

**Olena Sakovska**

ORCID: <https://orcid.org/0000-0003-2676-6170>

PhD in Economics, Associate Professor,  
Associate Professor of the Department of  
Tourism, Hotel and Restaurant Business  
Uman National University  
(Uman, Ukraine)

**THE ROLE OF  
RECREATIONAL  
ACTIVITIES IN  
INCREASING THE  
ATTRACTIVENESS  
OF TOURIST  
DESTINATIONS**

**Abstract**

*The article provides an empirical analysis of the impact of recreational activities on the development of touristic destinations. It is indicated that in recent years in Ukraine the number of people engaged in tourism activities involving the use of recreational services has been increasing. Such activities create a need for the development and provision of recreational services and increase the share of natural recreational areas. In this regard, there is an increase in recreational pressure on natural complexes and objects of special environmental and recreational significance. It is pointed out that some negative factors and factors of tourist and recreational activities lead to the degradation of the nature reserve fund, which creates the need to preserve natural complexes and their landscape. On the basis of the conducted analysis, the main directions of recreational and tourist activities within recreational areas have been identified. It is indicated that tourism and recreational activities are an integrated process of certain human actions, which leads to a certain set of tourism products and services based on the use of certain resources: raw materials, equipment, labor, technological processes, etc. It is determined that the resource base for tourism and recreational activities is the natural, historical and cultural objects of a certain territory. One of such locations may be the territory of a nature reserve fund. The article assesses the recreational activities of the territory of the National Nature Park “Nizhniosulsky”, which is an object of the nature reserve fund of Ukraine. The study made it possible to develop practical proposals, the implementation of which will help to reduce the negative impact of recreational activities on the objects of the nature reserve fund located in the territory of certain tourist destinations. In conclusion, it is stated that recreational activities are currently having a significant impact on the development of tourist*

*destinations, in particular, those with nature reserves, including nature preserves and parks. Being an important element of the natural resource potential, nature preserves and parks not only ensure the fulfilment of environmental protection functions but also become a key element of tourism development in Ukraine.*

**Keywords:** *tourism, recreation, statistics, nature reserve area, destination.*

## **Introduction**

In Ukraine, the number of people engaged in tourism activities has been increasing recently, which increases the share of use of natural areas covered by tourism activities. In this regard, there is an increase in recreational loads on the nature reserve fund (natural complexes and objects that have special environmental, scientific, aesthetic, recreational and other value). The specified activity leads to the degradation of the nature reserve fund, therefore, a problem arises in the preservation of natural complexes and their landscape. This aspect creates a need for more in-depth research in the direction of studying the issue of recreational activities in tourism and determining the norms of recreational load (critical standards) in order to develop tourist destinations and preserve the nature reserve fund of Ukraine.

Various aspects of the topic of recreational activities have been covered in the works of domestic and foreign scientists. Thus, the authors Kozhukhivska R.B., Sakovska O.M., Maliuga L.M. and Maslovata S.A. note that “today the tourism industry and the recreation sector are actively developing, which are becoming increasingly important for the economic development of Ukraine. The development of tourist and recreational zones has a positive impact on the economic growth of regions, in particular, the activities of health and cultural institutions are improving, and the percentage of small and medium-sized enterprises in regions with rich tourism potential is increasing” (Kozhukhivska R.B. et al., 2019).

The development of the recreational sphere at the present stage occurs through the expansion of recreational potential, the creation of multifunctional territories of the nature reserve fund and their involvement in recreational use. Ensuring environmentally safe

nature use in the territories and objects of the nature reserve fund requires taking into account environmental, social and economic factors that determine the state of recreational resources and form the conditions for their use. First of all, this concerns regional features of recreational nature use, which have significant differences in both natural, environmental and socio-economic aspects (Bavrovska N.M., Butenko E.V., 2015). The recreational resource potential of a territory is the total productivity of its recreational resources. A certain recreational territory can provide recreational services only to a certain number of vacationers who are able to satisfy their own recreational needs. This depends on many factors, the main of which is the availability of reserves of recreational resources (V'iun V.H., Ivanov A.M., 2010).

The study of the impact of recreation on the microrelief of tourist routes is relatively poorly developed; the list of indicators that will qualitatively and quantitatively characterize the features of microrelief changes at individual stages of recreational digression remains problematic (Brusak V.P., 2018). The increase in recreational and tourist activity in natural national parks has led to an expansion of the spectrum of issues on planning ecological and educational trails in methodological developments, the introduction of regulatory measures to reduce the anthropogenic load on natural systems, the introduction of a recreational use regime for certain territories, and the introduction of paid services (Hanych, N.M., Skabara, R.M., Stets'kyj, V.V., 2021).

Considering the conducted analysis of research and publications on the development of the potential of territories and the use of the recreational and resource base of territories, it is worth pointing out the significant significance of the analysed works. However, in our opinion, insufficient attention has been paid to the study of the role of recreational activities and its impact on increasing the attractiveness of tourist destinations, both in theoretical and methodological aspects and in practical aspects, therefore we consider it advisable to conduct a more thorough study in this direction.

## **Materials and Methods**

For the theoretical part of the study, the works of foreign and domestic scientists in the field of recreational activities were used.

The methods used in studying the topic of the article and writing it include a set of measures of systemic and comparative analysis, are based on an institutional approach using the assessment of statistical information, as well as the author's own generalizations.

## **Results and Discussion**

During the severe economic crisis, the issue of rational use of tourism resources has become quite acute for society. Almost all of them are used spontaneously, unplanned, unregulated, without taking into account permissible loads. As a result, under the influence of anthropogenic loads and natural conditions, tourist facilities and territories gradually lose their original attractiveness and valuable recreational properties.

To preserve and restore them, a set of measures is necessary, the implementation of which is impossible without identifying the recreational opportunities of individual resources, the load on the territory so as not to harm it, the maximum and minimum number of tourists that the relevant territory can accommodate, and so on (V'iun V.H., Ivanov A.M., 2010).

Tourism and recreational activities are an integrated process of certain human actions, which leads to obtaining a certain set of tourism products and services based on the use of certain resources: raw materials, equipment, labor, technological processes, etc. The resource base for tourism and recreational activities is the natural and historical and cultural objects of a certain territory. One of such locations may be the territory of a nature reserve fund.

The main types of recreational and tourist activities on the territory of the nature reserve fund can be: health improvement; rest; excursion activities; amateur and sport fishing; various types of tourism: children's, youth, family, socially inclusive, educational, sports, religious, ecological, rural (green), extreme, etc.

Recreational activities on the territory of the nature reserve fund of Ukraine are regulated by such basic documents as: the Law of Ukraine "On Tourism", the Law of Ukraine "On the Nature Reserve Fund of Ukraine", the Regulations on Recreational Activities within the Territories and Objects of the Nature Reserve Fund of Ukraine, which ensures the proper organization of recreation and tourism within the nature reserve fund of Ukraine and other regulatory

documents. Thus, the Law of Ukraine “On Tourism” defines the principles of organizing tourism as a socio-economic activity, helps to interact with tourists and the tourism business accordingly; the Law of Ukraine “On the Nature Reserve Fund of Ukraine” defines the possibilities and restrictions for organizing recreation and tourism depending on the categories of territories and objects of the nature reserve fund of Ukraine. For example, tourism is prohibited in nature reserves and protected areas of national natural, biosphere reserves and regional landscape parks. The Law of Ukraine “On the Nature Reserve Fund of Ukraine” defines that “The Nature Reserve Fund consists of areas of land and water space, natural complexes and objects of which have special environmental, scientific, aesthetic, recreational and other value and are allocated for the purpose of preserving the natural diversity of landscapes, the gene pool of the animal and plant world, maintaining the overall ecological balance and ensuring background monitoring of the natural environment” (Law of Ukraine “On the Nature Reserve Fund of Ukraine”, 1992).

According to the Law of Ukraine “On the Nature Reserve Fund of Ukraine”, the territories and objects of the nature reserve fund are divided into natural territories and objects, namely: nature reserves, biosphere reserves, national natural parks, regional landscape parks, nature reserves, natural monuments, protected areas; artificially created objects – botanical gardens, dendrological parks, zoological parks, parks-monuments of landscape art (Law of Ukraine “On the Nature Reserve Fund of Ukraine”, 1992).

The basic areas of recreational and tourist activities within the recreational territories and objects of the nature reserve fund of Ukraine are:

- creating conditions for carrying out these activities while respecting the regime of territories and objects of the nature reserve fund of Ukraine;

- organization and arrangement of information and tourist centres, ecological and educational trails, tourist routes, observation decks, recreational areas, campsites, and recreation camps;

- dissemination of information of advertising and informational content (publication in the media and on web pages of information about recreational resources and services, as well as about recreational activity subjects within the natural reserve fund of

Ukraine and/or near them);

- study, generalization and implementation of the best national and foreign experience and practices in organizing recreational and tourist activities;

- formation among vacationers and local residents of a culture of health improvement, recreation and tourism in nature, a careful and humane attitude towards natural and cultural heritage.

Among the main conditions for the development of recreation and tourism in the territory of the nature reserve fund of Ukraine is the minimization of the negative impact of vacationers on natural complexes and historical and cultural objects. Recreational and tourist use of territories and objects of the nature reserve fund of Ukraine is possible provided that an appropriate system of management and economic measures is developed, taking into account the established regime of protection and use of resources located in these territories.

Usually, when developing management decisions and tourism development projects, the main factor is demand, on the basis of which plans for increasing the recreational capacity of the territory and regulatory legal acts are created. But in the territories of the nature reserve fund, the leading role is given to environmental protection tasks. Therefore, the main condition for ensuring a balance between social and environmental interests is the regulation of recreational load.

Natural complexes and their constituent elements differ significantly in their potential resistance to recreational loads. The resistance of a natural complex to recreational loads is its ability to withstand these loads up to a certain limit. Exceeding the loads leads to the loss of the natural complex's ability to self-recover.

Recreational load should be understood as the number of tourists visiting a unit of area of a natural complex in a certain unit of time. The unit of measurement of recreational load is person-hour/ha, or person-day/ha. The latter is somewhat more convenient for practical use and means that during the entire comfortable period, one person or a certain number of people rest on a 1-hectare area for 8 hours (accepted daylight hours) every day (Brusak V.P., 2018). There is a distinction between critical (causing irreversible changes in the natural complex) and maximum permissible (determined by the

number of vacationers that does not lead to irreversible changes in the natural complex) load (Polchaninova I.L., Pokolodna M.M., 2021). Currently, the most widely used method for determining the impact of recreational activities on the development of tourist destinations is the method of determining the maximum recreational load on natural complexes ( $\sum rc$ ) during the organization of tourism, excursions, and mass everyday recreation, where the main indicators are: permissible recreational load on the site (persons/ha), area of the recreational site (ha), and recreational potential coefficient.

$$\sum rc = R_c * S_a * E_{rp}, \quad (4.1)$$

where:  $R_c$  – permissible recreational load on the site, *persons/ha*;

$S_a$  – area of the recreational site, *ha*;  $E_{rp}$  – coefficient of recreational potential.

To conduct a study on determining the impact of recreational activities on the development of tourist destinations, we selected the National Nature Park “Nizhniosulsky”. The park was created in 2010 and is an object of the Nature Reserve Fund of Ukraine of national importance. The park is located on the territory of the Globynsky, Orzhytsky and Semenivsky districts of Poltava region, Chornobayivsky district of Cherkasy region.

Recreational activities in the park are carried out in accordance with the Regulations on Recreational Activities within the Territories and Objects of the Nature Reserve Fund of Ukraine, approved by Order of the Ministry of Environmental Protection No. 330 dated June 22, 2009, registered with the Ministry of Justice of Ukraine on July 22, 2009 under No. 679/16695, as amended.

The main areas of recreational activities in the territory of the National Nature Park “Nizhniosulsky” are:

- creating conditions for organized and effective tourism, recreation and other types of recreational activities in natural conditions while observing the protection regime for natural complexes and objects;
- ensuring the demand of vacationers for general health, cultural and educational recreation, tourism, amateur and sport fishing, in

accordance with the regime of the park territory, etc.;

- justification and establishment of the permissible level of anthropogenic load, including that caused by recreational activities, on the territory, natural complexes and objects of the park;

- organization of advertising, publishing and information activities, environmental education among vacationers and tourists within the park territory;

- promoting the formation of an ecological culture among vacationers and local residents, a careful and humane attitude towards the national natural heritage (National Nature Park “Nizhniosulsky”, 2025).

Recreational activities are carried out by the park, ensuring: the creation and functioning of recreational infrastructure; organization and infrastructural arrangement of tourist and excursion routes, ecological and educational trails; coordination of the activities of recreational activity subjects by the park, regardless of the form of ownership and subordination, taking into account the use of natural and historical and cultural resources within the territories and objects of the park; creation and maintenance of an information bank of data on recreational facilities located within the territory of the park; participation in domestic and international scientific and practical conferences, congresses, seminars dedicated to issues of recreation development; study, generalization and implementation of domestic and foreign experience in organizing recreational activities.

On the territory of the National Nature Park “Nizhniosulsky”, in accordance with environmental legislation, the following zones are distinguished: a reserve zone; a zone of regulated recreation (within its boundaries, short-term rest and recreation of the population are carried out, a tour of especially picturesque and memorable places, visiting the ecological trail “Journey to Lake “Sudevskoye” and the tourist trail “Along the Sula”); a zone of stationary recreation (intended for the placement of hotels, motels, campsites, and other visitor service facilities); an economic zone.

We will assess the permissible recreational load for the National Nature Park “Nizhniosulsky”. It should be noted that the determination of the permissible recreational load is carried out using a visual assessment of the digression of the trails. Based on the visual assessment of the digression of the trails, the optimal load is

determined, at which it is possible to avoid irreversible changes in the ecosystem.

To assess the impact of recreational activities on the natural complexes of the reserve, the most popular among tourists ecological trail “Journey to Lake “Sudevske” is monitored annually. As a rule, the assessment of the condition of the ecological trail is carried out twice a year – at the beginning and end of the season. But it is worth noting that in 2025, due to martial law in Ukraine and insufficient funding for the economic needs of the park (in particular, three times less funds were allocated for conducting ecological monitoring studies), an assessment of the condition of part of the route at the beginning of the season was not carried out.

The level of digression of the trail is determined by visual assessment and assignment of a digression stage (from 0 to V). Using the Garmin GPSMAP 65 GPS navigator and the Garmin Explore™ the length of sections of the trail with different degrees of digression is measured. The data is processed in the Google application Earth, where the percentage of the digression stages of the trail are calculated.

An analysis of the level of digression of the trail, conducted at the beginning of 2022, showed that by the beginning of the season, the trail managed to partially recover from the previous tourist season, however, the level of digression increased significantly compared to the beginning of the 2021 season. Thus, the share of sections with level II digression increased from 28% to 59% compared to 2021, level 3 was assigned to 31% of the trail (in 2021 it was 19%). The share of sections with the least digression (stage I) in 2022 decreased from 28% to 2%. Sections with level IV appeared, which were not there at the beginning of the 2021 season – their share is 1.5%. The deterioration of the trail was probably influenced not only by the increase in anthropogenic load, but also by the large amount of precipitation at the beginning of the 2022 season, which led to waterlogging of the area and, as a result, reduced the stability of the trail and its ability to recover.

According to the statistical and analytical documentation of the National Nature Park “Nizhniosulsky”, the permissible recreational load of the territory is defined as 30 people/day. However, this value was determined in 2015, when the actual load was 900 people per

season, respectively, the anthropogenic impact on the territory was lower.

The permissible recreational load in 2022 was 2,280 people – 30 people/day \* 76 days (season duration in 2022). The actual load is 3,865 people, which exceeds the permissible load by 1.7 times.

Despite the fact that in the period from 2020-2021 the actual daily recreational load did not exceed the permissible daily load, the condition of the ecological trail “Journey to Lake “Sudevske” continues to deteriorate. This is explained by the temporal heterogeneity of the load distribution. Thus, the most massive visits to the routes are observed on average during 2 months – July and August, which account for 80-90% of the total recreational flow. During the peak of the tourist season, the actual load may exceed 60 people/day, which causes more harm than with a more uniform distribution during the season with the same number of visitors. Under such conditions, it would be advisable to calculate the recreational capacity of the park territory based on determining the average indicator between the permissible recreational load and the environmental impact coefficient according to the formula:

$$\sum r_{tc} = \frac{R_c}{E_{ek}}, \quad (4.2)$$

where:  $R_c$  – the permissible recreational load on the site;  $E_{ek}$  – environmental impact coefficient.

The ecological impact coefficient is determined based on the type of recreational nature use: 0.01 – for road recreation, 1 – for off-road, 2 – mining, 5 – bivouac, 7 – transport-off-road, 13 – infrastructure (Polchaninova I.L., Pokolodna M.M., 2021). So, for the National Nature Park “Nizhniosulsky” the coefficient is taken as 1, and the recreational capacity is equal to the value of the permissible recreational load - 2280 people. However, the presence of separate sections of the ecological trail “Journey to Lake “Sudevske” with a maximum permissible level, which are not restored until the beginning of the next season, indicates the need to reduce the permissible recreational load. Given that, by the beginning of the

2025 season, the portion of the trail with the maximum permissible degree of digression will be only 1.2%, we have made an assumption about the need to reduce the maximum permissible load by 10%.

Considering that the actual load on the recreational area of the National Nature Park “Nizhniosulsky” significantly exceeds the maximum permissible, we propose to take the following measures:

- limit visits to the area during the autumn-winter period;
- distribute the daily recreational load on the territory evenly throughout the season;
- build wooden decks in waterlogged areas of trails;
- in order to reduce anthropogenic load, it is necessary to reduce the maximum number of tourists in the group;
- monitor the condition of the trails throughout the season, and if necessary, limit park visits.

## **Conclusions**

Currently, recreational activities have a significant impact on the development of tourist destinations, in particular, on the territory of which there are objects of the nature reserve fund, in particular nature reserves and parks. Being an important element of the natural resource potential, nature reserves and parks not only ensure the implementation of environmental protection functions, but also become a key element in the development of tourism in Ukraine.

Recreational activities at the objects of the nature reserve fund have a specific structure, based on the balance of environmental and economic interests. At the same time, properly organized recreational and tourist activities can become an important component of environmental protection and socio-economic development of the destination, will contribute to the growth of environmental awareness of citizens by involving them in natural and cultural values. Therefore, in order to develop tourist destinations and preserve the nature reserve fund of Ukraine, it is important to carry out constant monitoring of the objects of the nature reserve fund, in particular, determining the norms of recreational load on the territory, conducting an analysis of anthropogenic load, assessing the development of infrastructure and developing an effective strategy for territory management.

In our opinion, the main steps to reduce the negative impact of recreational activities on the objects of the nature reserve fund located on the territory of individual tourist destinations should be innovative ways and special measures, in particular: preserving biological and landscape diversity; implementing eco- and environmental educational activities among the population; organizing and implementing ecotourism as a new type of tourist activity that does not harm the environment and contributes to its authenticity; conducting ecological monitoring of territories; renovation of disturbed natural objects.

### **References:**

1. *The Nature Reserve Fund of Ukraine. Wikipedia: a free encyclopedia. Retrieved from [https://uk.wikipedia.org/wiki/Природно-заповідний\\_фонд\\_України](https://uk.wikipedia.org/wiki/Природно-заповідний_фонд_України) (accessed May 10, 2025).*
2. *Kozhukhivska, R., Sakovska, O., Maliuga, L., & Maslovata, S. (2019). The formation of a system of investment prospects of Ukrainian tourism and recreation sector enterprises on terms of benchmarking. Proceedings of the 33rd IBIMA Conference «Education Excellence and Innovation Management through Vision 2020», (Granada, April 10-11, 2019), pp. 5282-5290.*
3. *Bavrovs'ka, N.M., & Butenko, Ye.V. (2015). Use of recreational areas in the context of effective land management. Kyiv: MVTs «Medinform».*
4. *V'iun V.H., & Ivanov, A.M. (2010). Methodology for determining the recreational loads on protected areas. Economics and management, 5, pp. 82-85.*
5. *Brusak, V.P. (2018). Methodological aspects of the study of recreational digression of microrelief of tourist routes. Problems of geomorphology and paleogeography of the Ukrainian Carpathians and adjacent territories, 1(8), pp. 108-120.*
6. *Hanych, N.M., Skabara, R.M., & Stets'kyj, V.V. (2021). The current state and ways to intensify the tourist activity of the Buzky Gard National Nature Park. Proceedings from: VII International Scientific and Practical Conference «Priority directions of science and technology development», (Kyiv, March 21-23, 2021). Kyiv: SPC «Sci-conf.com.ua», pp. 517-523.*

7. *About tourism: Law of Ukraine № 325/95-BP (1995, September 15). Retrieved from <https://zakon.rada.gov.ua/laws/show/324/95-%D0%B2%D1%80#Text> (accessed May 10, 2025).*
8. *Regulations on Recreational Activities within the Territories and Objects of the Nature Reserve Fund of Ukraine: Decree of the Ministry of Environmental Protection and Natural Resources of Ukraine №256 (2022, July 26). Retrieved from <https://zakon.rada.gov.ua/laws/show/z1043-22#Text> (accessed May 10, 2025).*
9. *Recreation and tourism. Ministry of Environmental Protection and Natural Resources of Ukraine. Retrieved from <https://wownature.in.ua/pro-nas/nasha-diialnist/rekreatsiia/> (accessed May 10, 2025).*
10. *About the Nature Reserve Fund of Ukraine: Law of Ukraine № 2457-XII (1992, June 16). Retrieved from <https://zakon.rada.gov.ua/laws/show/2456-12#Text> (accessed May 10, 2025).*
11. *Creation of territories and objects of the nature reserve fund as a way to preserve the national wealth of Ukraine. Ecobusiness. Retrieved from <https://ecolog-ua.com/news/stvorenniya-teritoriy-ta-objektiv-prirodno-zapovidnogo-fondu-yak-shlyah-dozberezhennya> (accessed May 10, 2025).*
12. *Polchaninova, I.L., & Pokolodna, M.M. (2021). Recreational complexes of the world. Kharkiv: KhNUMH im. O.M. Beketova.*
13. *National Nature Park "Nizhniosulsky". Ministry of Ecology and Natural Resources of Ukraine. Retrieved from [https://nppns.at.ua/index/informacija\\_pro\\_park/0-19](https://nppns.at.ua/index/informacija_pro_park/0-19) (accessed May 10, 2025).*
14. *Li, T., Liao C., Law, R. & Zhang, M. (2023). An Integrated Model of Destination Attractiveness and Tourists' Environmentally Responsible Behavior: The Mediating Effect of Place Attachment. Behavioral Sciences, 13, 264. Retrieved from <https://www.mdpi.com/2076-328X/13/3/264> (accessed May 10, 2025).*