as well to acquaint the tourists with Alpine and glacier landscapes.

## CONCLUSIONS AND OUTLOOK

It is possible to count as a whole that, excluding several small by size and difficult of access plots, the territory of the Russian part of the Ubsunur Hollow has significant perspectives for the development of foreign as well as of domestic ecological tourism. The unusual beauty and originality of landscapes presented here, the large number of preserved in a good condition archeological monuments will not leave anybody

indifferent. At the same time only ecological tourism has a right to exist here, because all the other types of recreational activity (intensive, in the first place) can negatively influence on the preservation of natural complexes of the future World Heritage territory.

The problem of monitoring and management of the recreational flows doesn't face sharply the territory yet because of a very small number of tourists. Nevertheless in future it's not worth to ignore the development of the monitoring system, taking into account the existing experience of other popular for tourism territories. Doubtlessly it will be possible to use the experience existing in the other countries of the world. Correctly organized (not mass) tourism will allow not only to preserve the existing slightly disturbed condition of the natural complexes, but will also create the base for finance sources flow into the development of the traditional branches of economy in the region.

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