DOI: 10.17951/b.2020.75.0.161-181

ANNALES
UNIVERSITATIS MARIAE CURIE-SKŁODOWSKA
LUBLIN – POLONIA

VOL. LXXV SECTIO B 2020

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Selected Aspects of Ecological Dimensions of Ecotourism Development in the Networks of National Natural and Regional Landscape Parks of Ukraine

Wybrane aspekty ekologicznych wymiarów rozwoju ekoturystyki w sieciach narodowych i regionalnych parków krajobrazowych Ukrainy

Abstrakt: Przeprowadzone badania miały na celu uzasadnienie roli i znaczenia ekoturystyki dla zrównoważonego wykorzystania naturalnych zasobów rekreacyjnych na przykładzie Ukrainy. W artykule opisano zaopatrzenie terenów administracyjnych w środki ekoturystyczne (w obrębie istniejących narodowych i regionalnych parków krajobrazowych) oraz wpływ skutków kryzysu i niedoszacowania czynnika środowiskowego na warunki wypoczynku ludzi. Postępujący rozwój sfery turystyczno-rekreacyjnej wymaga opracowania specjalnej strategii rozwoju terytorialnego. Mechanizmem jej realizacji powinna być procedura planowania krajobrazu. W toku badań: dokonano typologii regionów administracyjnych ze względu na stopień dostępności rekreacyjnych zasobów obszarów chronionych dla ekoturystyki oraz opracowano kartograficzne wsparcie dla tego problemu; udowodniono wpływ czynnika ekologicznego na stan i efektywne wykorzystanie potencjału przyrodniczego obszarów chronionych w celach przyrodniczych i rekreacyjnych; stworzono mapę narodowych parków krajobrazowych Ukrainy dedykowaną obszarom o różnym stopniu zanieczyszczenia; przeprowadzono analizę korelacyjną. Zebrane dane świadczą o braku efektywnego systemu zarządzania środowiskowego na poziomie zjednoczonej wspólnoty terytorialnej wiejskiej oraz na poziomie powiatu, a także o braku stabilnych powiązań zarządczych między regionalnymi wydziałami ekologii i zasobów naturalnych oraz powiatami i zjednoczonymi

wspólnotami terytorialnymi. Ta okoliczność nie przyczynia się do skoordynowanego i terminowego rozwiązywania złożonych problemów geoekologicznych, lecz działa jak hamulec dla zrównoważonego rozwoju ekologicznego, społeczno-gospodarczego i turystyki ekologicznej.

Słowa kluczowe: ekoturystyka; obszary chronione; narodowy park przyrodniczy; regionalny park krajobrazowy; regiony Ukrainy

Abstract: The suggested research is dedicated to justifying the role and importance of ecotourism for balanced use of natural recreational resources on the example of Ukraine. The article presents the provision of administrative areas with resources for ecotourism (within the existing national nature parks and regional landscape parks) and the impact of crisis eco-situations and underestimation of the environmental factor on the conditions of people's leisure. Progressive development of the tourist and recreational sphere requires the development of a special strategy of territorial development. The mechanism for its implementation should be a landscape planning procedure. In the course of the study, a typology of administrative regions according to the availability degree of recreational resources of protected areas for ecotourism was carried out and cartographic support of this problem was developed. The influence of the ecological factor on the condition and effective use of the natural potential of the protected areas of environmental and recreational purposes is proved. A map of the national natural and regional landscape parks of Ukraine dedicated to areas with varying degrees of pollution was created and a correlation analysis was conducted. The specific facts prove the lack of an effective system of environmental management at the rural united territorial community levels, district levels and the lack of stable management links between regional departments of ecology and natural resources, district and united territorial community levels. This circumstance does not contribute to a coordinated and timely solution of complex geo-ecological problems, it acts as a brake on sustainable ecological, socio-economic development and ecological tourism.

Keywords: ecotourism; protected areas; national natural park; regional landscape park; regions of Ukraine

INTRODUCTION

Nowadays it is appropriate to consider recreation and nature conservation as ecologically economical activity, the share of which in the spatial structure of regional economic systems is growing substantially, provided that the realization of the national eco-network formation program constitutes at least 30%. Together with forest, water and grassland nature use, their optimal share in the spatial terms should reach 50–60% of the total area, which would make it possible to constructively balance the total nature use in the region.

Within the framework of these conceptual principles, the development of recreational use of nature and nature conservation in the conditions of complicated ecological and geographical situation in Ukraine has a priority character today. Such development is connected with the spatial structures of regional eco-networks. In the traditional recreational regions of Ukraine (Carpathian, Black

Sea-Azov, Crimean), these types of nature use are defined in the development of economic complexes. In Podillia, West-Polissia, East-Polissia regions, their development has a second-order priority after agricultural and forest management. In other regions of Ukraine, the development of nature conservation and recreational nature use, although of secondary importance, is important for balancing the regional economic complex.

The purpose of the study is generalization of the theoretical approaches and substantiation of applied principles of ecotourism development in Ukraine, assessment of the availability of administrative resources for ecotourism (within the existing national nature parks [NNPs] and regional landscape parks [RLPs]) and the impact of crisis eco-situations and underestimation of environmental factors on recreation conditions. The introduction of tourism activity is rather controversial, which stimulates environmental activities and at the same time is a real "destroyer" of the natural environment. The essence of ecotourism is to focus not only on the type of recreational activities, but also on the nature of the tourism impact on the environment and the degree of responsibility of both tourists and organizers for the preservation of the natural environment.

THEORETICAL BACKGROUND OF THE CONDUCTED RESEARCH

According to Polish researchers, recreational use of nature (Przewoźniak 1999) should remain conditioned, i.e. meet the following criteria:

– attractiveness of the recreational interpretive environment depends, to a large extent, on the available natural values that form the development of recreational nature use,

– development of various forms of recreation, covered by natural objects,

– the proportionality of the environment with its recreational function,

– monitoring the conditions and features of recreation in the natural environment (quantitative, qualitative indicators), with enhancement of the self-regulation function of the respective eco-object with natural recreational absorption and anthropogenic activity,

– taking into account the extent of the environment development, fully adapt it to recreational activities, in terms of accessibility and protection of the environment (Przewoźniak 1999).

Multifunctional forms of nature protection, including biosphere reserves, national nature parks and regional landscape parks are the basic objects of purposeful ecological tourism and recreation. The very philosophy of the creation and operation of these facilities is, on the one hand, the implementation of the principles of nature conservation, and on the other hand, the formation of tourism infrastructure.

The formation of the principles of ecological tourism is based on a number of conceptual principles: natural and socio-cultural compatibility, economical and balanced economy and socio-ecological relations, conscious ethno-natural and ethno-cultural tolerance, laid down in international strategies and concepts (Tsaryk, Kuzyshyn, Tsaryk 2015).

HISTORICAL REVIEW OF THE TERM "ECOTOURISM"

Conceptual approaches to landscape-ecological optimization of the territory, developed by M. Grodzynskyi during 1993–2005, foresee the implementation of a number of step-by-step approaches. In particular, the definition of landscape-ecological criteria and priorities for the development of regional economic systems; achievement of optimum ratios between economic and natural lands; optimization of the biocentric-network structure of landscape systems, which is a natural canvas of perspective ecosystems (Grodzynskyi 2005), within which the main potential of nature conservation and recreational nature management is concentrated.

The development of tourism and recreation is accompanied by the creation of infrastructure, the development of tourism routes, the development of new recreation areas, the formation of a specific tourist product. This progressive development requires the creation of a special territorial development strategy, the mechanism of which should be the landscape planning procedure (Dmytruk 2004). The necessity of defining the spatial boundaries of the composite elements of tourism-recreational systems is caused by the need to compare them with the landscape structure of the territory and to analyse the adequacy of the legal regime of land and nature management. The ideal correlation of composite tourism-recreational elements with the landscape structure of the territory is formed within the territories of NPPs and RLPs, partly within the botanical gardens, dendrological parks, zoological parks, where a number of functional zones is allocated (Tsaryk, Novytska 2016).

Specificity of nature reserve development in Ukraine, where the main attention was paid to the conservation and restriction of the nature use regime by forming reserves promoted the limited use of nature reserve fund objects for ecotourism. The need to create national nature parks became apparent in the 1970s, due to the growing short-term recreation of urban populations in nature conservation areas. With the increase in the number of private means of transportation, both the number of weekend vacationers and the length of trips from large urban settlements increased from 50–60 km in the 1960s, 150–200 km in the 1980s, to 250–500 km at present. At the same time, a considerable part

of vacationers went to the areas with protected objects, which made it necessary to regulate anthropogenic loads (the number of tourists per unit area of nature reserve territory), to regulate spatial and temporal use of data on the objects in accordance with the norms of permissible loads and their actual state (Tsaryk, Novytska 2016).

The development of a "recreation industry" for the territory of Ukraine with high population density, significant development of the territory, low forested areas required new recreational areas. That is why, in the 1980s, a new form of nature conservation emerged in Ukraine – national nature parks, later biosphere reserves, then, in the 1990s – regional landscape parks, and at the beginning of the 21st century – transboundary biosphere reserves. Conservation of natural diversity in accordance with the concept of sustainable development of Ukraine is considered as a natural basis for balanced development of the state. Ecotourism, which is carried out mainly in the territories of the nature reserve fund, can become an example of balanced use of natural recreational resources, which is one of the principles of sustainable development of the economic complex (Kuzyk 2018; Tsaryk 2016).

AN OVERVIEW OF INTERNATIONAL ECOTOURISM RESEARCH

Ecotourism is a type of tourism activity based on a harmonious relationship of a person with the natural and cultural environment in order to meet one's needs for recreation and recovery on the basis of eco-education and sustainable nature use (Dmytruk 2004). Strategic goal of ecotourism is limiting recreational activities according to the needs of the environment (travels, eco-educational excursions, tourism trips) (Grodzynskyi, Stetsenko [eds.] 2003).

Ecotourism is a cognitive and recreational type of tourism focused on natural territories, which involves the pursuit of various forms of active recreation in natural landscapes without causing damage to the environment. It suggests organization of trips to places with relatively unchanged nature that do not lead to disturbance of the integrity of ecosystems, with the aim of forming an idea of the natural and cultural-ethnographic features of this territory, which creates such socio-economic conditions when nature protection becomes advantageous to the local population (Khrabovchenko 2003). At this stage, ecotourism is defined as "a responsible trip to nature territories, that protects nature, the environment, supports the well-being of local people, and development and education" (*Plan działania*... 2015).

In Europe, this issue is ambiguous. For example, in Germany it is referred to as *Ökotourismus*, which in the closest translation is understood as "eco-friendly

tourism". However, there are many initiatives that have shown the development of ecotourism over the last decades – the Estonian Ecotourism Association (www.ecotourism.ee), the Romanian Ecotourism Association (www.eco-romania.ro) or the Swedish Ecotourism Society (www.naturesbestsweden.com). These organizations have created a solid foundation and have raised awareness of this topic outside their own countries, such as developing an algorithm for certification of small and medium-sized enterprises (tour operators, as well as providers) for the implementation of recreational use of nature.

There are the following forms of ecotourism: active (hiking, biking, horse riding, collecting something, fishing, hunting), faunistic, floristic, cultural and ethnographic trips. There are also a number of terms in tourism that can be related to ecotourism, e.g. nature tourism, adventure tourism, green tourism, community-based tourism and sometimes eco-friendly tourism or alternative tourism (Dmytruk 2004).

Discussions on the sustainable impact of ecotourism are still ongoing within the scientific circles. Today, this type of activity is often identified with the process of "immersion" into untouched nature or the promotion of production and consumption of environmentally friendly and organic products. There is also ample evidence of excessive use of this term, for example, "greenwashing" (literally: green lingerie), that is, speculating on the term "eco" by non-environmental projects or doing business that has a negative impact on natural areas. This type of abuse means that consumers lose credibility with ecotourism and create a negative image of it. That is why the most important task now is to concretize the concept of "ecotourism" so that it can be integrated with the concept of sustainable tourism development and its adaptation to everyday tourist activities.

For the first time the term "ecotourism" was formally used at a conference by Mexican environmentalist Hector Ceballos-Laskuraynom in the first half of the 1980s. In his opinion, this term reflected the idea of harmony between recreation and ecology and became very popular. One of the options of this definition is ecotourism as an active form of recreation based on the rational use of natural resources. This implies the rejection of the cult of comfort, mass communication, accessibility and consumption that increase the number of tourist services. Instead, it cultivates a different value system that includes contemplation of nature, spiritual enrichment, communion with its commitment to natural heritage, and the support of the traditional culture of local communities (Lukichev 2011).

According to the experts from the World Tourism Organization (UNWTO), ecotourism is a purposeful journey into natural areas, to better understand local culture and the environment, which does not violate the integrity of the ecosystem, while making the protection of natural resources beneficial to the local

people. In the professional as well as in the academic world, there are several idealistic definitions of ecotourism with similar interpretations. Ecotourism (ecotourism) means responsible travel to natural areas; experiencing the natural environment without damaging it; discovering natural and cultural sites that supports nature conservation. It has a gentle impact on the environment, provides active socio-economic involvement of residents and they benefit from this action (International Union for Conservation of Nature). Ecotourism is a responsible journey to natural areas that promotes nature conservation and enhances the well-being of residents (International Ecotourism Society). Ecotourism is a type of tourism that involves travelling to places with relatively untouched natural environment to get an idea of the natural, cultural and ethnographic features of an area that does not violate the integrity of ecosystems and creates such economic conditions in which the protection of nature and natural resources becomes advantageous (World Wildlife Fund).

The main criteria for the development of ecotourism include the location of residences that provide accommodation services near national parks, biosphere reserves, regional landscape parks, unique natural sites as well as maintaining the ecological standards by the owners of these residences as regards the organization of everyday life and leisure, and the creation of a variety of immersion wildlife programs. Therefore, the success of the development of ecotourism depends on the quality of the environment, since tourists appreciate its purity. Thus, the environmental factor becomes an economic category: maintaining the environment in good condition is economically advantageous and is the key to the successful functioning of hospitable estates.

There is a widespread belief that ecotourism is based on three components:

– Nature: the interests of ecotourists are based on nature and valuable natural resources and on the protection of these resources,

– Culture: local tangible or intangible cultural heritage and local traditions are used in a way that respects, protects and promotes them,

– Local community: ecotourism supports the well-being of local communities and empowers them (ideally, they should manage ecotourism businesses on their own, not just being busy with foreign investors) (Shumlyanska 2011).

These three pillars of ecotourism are often forgotten when ecotourism is associated with natural tourism or the broader concept of sustainable tourism (Sawitska, Sawitska, Pogrebniak 2017). For example, in the US, ecotourism and sustainable tourism are seen as virtually interchangeable. This, however, implies a more tolerant approach – the functioning of huge hotels that employ different eco-friendly management strategies is a great example of reducing the negative impact on the environment. It is being considered sustainable and sometimes

called “ecotourism”. In addition, tours organized by large tour operators such as Discover nomads, Costsaver, Topdeck, oriented to small groups, are conducted in exotic locations and involve local guides and professionals who identify themselves as promoters of ecotourism, although most of the profits are transferred to the foreign organizing centre.

The so-called “Western European model of ecotourism” is based on the development of tourism forms in the cultural landscape and emphasizes the principles of sustainable development of ecotourism forms and conservation of natural resources. This model pays attention to such functions of ecological tourism as care for the social, cultural and ecological well-being of the local population.

Zaręba (2006) determines that environmentally-friendly trips, which are traditionally associated with ecotourism, take place in attractive areas with natural landscape. It includes various types of tourism: agritourism, ecotourism, professional tourism, excursion tourism, leisure, adventure tourism, etc. provided that the people involved in the trip do not deliberately interfere with the natural ecosystems. Ecotourists express their respect for the environment and culture of the local population, and their tourism costs provide the means to protect the environment and the local economy. Kotala and Niedziółka (2009) considered the term “ecotourism” and its different forms. Moreover, they characterized the infrastructure for ecotourism. Agritourism and ecoagritourism as forms of ecotourism have been presented, too.

The use of national nature parks for ecotourism purposes in European countries has its own national characteristics. For example, in Norway there are special centres of active leisure in national parks, as well as the specially marked routes for camping and the overnight stay organized both in hotels, and in cottages. There is also an information centre where you can get general information about available entertainment and active tourism, local history and cultural heritage. Polish national nature parks place emphasis on recreational activities and tourism routes and there is almost no protected areas. The severity of the reserve regime of Italian, French, Finnish and Austrian national parks is similar in structure to the Ukrainian ones. Traditionally, their information centres are located only at the entrance to the park. The territory of the parks is owned by the state. German national parks have the greatest signs of autonomy and they are exclusively subordinate to the local authorities (the subject of the federation). A special feature of the country national parks network is the focus on national tourists. Therefore, the “German model of ecotourism development” is formed here. It is based on cognitive tourism. It includes acquaintance with some valuable botanical, zoological, hydrological, geological, geomorphological or other

natural objects, as well as simply picturesque landscapes or anthropogenically transformed natural complexes.

THE METHODOLOGY OF THE STUDY

Methods of cartographic modelling and comparison of the territorial boundaries map of the NPPs and RLPs of Ukraine with the map of the territory pollution degree by the multiplicity of the total allowable values were used. The indicators of the resources supply of ecotourism for ordinary citizens (the ratio of areas of BC, NPP and RLP to the amount of population of administrative regions) are calculated on the basis of which 5 typological groups of administrative regions are allocated according to the degree of provision of recreational resources for ecotourism (Fig. 1). Subsequently, the integrated map shows the dependency of NPPs and RLPs on the areas with different levels of pollution (Fig. 2), and, thus, indirectly demonstrates the overall ecological status within the basic objects of ecotourism.

RESULTS OF EMPIRICAL STUDIES OF THE PROBLEM

Perfect objects for the development of ecotourism in Ukraine are nature conservation and recreational sites: biosphere reserves and transboundary reserves, national nature parks, regional landscape parks, individual reserves, nature monuments, and artificially created botanical gardens, dendrological and zoological parks, parks-monuments of landscape art (Law of Ukraine On the Nature Reserve Fund of Ukraine).

In 2007, there were 4 biosphere reserves in Ukraine, 17 national nature parks, 46 regional landscape parks, 20 botanical gardens, 33 dendrological and 13 zoological parks, 90 parks-monuments of landscape art with a total area of over 1.603 million ha. Considering that in most of these establishments about 40% of the territory is allocated for recreational use, the recreational potential of the reserved territories (without taking into account the areas of reserves, protected areas) was more than 640 thousand ha. The average level of recreational resources provision of protected areas for the average Ukrainian was 0.0304 ha/person or 304 m^2/person.

In 2019, there were 4 biosphere reserves (BRs), 51 national nature parks in Ukraine (Tab. 1), 83 regional landscape parks (Tab. 2), 28 botanical gardens, 57 dendrological and 13 zoological parks, 572 parks-monuments of landscape art with a total area of more than 2.190 million ha. Recreational potential of protected areas (excluding areas of reserves, protected areas) is more than

2.092 million ha. The average level of recreational resources provision of protected areas for the citizen of Ukraine is 0.0493 ha/person or 493 m^2/person. Considering the significant decrease in population from 46.6 million in 2006 to 42.3 million in 2019 and an increase in the amount of protected recreational areas, it can be stated that the relative provision of ordinary Ukrainians with recreational resources for ecotourism has grown by 1.64 times.

In the territorial aspect, there are significant differences in the provision of recreational resources for ecotourism. The analysis of this indicator, in terms of administrative regions, showed that in five regions (Zhytomyr, Cherkasy, Dnipropetrovsk, Luhansk, Kyiv) there is a minimum of the main protected categories of recreational purpose (biosphere reserves, national nature parks, regional landscape parks) which inhibits the development of recreational business in general and ecotourism in particular (Tsaryk, Kuzyshyn, Tsaryk 2015). Kherson, Khmelnytskyi, Sumy, Chernihiv, Zakarpattia, Ivano-Frankivsk, and Volyn regions have got the largest areas of protected recreational use (Tab. 1 and 2).

Analysing the index of the availability of recreational resources for ordinary citizens, there are 5 typological groups of administrative regions: the first group consists of the Khmelnytskyi, Kherson, Sumy and Chernihiv regions with an indicator of the availability of recreational resources of protected territories exceeding 1,400 m^2 per person, which exceeds the average Ukrainian indicator by 2.8 times. Volyn, Ivano-Frankivsk and Zakarpattia regions, whose indexes exceed the average Ukrainian by 2.4 times, are included in the second group with the indicator of the availability of recreational resources of protected territories from 1,000 to 1,200 m^2 per person. The third typological group consists of areas with an indicator of the availability of recreational resources of protected areas from 510 to 830 m^2 per person, which exceeds or is close to the average Ukrainian indicator. It includes Kirovohrad, Mykolaiv, Chernivtsi, Ternopil, Lviv, and Poltava administrative regions. The fourth typological group of regions has an indicator of the availability of recreational resources of protected areas from 134 to 262 m^2 per person. It includes Autonomous Republic of Crimea, Donetsk, Kharkiv, Vinnytsia, Odesa regions. These territories have indicators more than twice lower compared to the average Ukrainian. The fifth typological group is composed of administrative-territorial units with an indicator of the availability of recreational resources of protected areas less than 100 m^2 per person – Cherkasy, Luhansk, Kyiv, Zhytomyr regions, city of Kyiv and Sevastopol (Fig. 1).

An important criterion for the development of ecotourism is the geoecological status of the territory. According to the indicator of the pollution degree (by the multiplicity of the total allowable values), there are six ranks distinguished in Ukraine (from conditionally clean to catastrophically polluted).

Tab. 1. Network of national nature parks in Ukraine (Source: Own study)

No.	Name	Foundation year	Administrative-territorial location	Physico-geographical connection	Area (ha)
1	Carpathian	1980	Ivano-Frankivsk region	Ukrainian Carpathians	50,495
2	Shatskyi	1983	Volyn region	Polissia region	48,977
3	Synevirskyi	1989	Zakarpattia region	Ukrainian Carpathians	40,400
4	Azov-Sivashskyi	1993	Kherson region, AR of Crimea	Southern Steppe Subzone	57,400
5	Vyzhnytsia	1995	Chernivtsi region	Ukrainian Carpathians	7,928
6	Podilski Tovtry	1996	Khmelnytskyi region	West Ukrainian region	261,316
7	Holy Mountains	1997	Donetsk region	Northern Steppe Subzone	40,589
8	Yavorivskyi	1998	Lviv region	West Ukrainian region	7,108
9	Desniansko-Starogutskyi	1999	Sumy region	Polissia region	16,215
10	Skolevski Beskydy	1999	Lviv region	Ukrainian Carpathians	35,261
11	Uzhansky	1999	Zakarpattia region	Ukrainian Carpathians	39,159
12	Hutsul region	2002	Ivano-Frankivsk region	Ukrainian Carpathians	32,271
13	Galician	2004	Ivano-Frankivsk region	West Ukrainian region	14,685
14	Gomilshanski forests	2004	Kharkiv region	Northern Steppe Subzone	14,315
15	Ichniansky	2004	Chernihiv region	Forest-steppe zone	9,666
16	Velykyi Luh	2006	Zaporizhzhia region	Northern Steppe Subzone	16,756
17	Mezinsky	2006	Chernihiv region	Polissia region	31,035
18	Holosiivskyi	2007	City of Kyiv	Polissia region	4,521
19	Prypiat-Stokhid	2007	Volyn region	Polissia region	39,216
20	Lower Dniester	2008	Odesa region	Middle-steppe subzone	21,311
21	Enchanted land	2009	Zakarpattia region	Ukrainian Carpathians	6,101
22	Zalissia	2009	Chernihiv region	Polissia region	14,836
23	Bilozerskyi	2009	Kyiv, Cherkasy regions	Forest-steppe zone	7,014
24	Slobozhanskyi	2009	Kharkiv region	Forest-steppe zone	5,244

Cont. tab. 1.

25	Pyriatynskyi	2009	Poltava region	Forest-steppe zone	12,028
26	Dzarilgatskyi	2009	Kherson region	Southern Steppe Subzone	10,000
27	Dvorychanskyi	2009	Kharkiv region	Northern Steppe Subzone	3,131
28	Cheremskyi	2009	Chernivtsi region	Ukrainian Carpathians	7,117
29	Siversko-Donetskyi*	2009	Luhask region	Northern Steppe Subzone	7,007
30	Dermansko-Ostrozkyi	2009	Rivne region	West Ukrainian region	1,648
31	Kremenets mountains	2009	Ternopil region	West Ukrainian region	6,951
32	Charming harbour	2009	AR of Crimea	Crimean steppe region	10,900
33	Nyzhniosulskyi	2009	Cherkasy, Poltava regions	Forest-steppe zone	18,635
34	Northern Podillia	2009	Lviv region	West Ukrainian region	15,588
35	Biloberezhzhia Sviatoslava	2009	Mykolayiv region	Northern Steppe Subzone	35,223
36	Carmeliukove Podillia	2009	Vinnytsia region	Forest-steppe zone	16,518
37	Buzkyi Gard	2009	Mykolayiv region	Northern Steppe Subzone	6,138
38	Hetmanskyi	2009	Sumy region	Forest-steppe zone	23,360
39	Tuzlov estuaries	2010	Odesa region	Middle-steppe subzone	5,244
40	Khotynskyi	2010	Chernivtsi region	West Ukrainian region	9,446
41	Verkhovynskyi	2010	Ivano-Frankivsk region	Ukrainian Carpathians	12,023
42	Pryazovskyi	2010	Zaporizhzhia region	Southern Steppe Subzone	78,127
43	Oleshkivski pisky	2010	Kherson region	Southern Steppe Subzone	8,020
44	Tsuman Pushcha	2010	Volyn region	West Ukrainian region	33,475
45	Meotyda	2010	Donetsk region	Northern Steppe Subzone	20,720
46	Syniohora	2010	Ivano-Frankivsk region	Ukrainian Carpathians	10,866
47	Dniester Canyon	2010	Ternopil region	West Ukrainian region	10,830
48	Small Polissia	2013	Khmelnytskyi region	Mixed forest zone	5,999
49	Lower Dnieper	2015	Kherson region	Southern Steppe Subzone	80,178

Cont. tab. 1.

50	Nobelskyi	2019	Rivne region	Polissia region	25,319
51	Kamianska Sich	2019	Kherson region	Southern Steppe Subzone	12,261
52	Boykivshchyna	2019	Lviv region	Ukrainian Carpathians	12,240
	Ukraine in general				1,316,568

* liquidated by a court decision in 2010.
The numbering of the NNP in the table corresponds with its numbering in Fig. 2

Tab. 2. Network of regional landscape parks in Ukraine (Source: Own study)

No.	Name	Foundation year	Administrative-territorial location	Physico-geographical connection	Area (ha)
1	Kalynivskyi	2000	AR of Crimea	Crimean steppe region	12,000
2	Bakalska Kosa	2000	AR of Crimea	Crimean steppe region	1,520
3	Karalarskyi	2007	AR of Crimea	Crimean steppe region	6,806
4	Quiet Bay	2007	AR of Crimea	Crimean mountains	1,508
5	Foxhole Bay Echki-Dag	2008	AR of Crimea	Crimean mountains	1,561
6	v. Uzun-Syrt, Mount of Clementiev	2010	AR of Crimea	Crimean mountains	840
7	Scientific	2011	AR of Crimea	Crimean mountains	965
8	White Rock	2011	AR of Crimea	Crimean steppe region	2,256
9	Bakhchysarai	2011	AR of Crimea	Crimean mountains	10,300
10	Kizil-Koba Tract	2011	AR of Crimea	Crimean mountains	102
11	Donuzlav	2013	AR of Crimea	Crimean steppe region	2,335
12	Takil Foreland	2013	AR of Crimea	Crimean steppe region	850
13	Bitak	2013	AR of Crimea	Crimean steppe region	55
14	Atlesh	2013	AR of Crimea	Crimean steppe region	260

Cont. tab. 2.

15	Mizhrichynsyi	2002	Chernihiv region	Mixed forest zone	78,754
16	Yalivshchyna	2014	Chernihiv region	Mixed forest zone	169
17	Nizhynskyi	2015	Chernihiv region	Mixed forest zone	6,123
18	Chernivetskyi	1996	Chernivtsi region	Ukrainian Carpathians	21,488
19	Cheremoskyi	2017	Chernivtsi region	Ukrainian Carpathians	7,868
20	Prydniprovsyi	2008	Dnipropetrovsk region	Northern Steppe Subzone	4,918
21	Dnipro Forests	2010	Dnipropetrovsk region	Northern Steppe Subzone	4,438
22	Samara Plavni	2012	Dnipropetrovsk region	Northern Steppe Subzone	2,801
23	Polovetskyi Steppe	2000	Donetsk region	Northern Steppe Subzone	1,335
24	Meotyda	2000	Donetsk region	Northern Steppe Subzone	14,352
25	Donetsk Ridge	2000	Donetsk region	Northern Steppe Subzone	7,464
26	Kleban-Byk	2000	Donetsk region	Northern Steppe Subzone	2,900
27	Zuivskyi	2002	Donetsk region	Northern Steppe Subzone	1,533
28	Kramatorskyi	2004	Donetsk region	Northern Steppe Subzone	2,248
29	Slavic resort	2005	Donetsk region	Northern Steppe Subzone	431
30	Dnistrovskyi	1993	Ivano-Frankivsk region	Deciduous forest zone	19,656
31	Hutsul region	1997	Ivano-Frankivsk region	Ukrainian Carpathians	17,729
32	Polyanytskyi	1996	Ivano-Frankivsk region	Ukrainian Carpathians	1,032
33	Velykoburlatskyi Steppe	2000	Kharkiv region	Northern Steppe Subzone	2,042
34	Izumska Luka	2003	Kharkiv region	Northern Steppe Subzone	5,002
35	Wild Nature Park “Olhova Balka”	2009	Kharkiv region	Forest-steppe zone	466
36	Chervonooskilskyi	2010	Kharkiv region	Northern Steppe Subzone	6,623
37	Sokilnyky-Pomirky	2012	Kharkiv region	Forest-steppe zone	1,105
38	Pechenizke Pole	2013	Kharkiv region	Northern Steppe Subzone	5,166

Cont. tab. 2.

39	Feldman-Ecopark	2013	Kharkiv region	Forest-steppe zone	141
40	Malovanka	1998	Khmelnytskyi region	Mixed forest zone	16,915
41	Bokowenkivsky	2005	Kirovohrad region	Northern Steppe Subzone	17,531
42	Svitlovodskyi	2011	Kirovohrad region	Forest-steppe zone	60,320
43	Trakhtemyriv	2000	Kyiv region	Forest-steppe zone	5,563
44	Boguslavl	2008	Kyiv region	Forest-steppe zone	8
45	Bird's paradise	2017	Kyiv region	Forest-steppe zone	467
46	Znesinnia	1993	Lviv region	Deciduous forest zone	312
47	Nadsianskyi	1997	Lviv region	Ukrainian Carpathians	19,428
48	Upper Dniester Beskids	1997	Lviv region	Ukrainian Carpathians	8,536
49	Ravske Roztochchia	1997	Lviv region	Deciduous forest zone	19,103
50	Striletske Hill Ridge	2014	Lviv region	Deciduous forest zone	8,910
51	Bilovodskyi	2001	Luhansk region	Northern Steppe Subzone	14,011
52	Kinburnska Kosa	1992	Mykolaiv region	Southern Steppe Subzone	17,890
53	Tylihulskyi	1995	Mykolaiv region	Middle-steppe subzone	8,195
54	Pryinhulskyi	2002	Mykolaiv region	Middle-steppe subzone	3,153
55	Granite-steppe Pobuzhzhia	2006	Mykolaiv region	Northern Steppe Subzone	7,394
56	Vysunsko-Inhuletsky	2011	Mykolaiv region	Middle-steppe subzone	2,713
57	Ishmael Islands	1993	Odesa region	Middle-steppe subzone	1,366
58	Tylihulskyi	1997	Odesa region	Middle-steppe subzone	13,954
59	Dukanskyi	1994	Poltava region	Forest-steppe zone	11,945
60	Kremenchucki Plavni	2001	Poltava region	Forest-steppe zone	5,080
61	Lower Vorsklianskyi	2002	Poltava region	Forest-steppe zone	23,200
62	Hadiatskyi	2011	Poltava region	Forest-steppe zone	12,803

Cont. tab. 2.

63	Kahamlytskyi	2013	Poltava region	Forest-steppe zone	28
64	Pripiat-Stokhid	1995	Rivne region	Mixed forest zone	21,600
65	Nadsluchanskyi	2000	Rivne region	Mixed forest zone	17,271
66	Dermansko-Mostivskyi	2002	Rivne region	Mixed forest zone	19,837
67	Seimskyi	1995	Sumy region	Forest-steppe zone	98,858
68	Prudishchansky	1995	Sumy region	Forest-steppe zone	2,538
69	Dniester Canyon	1990	Ternopil region	Deciduous forest zone	42,084
70	Zarvanytskyi	1994	Ternopil region	Deciduous forest zone	283
71	Zahrebellia	1994	Ternopil region	Deciduous forest zone	630
72	Murafa	2008	Vinnytsia region	Forest-steppe zone	3,453
73	Middle Pobuzhzhia	2009	Vinnytsia region	Forest-steppe zone	2,618
74	Dniester	2009	Vinnytsia region	Forest-steppe zone	6,719
75	Nemyrivske Pobuzhzhia	2013	Vinnytsia region	Forest-steppe zone	5,678
76	Prytysnianskyi	2009	Zakarpattia region	Ukrainian Carpathians	10,331
77	Syniak	2011	Zakarpattia region	Ukrainian Carpathians	4,631
78	Panay	1998	Zaporizhzhia region	Northern Steppe Subzone	1,025
79	Partisan Glory	1994	City of Kyiv	Mixed forest zone	115
80	Lysa Mountain	1994	City of Kyiv	Mixed forest zone	137
81	Dnipro Islands	2005	City of Kyiv	Mixed forest zone	1,215
82	Holosiivskyi	1995	City of Kyiv	Mixed forest zone	1,185
83	Maksymova Dacha	2013	City of Sevastopol	Crimean mountains	84
	Ukraine in general				776,256

The numbering of the RLP in the table corresponds with its numbering in Fig. 2.

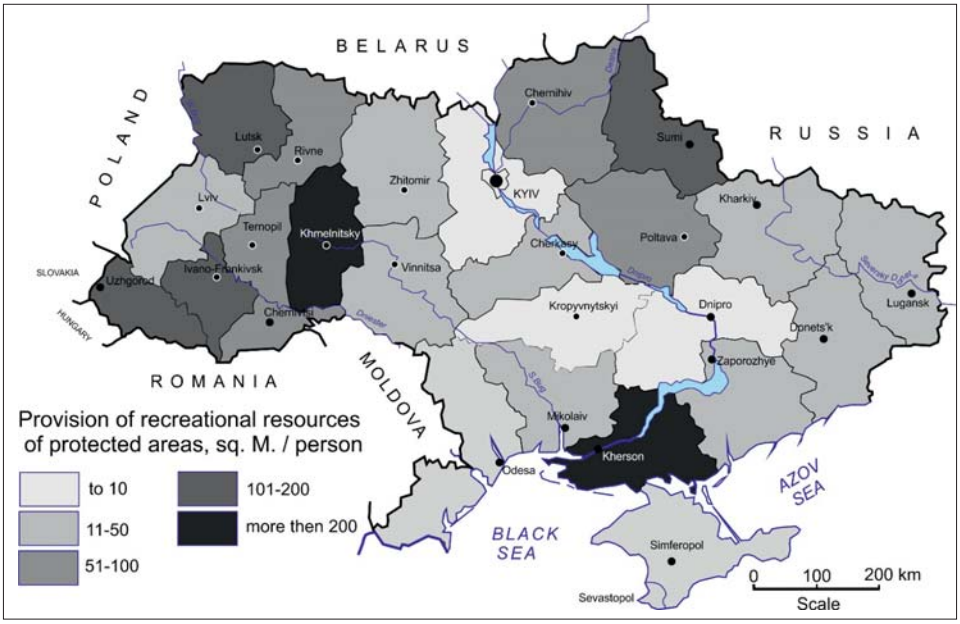

Fig. 1. Availability of recreational resources of protected areas according to the used method of synthesis (Source: Own study)

About 50% of the territory of Ukraine are characterized by a rather difficult geo-ecological situation (the degree of pollution is high and extremely high). These are the territories of the steppe zone with a high degree of cultivation and pollution with toxic chemicals, mineral fertilizers and objects of the mining and processing industry; radioactively contaminated territories of the mixed forest zone; the southern part of the deciduous forest zone and the western and southern parts of the forest-steppe zone distinguished by radioactive, agricultural and industrial pollution.

By depicting the pollution degree of the NPP and RLP locations, we obtained the attachment of the basic nature conservation and recreational institutions to the territories with different geo-ecological status (Fig. 2). Fifteen RLPs and 2 NNPs are in the occupied territories of Donbass and Crimea with limited access for citizens of other regions of Ukraine. Sixteen RLPs and 13 NNPs are located in the areas with a difficult geo-ecological situation within the steppe zone of Ukraine, 7 RLPs and 6 NNPs are in a difficult geo-ecological situation in the southern part of deciduous forests and the southern and western part of the forest-steppe zone of Ukraine. Nine RLPs and 6 RNPs are located in the radiation-polluted territories of the mixed forest zone. Hence, 56% of the RLPs and 56% of the NNPs are attached to the territories with a complex

geo-ecological situation, which makes it impossible for ecotourism to reach the full-scale development. And only in 44% of the territory we observe favourable natural conditions for the development of ecotourism in Ukraine.

Hence, the strategic objectives of the prospective development of Ukraine (its administrative and territorial entities), in addition to economic and social dimensions, is to improve the geo-ecological situation. This task is considered a priority in the context of crisis ecosystems in the regions (Dmytruk 2004) since environmental quality is one of the leading criteria for quality of life of the population. However, in the real practice of management, we see an underestimation and sometimes lack of attention in terms of environmental factors of development. And this is due to the imperfection of legal support, inefficiency of organizational and administrative structures, lack of proper control over the actions of the authorities on the part of civil society. According to Buryk (2017), conceptual and strategic approaches to the formation and implementation of the state policy of sustainable development still have not been developed due to the unsystematic and insufficient consistency of numerous concepts, strategies and programmes, lack of coordination and effective control over their implementation.

The inefficiency of organizational and management structures is demonstrated by several facts. In the departments of ecology and improvement of housing and communal services management, there are no employees capable of developing strategies, implementing them and ensuring control over their implementation. At the rural united territorial community level, there are no positions for someone in charge of environmental security or sustainable development. At the level of administrative districts, there are no institutions responsible for monitoring environmental safety. Environmental and natural resources departments of Regional State Administration do not have functional links to the district department and the smaller united territorial community as well. Strategies are being developed, but there is no way to ensure their proper implementation.

Additionally, research on the most important environmental problems of 30 united territorial communities of Ternopil region by interviewing the respondents showed that the research results were predictable (meaning 300 respondents). When asked: "What is most relevant to your united territorial community: street improvement, cooperative availability or quality of water supply?", the majority (78%) chose the last option. Among the most pressing environmental problems in the 20 united territorial communities of the Ternopil region, was the one connected with the sorting and recycling of solid waste. In 7 united territorial communities, the main problem is the lack of treatment facilities, and in 6 communities – the lack of centralized water supply and sanitation or its

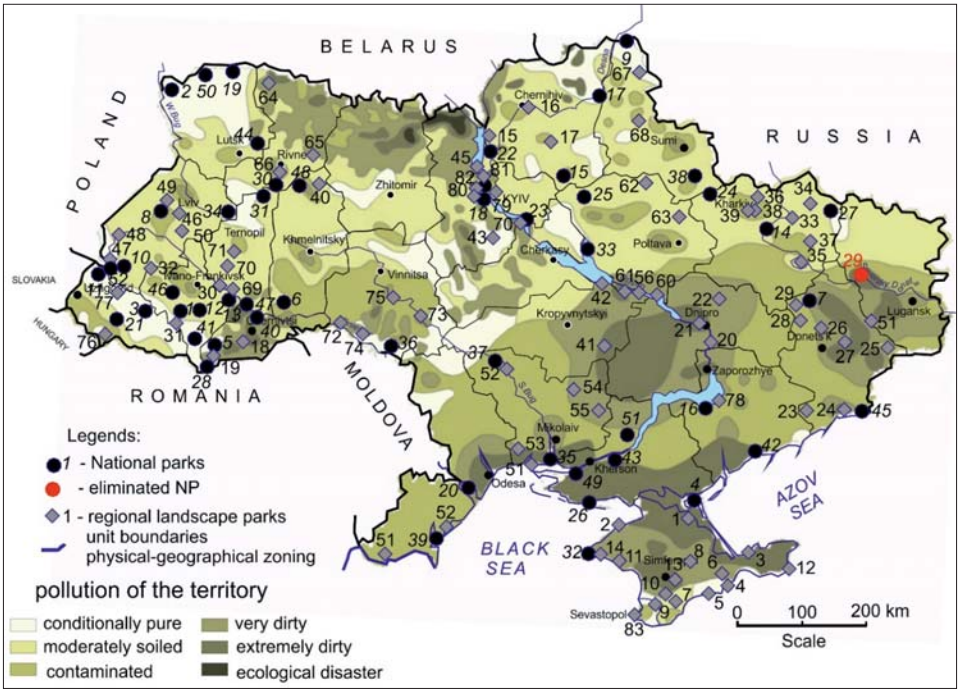

Fig. 2. Attachment of NPPs and RLPs to the territories with different level of pollution (according to used methods of generalization and synthesis) (Source: Own study)

improper functioning. In the context of sustainable development, priority is given to the environmental issues, economic issues take the second place, administrative planning and social issues are in the third one. We have conducted a survey among the representatives of the united communities of the same Ternopil region, on whether an official is responsible for the well-being and environment in the community. The majority (85%) said "yes", and only 15% (5 communities) held the opposite view (Tsaryk 2016).

Thus, the improvement of ecosystems both within settlements and administrative-territorial units seems problematic in the short term, and hence we will observe a deterioration of the environment due to the development of ecological tourism.

CONCLUSIONS

According to the results of the conducted research, it is possible to conclude that within the territory of Ukraine there are 5 regional recreational and conservation systems: western, north-eastern, central, eastern and southern with the developed nature protection and recreational infrastructure. The combined development

of territorial recreational and conservation systems is a guarantee of the creation of ecological stabilization framework that will provide the environmental, anthropo-ecological and recreational functions of geosystems of Ukraine.

The progressive development of the tourist and recreational sphere requires the development of a special strategy of territorial development, the mechanism of which should be the procedure of landscape planning. The separation of the spatial boundaries of the composite elements of the tourism and recreational system was carried out on the example of the region of Ukraine caused by the need to compare them with the landscape structure of the territory and the analysis of the adequacy of the legal regime of land and nature management. An important functional role in ecotourism is played by recreational territories (national nature parks and regional landscape parks) and artificially created objects (botanical gardens, dendrological parks, parks and monuments of landscape art), since there are differentiated modes of nature management introduced here, taking into account recreational loads.

The strategic task of the perspective development of Ukraine, its administrative and territorial entities, in addition to economic and social dimensions, is to improve the geo-ecological situation. This task is considered a priority in the context of crisis ecosystems in the regions, since environmental quality is one of the leading criteria for quality of life of the population. However, in the real practice of management, we can see an underestimation and sometimes lack of attention paid to environmental development factors. And this is due to the imperfection of legal support, inefficiency of organizational and administrative structures, as well as lack of proper control over the actions of the authorities on the part of civil society.

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