

SPECIAL NATURAL RESERVE OF BANAT SANDY TERRAIN- PROTECTION AND DEVELOPMENT OF ECO-TOURISM

Jovan Romelic, Pavle Tomic, Sasa Kicosev
University of Novi Sad, Institute of Geography,
Trg Dositeja Obradovica 3, 21000 Novi Sad, Yugoslavia

Banat sandy terrain is the area situated in the south-eastern part of Vojvodina, i.e. southern Banat. According to Bukurov (1984) it is a whole sandy area comprising Dubovac, Kajtasovo, Grebenac, Sagali-ko hill, Banatski Karlovac, Vladimirovac, Mramorak, and Deliblat. It is in an elliptic shape with the dominating line (53 km) in the direction south-east to north-west and the short way in the north-east and south-west direction (25 km). The surface area of the sandy terrain is 300 square kilometres.

Tourism and geographical position

The location of the sandy terrain towards international tourist destinations is relatively adequate considering the fact that the north borderline area is almost entirely connected to the international motorway E-94, Belgrade-Pančevo-Vršac-Timisoara-Bucharest, which presents a part of the east European (Mediterranean) tourist thoroughfare.

Internally, it connects the highest and most attractive parts of Peščara, with big, neighbouring and thus most significant emission centres: Belgrade, Pančevo, Vršac. Also, there are several regional directions that are closely connected with these that connect strong emission centres like Zrenjanin and Kikinda, which do not possess tourism destinations of the quality and specific attractiveness such as that of the Banat sandy terrain in their neighbouring area.

On the other hand, the southern part of Peščara is in contact with the tourism direction Podunavlje, which connects Bela Crkva, Kovin, Smederevo and Požarevac. To this road near Smederevo and Požarevac, the sea line direction which joints tourism localities and emission centres in eastern Serbia is connected. Peščara is a specific and unique destination and in its comprising zone possesses these areas, though no satisfactory contacts have been established so far. Understandably, the approximation of the whole zone, regarding its quality and potentials, can be developed onto the rest of Vojvodina, especially Novi Sad.

Preservation of natural values and rarities as the basis of tourism development

Banat Peščara has a status of Special Natural Reserve. This was influenced by natural values which could be put into the following categories: the biggest accumulation of sand in Panonian plain, relief has a specific dune character, between the dunes there are depressions making up the, so called, mini natural-geographic complexes; Hydrographically, the widest area is with no water flows and its geological specific characteristic is that it has the sand particles of the smallest granulation in the Panonia plain. Pedologically, there are areas with a great diversity of types, subtypes and varieties i.e. from the initial to chernozem and it possesses the variety of flora made up of 891 species many of which have been protected as rare and extremely rare strains. It also has its autonomous woodland and steppe vegetation which is no longer existent in other regions of the plain. Additionally, it is very rich in fauna and many species have been protected. All the stated values are of a great scientific, educational and historical importance.

Specific values that are to be sustained by establishing their status as being protected categories are:

1. Areas of a particular natural significance:
 - a) Solely natural reserves (279,11 ha)
 - b) Reserves for sustaining the genetic stock (2.007,79 ha)
2. Natural attractions:
 - a) Natural monuments (436,06 ha).

Measures for preservation as well as certain conditions for the use of protected natural goods have been implemented and thus the **Principle of Life Preservation** applied.

This is a very advantageous command and request since the only perspective of a successful tourism development lies in the preservation based on ecological parameters and capacity of the area.

Therefore, we have determined certain measures and protective plans: general (1) and (2) specific. General measures and plans include overall conditions and criteria for protection of complete values of the region, whereas the specific ones are given as requests, i.e. restraints. These include the following problems: regulating the regime of building thoroughfares of different categories, conditions and regime of cattle pasturing, building of all kinds of objects (groves, pens, cottages, wells etc.,) protection against fire as well as the type, dynamics and the form of all tourism activities.

Cultural-historical values

On the area of Banat Peščara there are specific trails of human life and actions. Many of them are in the phase of disappearing quickly or being under change through which they lose their authenticity. There is a whole lot of objects which could be reconstructed and conserved and in that way present an important part of the protected area, i.e. values upon which we could base our cultural and educational tourism. These include, first of all, the only settlement built in Peščara named Šušara, with elements of specific constitution of objects for living in, working and supplying water, which should urgently be placed under protection and preserve its authenticity. Therefore, apart from the planned museum complex on Čardak, Šušara could, because of some of its values, become a settlement with stationary objects which would be regarded as museum quality values.

Besides, there are 25 cottages in Peščara itself with groves where foresters lodge. Some of them that are situated along paths for visiting guests, especially experts, members of organised tours and students of the school in nature, could be an object of their visit, provided that these objects are complemented with the huge number of materials which testify about their origin and purpose. Unused objects could be protected against deteriorating and be used for accommodating nature lovers on the principle of time share.

Also, ancient crafts, customs, costumes and similar, beside the fact that they can be used as museum pieces, could also be presented on certain manifestations, especially those organised the excursion-recreational locality called "Devojački bunar" and where they can be observed by a number of people, bearing in mind how widely visited these events are. Out of all crafts the one that has been a subject on these events is apiculture, though many old crafts and their products can be included here and present specific souvenirs.

Receptive factors

Special natural reserve, apart from the school in nature, is not accounted for a large concentration of objects for purposes of residential tourism. For this, some of the rudimentary tourism objects have been built- a hotel on the Devojački bunar site, mainly meant for the participants and organisers of certain manifestations. From complementary objects there are: student accommodation, teaching objects and resources for outdoor teaching in the locality of Čardak. For occasional needs of other

forms of prolonged residential tourism there are rudimentary as well as complimentary objects in bigger settlements on the outskirts and in the vicinity of Peščara - Vršac, Bela Crkva, Kovin and others.

Restaurant facilities are in the form of cafeteria and are located in the resort of Devojački bunar. Also, restaurants, taverns, diners and the like, are situated in the area that belongs to the borderline zone of the Reserve. These do not satisfy the development plans of eco-tourism and their further building and location must be chosen and carried out in compliance with the realisation of individual segments of tourism product of Banat sandy terrain. Alongside these they can, depending on whether visiting or residential tourism is more frequent, have either a stationary or mobile/varying character.

Taking into account the norms for area protection, housing capacities could offer around 1700 beds, and inkeeping with around 3000 seats indoors and 4000 outdoors. Excursion-recreational localities could make use of the parking spaces for 4000 cars and 150 buses. Among them it is distinctive that the most ambitious plans are connected with Devojački bunar which possesses certain tourism tradition and communication advantages.

Communication factors

Excursion-recreational localities which include building of houses for rest and recreation (secondary stay) in the regional sense has a relatively discursive proximity. Thus, their evaluation, regarding communication factors and the surrounding competitive or complementary values require complex analysis. Through building of the bypass which doesn't directly include the Special natural reserve (except for Devojački bunar) but is situated in its Protection Zone, we have fulfilled the condition of accessibility to the excursion-recreational localities. However, it is necessary that we look into specific investigation of qualitative and quantitative characteristics of nearby, individual, local (access and main) roads which have to divide from recreation mark of the bypass and lead to resorts and to wood complexes (for working on maintenance and improvement of vegetation). The problem is so much distinctive considering the fact that quality of roads is unequal. Besides, it is vital to establish the proximity and connection between localities and bigger community centres which are situated in their excursion-contractive zone (up to 30 km for half-day excursion, 100 km for a day excursion and 250 km for weekend outings). It is also necessary to enhance their quality and regional directions as they proved to be inadequate for the needs of urgent interventions in case of fire in the woods. Beside that, the vegetation itself with branched and fallen crowns makes it impossible to reach these parts.

Possible forms of Eco-tourism

Tourism represents a certain aspect of evaluating the Banat peščara. Unique on the territory of our country, it constitutes a distinctive complex of tourism values, which is the main attribute of its attractiveness. Typical microclimate, relief, vegetation, accessibility, the existing tourism capacity, tourism infrastructure and suprastructure and other, confirm their tourism relevance.

On the basis of the stated characteristic potentials, it is possible, alongside with certain evaluation, to establish the following forms of Eco-tourism: excursion-recreational tourism on admired localities on the borderline of Peščar, hunting tourism which would be organised at the Hunting-breeding centre "Dragičev hat", school in nature enriched with elements of the curriculum of ecological schools, time share tourism, cultural-educational tourism (visiting the museum complex on Peščara), cultural-manifestations : "Apiculture Fair" and painting colony "Deliblato", excursions based on realisation of the school curriculum, photo-safari tourism, science tourism, etc.

Excursion-recreational tourism

By its unique recreational, curio, significant and aesthetic attributes in the area of the Special Natural Reserve, it is necessary to make several localities available for excursion-recreational purposes: Devojački bunar, Šušara selo, Šušara Staro selo, Kremenjak, Dragićev hat-Palfi kolonija, Spomenik, Mramoračke Šume, and others. Material basis and tourists intake will be adjusted to the size of the area and the level of nature protection. Total size of this area will be 2,000 ha and would be able to take 26,000 visitors in a single day.

Visitors of this particular region are mainly those who belong to half-day and whole-day contractive zone. Owners of rest and recreation houses (weekend houses) stay longer. The offer has been so far extremely unorganised and resembles more an improvisation. This requires the evaluation of resources and design and building of adequate material basis and presence of adequate organisational factors in order to make the tourism offer correspond to the optimal realisation of excursion visits.

Hunting tourism

Because of the need to realise the protective treatment of this area, by implementing the decision of government bodies from 1980, there are breeding centres that have been established on the locality of Dragićev hat which occupies the south-eastern part of Peščara. This has marked the beginning of forming of hunting stock for optimal functioning of this kind of tourism in protected natural conditions. So, in the period of 1986 to 1993, 429 specimen of high game have been picked off. Out of this number they were 33 deer, which is relatively few, but they were very good specimens since some of them surpass the value of 220 points. The greatest number goes for wild boar (266 specimens) some of which claim high value of 130 points.

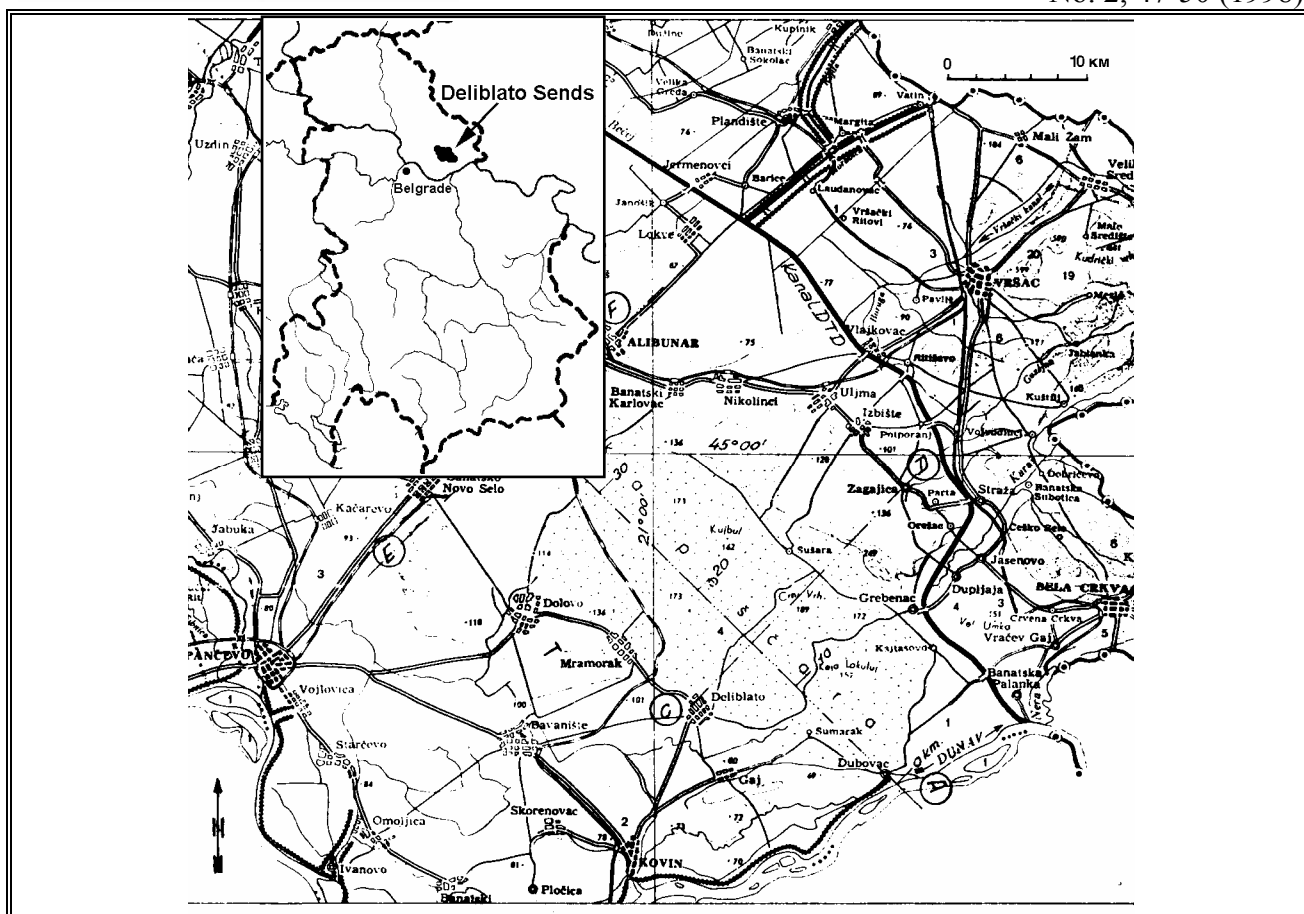


Fig. 1: Map of the Deliblato Sands

Breeding of big game in the the same way so far will have to prove profitable on the basis of income from hunting tourism. However, there are no real evidence that this effect is present, especially for longer periods. The problem is whether the overseas hunting tourism which is the most profitable, will still hold its positive trend. It is possible to expect that the international competence is going to be high and that in the present achievements we cannot fulfil the requirements of the world market.

School in nature with elements of plan and programme for school of ecology

For the purposes of school in nature in Peščara objects on the locality of "Čardak" are being used and to it the former youth hostel "Paja Marganović" is added. The school possesses outdoor and indoor classrooms, huge restaurant for meals, whereas in the middle of this area there is a large plateau for organisation of performances. Some primary schools organise a several day stay for their students from lower grades of the school in this object. Regular classroom teaching and extracurricular activities are being organised through the engagement of teachers and principal schools that are regular organisers of certain aspects of activities in the schools themselves.

Apart from the classically organised School in Nature (teaching in nature), there is a possibility of introducing some additional activities which would represent organisation novelty or, by its form and context, are already known, but were not present in this area or perhaps were prevalent till the beginning of 80s only to be neglected later. These include: teachers and students excursions from individual settlements that are so near to enable organisation of half-day and whole-day outings; stationary field work of students and teachers which doesn't have a research character but serves for

the coverage of new units and revision by the use of objects which are meant for the school in nature and excursion-recreational localities; stationary field work which has a purpose of professional education of teachers; camping in tents by which certain optimal requirements for choosing and arranging of the site, especially on the outskirts, nearer to the Dunav Tisa Dunav canal.

Cultural-educational tourism

There is no museum complex in Banat Pešćara. Back in the 80s there was an idea for its establishing, its borders and type of objects which should be included in the museum site. Still, it was not suggested where the proposed complex would be situated.

Forming of the museum complex should be taken step by step, comprising all relevant points, and complex by emphasising the things specific for this area. We reckon that the work should be begun by forming of natural collections which would include geological, botanical and zoological material. The remaining thematic contents should include geomorphologic, climatic, hydrographic and pedological peculiarities; flora and fauna inside of communities; forestry from a historical, protective and practical aspect; all aspects of hunting; herbs and its usable properties; apiculture, sheep breeding through history and technology of milk production, etc.

In realisation of the museum complex all scientists and professional people, who study it and its commercial enterprises, who use it and take care of its maintenance, should be engaged. Location of the museum would be most convenient to be on Čardak regarding its educational-disciplinary function and good connections with emission centres.

Manifestation tourism

This aspect of tourism has good conditions for development. Up to now, we have used a long tradition of apiculture in this area because of its fitogeographic basis (acacia woods and meadow herbs). Apiculturists come from various parts of the country. Thus the whole thing receives the form of large manifestation. It is called the "Apiculturists' Fair" and dates back to the times of initiation of excursion-recreational localities on Devojački bunar, i.e. to 1962. Though active, it requires enrichment of its context with elements of life in the community of Pešćar and its surrounding area.

There are certain good conditions for organisation, provision and expansion of its contents in the "Art Community Deliblato" manifestation. It takes place every second year and lasts two weeks (second half of June). This enables work of artists in all parts of Pešćara and their favourite site is on the locality of Devojački bunar. Artists engage not only in arts production but also in recreation and socialising with locals. From 1978 their works are exhibited in the Contemporary Gallery of the Cultural Centre in Pančevo. At the end of this manifestation every participant present the fund committee and sponsors with two works of art. Up to the present the Fund of the Contemporary Gallery in Pančevo received 1580 works.

Excursion tourism

This form of tourism has a distinctive approval but the biggest part of visits comes from the transit as a part of general school regional excursions. For excursions with stationary character, which would understand one or several nights, objects on Čardak or Devojački bunar can be used, but the process of field work, beside teaching staff, will include a guide group educated to recognise certain

occurrences and processes in this area. For organisation of excursions on a higher level, experts and scientists, who have been systematically studying it through many years, will be engaged.

Excursions will be organised as a component part of congress tourism. From the place of organisation of the tour there could be organisers, itinerants who would lead to the round trip of Peščara with occasional stopping off by internal routes, either by bus or, for the sake of particular scientific-educational importance, by foot. Under this form of Eco-tourism we should understand also the photo-safari tourism, which beside certain organising tours includes the visit to these localities that from ecological, scientific-educational standpoint are elements of interest, or it could be game and wildlife which could be filmed from the set objects in the restricted hunting area.

Conclusion

Banat Peščara is a special natural reserve with ambition to develop tourism which is subservient to the functions of protection and preservation. Individual forms of tourism migration are at its primary stage which is necessary to implement a systematic, progressive work on formation of the material basis and engagement of organisational factors in order to ensure that the expected aspects of Eco-tourism will get its optimal physiognomy. On the basis of analysing of the tourism-geographical position, natural and antropogenous values and other components that are relevant for tourism, we can draw a conclusion that it can be developed in the following aspects: excursion-recreational, hunting, school in nature, cultural-educational, manifesational, excursion etc.

References

- Bukurov B., 1984. *Geomorfological problems of Banat*, VANU, works, book II, Section of arts, book 2, Novi Sad
- Novković V., Bradvarcević J., 1994. *Administering governming big game in restricted hunting zones Deliblat sandy terrain* Deliblat sand, Collection of works VI "Srbijašume", Pančevo, pp. 467-474.
- Popov M., Dimitrijević S., 1994. *A concept of long-term development of hunting and tourism in Deliblat sandy terrain* Deliblat sand, Collection of works VI "Srbijašume", Pančevo, pp. 119-126.
- Govornikov B., 1980. *The Museum Complex on Deliblat sandy terrain*. Deliblat sand Collection of works from the second international symposium on protection and improvement of Deliblat sandy terrain. SPR "Deliblat sand", Ecological society of Vojvodina, Pančevo
- Group of authors, 1973., *Development of Tourism in the south-eastern Banat area*. Institute for investment economy, Beograd.
- Popov M., 1994. *History of forestanding and condition of Deliblat sandy terrain by the and of XX century*. Deliblat sand Collection of works VI, "Srbijašume", Beograd-Pančevo, pp. 5-28
- Kuzmanović J., 1994. *Projection of protection and use of natural values of Deliblat sandy terrain*. Deliblat sand. Collection of works VI, "Srbijašume" Beograd-Pančevo. pp. 85-96.