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Analysis of zoning schemes of the territory of Ukraine for the purposes of optimization and management of recreational and tourist activities

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Abstract. The purpose of this publication is to analyze the existing set of results of scientific and applied research in the field of recreational and tourist zoning of Ukraine and identify methodological differences in existing schemes for planning the development of recreation and sectoral zoning. To achieve this goal, the study used a content method of analysis of a

set of existing theoretical and methodological approaches to zoning, research and development on the organization and functioning of recreational territorial units. Methods of comparative analysis of the data on the formation of the territorial structure of tourist regions, determining the criteria for taxonomic classification of territorial recreational formations allowed to systematize information about existing world zoning systems and recreational and tourist territorial structure of Ukraine. The information base of the study is the regulatory documents, analytical and statistical materials of the WTO, NTO of Ukraine, scientific publications of leading Ukrainian and foreign researchers on zoning, in particular, zoning to manage and optimize tourism and recreational activities. The study involves schemes for the development and allocation of resources for tourism and recreation, zoning schemes in Ukraine, in the field of recreation and tourism, which were carried out in the period from 1960s to 2020s. Numerous schemes of recreational and tourist division of the country's territory and its separate regions indicate the confusion of terminology, approaches, standards and rules for zoning the country. In Ukraine, there are sectoral zoning, which are based on the principles of "zona making" conception, however, most sectoral zonings are not compared and do not correlate. The principles laid down in the implementation of sectoral recreational and tourist zoning are not always coordinated with the regulations that exist in the system of spatial planning. The results of the analysis emphasize the urgency of unification of terminology, certainty with methodological approaches to taxonomic classification and selection of taxa within the country. Today the issues of formation of recreational, tourist, resort spaces for the purposes of efficient and rational nature use and development of a competitive national tourist product are solved without a single coordinated recreational and tourist zoning of the territory of Ukraine.

Keywords. tourism, recreation, taxonomy, taxonomic recreational units, zoning, recreational and tourist zoning

Аналіз схем районування території України для цілей оптимізації та управління рекреаційною і туристською діяльністю

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Анотація. Метою даної публікації є проведення аналізу існуючого масиву результатів наукових та науково-прикладних розробок рекреаційно-туристичного районування території України і виявлення методологічних відмінностей в існуючих схемах планування розвитку рекреації та галузевих районуваннях. Для досягнення мети в дослідженні використано контентний метод аналізу масивів існуючих теоретичних і методологічних підходів районування територій, наукових розробок з питань організації та функціонування рекреаційних територіальних утворень. Методи компаративного аналізу даних, щодо формування територіальної структури туристичних регіонів, визначення критеріальної основи проведення таксономічної класифікації територіальних рекреаційних утворень дозволили систематизувати інформацію про існуючі світові системи зонування та рекреаційно-туристичну територіальну структуру України. Інформаційною базою дослідження слугують нормативні документи, аналітичні та статистичні матеріали ВТО, НТО України, наукові публікації провідних українських та зарубіжних дослідників з питань зонування територій, зокрема, районування з метою управління та оптимізації туристсько-рекреаційною діяльністю. В дослідження залучені схеми розвитку та розміщення ресурсів туризму і рекреації, схеми районувань території України, в галузі рекреації та туризму, які здійснювалися в період з 1960тих по 2020ті роки. Численні схеми рекреаційно-туристичного поділу території країни та її окремих регіонів вказують на заплутаність термінології, підходів, нормативів та правил щодо районування території країни. В Україні є галузеві районування, які базуються на принципах теорії районуоут-

ворення, проте, більшість галузевих районувань ніяк між собою не співставлені і не співвідносяться. Принципи, які закладаються при проведенні галузевих рекреаційно-туристичних зонувань не завжди зкоординовані із нормативними документами, що існують в системі територіального планування. Результати аналізу наголошують на нагальності уніфікації термінології, визначеності із методичними підходами таксономічної класифікації та виділення таксонів в межах території країни. На сьогодні питання формування рекреаційного, туристичного, курортного просторів для цілей ефективного і раціонального природокористування та розроблення конкурентоспроможного національного туристичного продукту вирішуються без єдиного узгодженого рекреаційно-туристичного районування території України.

Ключові слова. туризм, рекреація, таксономія, таксономічні рекреаційні одиниці, районування, рекреаційно-туристичне районування

Introduction

Economic transformations in Ukraine, global financial crises, lack of funding for domestic tourism in our country require more efficient use of all opportunities for further rational management of available resources and develop an effective strategy for the industry as a whole.

According to UNWTO, during January-August 2020, international tourist travel decreased by 70% compared to 2019, when there were 1.46 billion tourist trips. The tourism sector has suffered losses of more than 700 billion USD, which is more than eight times higher than the recession caused by the global economic crisis in 2009 (WTObarmeterrus, 2020). Military action in the Donbass and the occupation of the Crimean Peninsula led to the reorientation and opening of new tourism destinations, the COVID-19 pandemic showed the importance of domestic tourism. Its development in Ukraine has become increasingly important over the past 10 years.

Today's political-administrative, socio-economic realities in the development of Ukraine allow to review the existing methodological bases used for land division to solve applied problems of recreational geography, in particular, to formulate new approaches to land division for more effective planning of recreation and tourism in the whole country.

Decision-making in formulating strategies for the development of the recreation and tourism industry in Ukraine as a whole and its individual regions should be based on sound project planning of territories, which are expressed in the schemes of zoning and development of territories, including recreation. Particularly relevant issues addressed by zoning schemes are the formation of recreational, tourist and sanatorium spaces for the purposes of efficient and rational use of nature, development of ways for careful use of natural medical and recreational resources through the design of tourism development zones and resorts. In addition, development and zoning schemes become the basis for the development and implementation of a competitive national tourism product.

Methodological issues of determining the tourist, recreational, climatic and recreational potential of ter-

ritories, typology of recreational areas and special division of territory in the field of tourism and recreation into territorial units are gradually beginning to be covered in development, scientific and applied, normative nature, geography and urban planning, health care, etc. from the 60s - 70s of the 20th century. Researches in the field of recreational division of territories, development of taxonomic recreational classification were carried out by Likhanov B., Preobrajenskij V., Vedenin Yu., Mukhina L. (1975), Panchenko T. (1990, 2005, 2009), Mazurkevich O., Mis'kij V. (1990) Rodichkin I. (1978), Shischenko P. (1989), Stauskas V. (1977), Bejdik O. (1997, 2004, 2009), Mokliak A. (2004), Matsola V. (1997), Danilova N. (1980), Pokolodna M. (2008, 2012) and other authors.

Issues of planning recreational areas in the world, their isolation and functioning in the land use system are revealed in researches and projects since the 1940s, in particular, Wehrwein G., Johnson H. (1948), Jim, C (1989), Hirt S. (2004), Caves R. (2005), Lefcoe, 2005, Hodge G., Gordon D. (2014), Baycan T., Nijkamp P. (2009) and other authors. In these studies, the world's zoning systems are reduced to the two largest groups, namely the American and Western European, which have significant differences. Also, the system of territorial zoning of China is singled out as a system that provides mechanisms for the allocation of particularly valuable lands (including agricultural), Japan, Hong Kong, etc. (C. Y. Jim, 1989, Cheung Darren Man-wai, Tang Bo-Sin, 2016, Hong Kong planning standards and guidelines, 2014). Existing zoning systems are primarily a tool for regional development planning for authorities at various levels and are considered as so-called legal zoning, as they primarily establish and regulate the rights of use of real estate and land resources.

The American zoning system is characterized by the highest degree of independence of local governments, the declaration of policy of strategic planning of socio-economic development is developed in one stage covering the entire territory and all its components (Wehrwein G., Johnson H., 1948, Hirt S., 2004, Lefcoe G., 2005, Hodge G., Gordon D., 2014).

The Western European zoning system is a set of national zoning systems that have certain, sometimes

fundamental, differences. For example, in the United Kingdom, territorial zoning is carried out only by local governments or unitary institutions and is coordinated in accordance with the regional development plan. Issues of planning of protected lands (national parks, reserves) are coordinated by the Organization of National Parks, in particular. Also, there are differences in taxa (classes or categories) of territorial division in different zoning systems (Caves R., 2005, Baycan T., Nijkamp P., 2009).

Analysis of sources related to the world practice of territorial zoning and land management showed that the basic approach to division is the normative method of territorial planning used by local governments (Caves, 2004; Lefcoe, 2005; Hirt, 2014), and the main criteria for zoning types of nature use are selected (recreational, water, forest, agro-, urban and other types of nature use) – “land use form” (Hirt, 2014). In accordance with the type of nature use and the nature of land ownership, users carry out zoning of territories based on the principles of sustainable development of society, term of use, nature and intensity of use, size of taxa, etc. Thus, in the world practice, territorial division (regardless of industry) is the zoning of the territory. Zoning is a method of spatial planning (urban planning, in particular) in which different levels of territorial governance (municipalities, Fish and Wilderness, Forest services or others) divide territorial resources into taxa, called zones (National Research Council, 2009; Hirt, 2014). Each of the taxa has a set of clear rules and regulations aimed at the strategic development of areas subject to zoning and which differs from other zones. During the implementation of zoning, the duration of allocation of zones (temporary, single-use, zones or steel, permanent use, zones, for example, residential, industrial, etc.) is taken into account and indicated. Zones also take into account the possibility of combining several compatible types of nature management, or in the case of zoning based on forms, different rules may regulate the density, size and shape of permitted use regardless the purpose (Hodge, 2014). The planning rules for each zone determine whether planning permission can be granted for a given site design for a specific use or not. Such zoning determines the direct and conditional use of land, and its rules determine the size of land into which the territory can be divided, the form and scale of design decisions. Zoning rules are established to manage the growth and development of areas (including cities) (Rodrigue, 2020).

The current state of zoning in Ukraine is based on the multifaceted definition of the concept and revolves around the legal regulation of zoning processes, tools

and mechanisms for nature regulation and management. Numerous existing schemes (in particular, recreational) of the division of the country's territory and its individual regions indicate the confusion and diversification of terminology, approaches, standards and rules for zoning. In addition, in Ukraine there are numerous sectoral zoning, which are based on the principles of the theory of “zone making”, however, most sectoral zonings are not compared and do not correlate. In addition, the principles laid down in the conduct of sectoral zoning are not always coordinated with laws and regulations that should regulate the system of spatial planning and often have a different interpretation of zoning. There are significant differences between sectoral zoning and schemes of territorial planning of recreation and tourism in Ukraine during the period of formation and existence of recreational geography, geography of resorts and tourism.

Thus, the general *purpose* of this article is to identify methodological differences in the existing schemes of recreation development planning and tourist and recreational zoning of the territory of Ukraine; clarification and description of basic approaches to zoning the territory of Ukraine for the purposes in order to optimize and manage the recreational and tourist activities. The *object* of this study is the existing, in *the field* of recreational geography and tourism, zoning of Ukraine to analyze zoning schemes of its territory and the allocation of taxonomic territorial units in order to optimize and manage the development of recreational and tourist activities.

Materials and methods of research

The information base of the study is legislative, normative documents, analytical and statistical materials of the World Tourism Organization, the National Tourism Organization of Ukraine, scientific publications of leading Ukrainian and foreign researchers on zoning, in particular, zoning to manage and optimize tourism and recreation. The study involves schemes for the development and allocation of resources for tourism and recreation, zoning schemes in Ukraine, in the field of recreation and tourism, which were carried out in the period from the 1960s to 2020s.

To achieve the goal of this study used methods of scientific analysis and synthesis, in particular, content method of analysis of geographic information in the study of existing theoretical and methodological approaches to zoning, research on the organization and functioning of recreational territorial entities, methods of comparative analysis of information, in particular, comparison and generalization of data on

the formation of the territorial structure of tourist regions, determination of the criterion basis for taxonomic classification of territorial recreational formations, during the systematization of the obtained data on existing world zoning systems and recreational and tourist territorial structure of Ukraine.

Results and its analysis

The successful development of recreational and tourism activities is due to a number of important factors, including effective audit and assessment of resource potential of territories for tourism and/or recreational activities, rational use of recreational and tourism resources based on clear schemes of spatial differentiation of regional resources, effective policy states in tourism support, etc. In Ukraine, the practice of zoning is defined as a way to regulate the environmental management and the function of territorial management. Regionalization is carried out in order to optimize and manage recreational and tourism activities, which is coordinated and determined by legislative, normative documents of the regulatory sphere of territorial recreational and tourist planning allows to use the existing recreational and tourist potential of the regions and pursue a clear state policy in tourism and recreation, turning this area into an important source of both business development and filling the local and national budgets.

The best scientific meaning of recreational and tourist zoning is conveyed by Beidyk O.O. (1997), who proposes to consider such special zoning as the allocation of territorial division units (taxa), characterized by the structure of the resource base for the development of recreational activities, the specifics of development of recreational resources, activities in the field of preservation and protection of existing resources of the territory specialization in recreational and tourist services. Sectoral recreational zoning of territories should be aimed at coordinating the recreational and tourism industry with the system of nature management of the region as a whole, the existing features of the regional economy and so on (Bejdik, 1997). In Ukraine, the practice of special zoning is based on the following principles:

- constructiveness, which is determined primarily by the purpose of zoning;
- objectivity, which consists in the clarity of the criteria for allocating units of territorial division, mostly, of different ranks;
- hierarchy, which is determined by the levels of mutually subordinate different ranks of taxa;
- complexity, which consists in the complexity of zoning procedures for the purposes of optimization

and management of recreational and tourist activities;

Regarding the regionalization of the territory for recreation and tourism, the domestic scientific literature, depending on the purpose and objectives, uses a branched, non-unified and confusing terminology - “recreational”, “resort”, “resort-recreational”, “tourism”, “tourist-recreational” and “recreational-tourism” etc. The last term, according to the authors, is the most appropriate, because it allows to take into account the specifics of recreation and tourism - the available resource base, differences in physical-geographical and socio-economic features, cultural and historical aspects (ethnography, cultural heritage attributes, etc.), economic potential of the territory, etc. Thus, according to the current scientific interpretations, recreational and tourism zoning is the division of territory into taxonomic levels, characterized by a certain recreational and tourist specialization.

One of the key points of sectoral zoning is the observance of clear subordination and hierarchy in the allocation of taxonomic units of zoning of territories. Different methods of taxonomic classification of recreational territorial formations coexist in the scientific literature. Thus, Shelomov M.P. (1975) identifies the following hierarchical levels: institution, complex, functional area, resort, district, region, country. Kotlyarov E.N. (1978) proposes the following hierarchy of taxonomic recreational units: republic (region) → district → recreational area → recreational subdistrict. Znamenskaya E.A. (1969) proposed another hierarchy of resort formations: sanatorium (resort) institution → resort complex → resort → resort district. The disadvantage of this taxonomy is the use of such concepts as “complex” and “district” when designating the ranks of resort formations. Zorin I.V., in the work “Diversity of territorial and recreational systems and its typification” (1975) proposes to adhere to the taxonomy, which is based on the notion of redistribution of management and service functions, the diversity of recreational activities. Based on the following principles, the author identifies 5 taxonomic levels of recreational territorial entities: enterprise → factory → compound → association → industry.

In our opinion, the most successfully taxonomic levels of recreational territorial formations are presented in the scientific works of Dolishny M.I., Nudelman M.S., Tkachenko K.V. (1984), who proposed the following hierarchy: recreational point → recreational center → recreational node → recreational subdistrict → recreational district. The similarity of the hierarchy of recreational formations is characterized by the development of Shabluii

O.I.: recreational point → recreational center → recreational node → recreational area → recreational region → recreational zone (Shablii, 1994).

The combination of the last two taxonomic divisions allows us to propose the following hierarchy of recreational and tourism zoning: recreational and tourism institution → recreational and tourism point → recreational and tourism center → recreational and tourism area → recreational and tourism region, in which:

- Recreational and tourism institution is a single recreational or tourism facility that occupies a limited area (sanatorium, boarding house, recreation center, camp site, camp, etc.). Links to other objects are inconspicuous.

- Recreational and tourism point is a settlement of insignificant area, in which there is at least one recreational and tourism institution and defines one of its important functions.

- Recreational and tourism center is a set of recreational and tourism facilities located within the administrative boundaries of the settlement with a developed infrastructure (transport, services). Recreational and tourism center is characterized by the availability of resources in sufficient quantities for their effective use in the recreational and tourism sphere.

- Recreational and tourism area is an area where the natural recreational and tourism, historical and cultural potential is integrated with the social and economic infrastructure of the given territory.

- Recreational and tourism region is a key unit of zoning, covering several administrative and historical regions, natural areas and so on. This area is characterized by common climatic conditions, terrain, hydrological regime, historically formed settlement system and a single historical and cultural heritage.

A significant number of different zoning schemes of the Ukrainian territory for recreation and tourism coexist in the scientific circulation (presented in the Table 1).

Thus, the first attempts to zoning the territory of our state were made in the 60s of the 20th century. In particular, in the General scheme of location of sanatoriums and the list of resorts and medical areas of Ukraine (1961) for the first time on the territory of the former Soviet Union the resort possibilities of the territory were comprehensively studied and prospects of development of resort industry were defined. (360 settlements have been identified which have all the prerequisites for the development of the sanatorium-resort sphere) (Fig. 1 a).

In 1968, the scheme of placement resorts, places of mass recreation and tourism in Ukraine was a zoning of the territory with the definition of promising areas for the organization of recreational and tourism activities. When identifying the prospects of territories for recreation, it were studied the following: resort areas (in Zakarpattia, Lviv, Ivano-Frankivsk, Chernivtsi, Poltava, Odessa, Zaporizhzhia, Donetsk regions and the Autonomous Republic of Crimea); zones of mass recreation (mainly in the coastal zone of the main Ukrainian river - the Dnipro (middle and lower reaches), the Southern Buh (lower reaches), the Dniester (upper reaches), the Seversky Donets and the Desna); suburban green areas (around regional centers, the largest is around Kyiv); monuments of nature and culture (objects of national importance) (Mis'kii, Panchenko, Mazurkevych, 1990).

Mukhina L.I. (1973) carried out the grading of the natural and geographical provinces of the USSR under the conditions of the organization of summer recreation (beach and bathing spots without sea-shores). The south and south-east of our state received

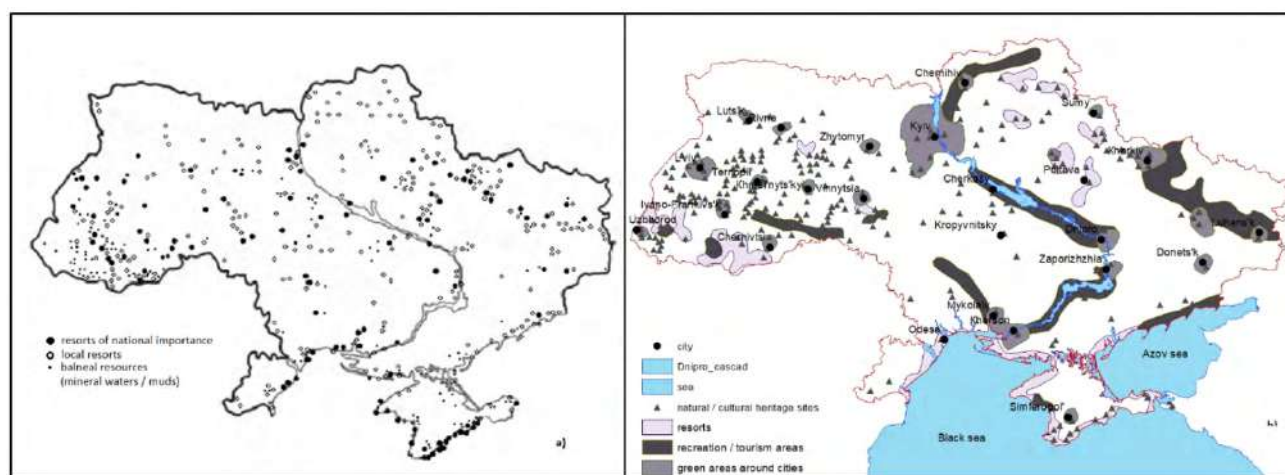


Fig.1 a) Scheme of location of national, local resorts and sources of medicinal mineral waters and muds on the territory of Ukraine (1961); b) Scheme of location of resorts, places of mass recreation and tourism in Ukraine (1968).

Source: made by the authors based on the Mis'kii, Panchenko, Mazurkevych, 1990

Table 1. The main schemes of Ukraine zoning for tourism purpose (all developments in the table are given in the original language)
Source: made by the authors based on the results of their own research

Year	The name of the scheme (in the original language)	Author (-s)
1961	General layout of sanatorium and health institutions and a list of resort and medical areas in Ukraine	Giprograd
1968	Layout of resorts, places of mass recreation and tourism in Ukraine	Urban Planning Institute of Research and Design
1975	Rating of natural-geographical provinces of the USSR under the conditions of organization of summer rest	Muhina L.I.
1975	Recreational zoning of the territory of the USSR	Institute of Geography of the USSR Academy of Sciences (led by Probrzhens'kii V. and Liha-nova B.)
1977	Duration of a comfortable period in the USSR for summer recreation and tourism (in days)	Danilova N.A.
1978	Location scheme of regional recreational systems	Rodich'kin I.D.
1979	The scheme of development and placement of resorts, recreation and tourism places, natural parks and reserves in the USSR, including the Ukrainian SSR	Urban Planning Institute of Research and Design
1983	Scheme of perspective development of tourism in the Ukrainian SSR	Giprograd
1983	Regional scheme for the development and placement of resorts, recreation and tourism sites, natural parks and reserves in the Ukrainian SSR	Urban Planning Institute of Research and Design, Giprograd
1985	Recreational zoning of the USSR	Pirozhnik I.I.
1985	Tourist zoning of the USSR	Zorin I.V. and others
1987	Tourism regionalization of the USSR	Krachylo M.P.
1989	Geographical and recreational zoning	Geographical encyclopedia of Ukraine
1989	Recreational and climatic zoning	Kyiv State University - Faculty of Geography
1991	Consolidated scheme of the regional planning of Ukraine. Section: Natural and recreational territories of Ukraine	Giprograd, Urban Planning Institute of Research and Design
1994	Comprehensive recreational zoning of the territory of Ukraine	Shablii O.I.
1996	Tourism zoning of Ukraine	Institute of Tourism of the Ukrainian Trade Unions Federation (Krachylo M., Popovych S., Fedorenko N.)
1997	Recreational and tourism zoning of Ukraine	Beidyk O. O., Liashenko D.
2001	General scheme of planning of the territory of Ukraine (Development of health and recreational network)	Dipromisto, Urban Planning Institute of Research and Design
2004	Recreational zoning	Lukianova, Tsybukh
2004	Recreational and tourism zoning of Ukraine	Smal' I. I.
2004	Rating resource-recreational zoning of Ukraine	Beidyk O. O.
2004	Tourism zoning	Mokliak
2006	Geospatial organization of recreational economy	Staphiichuk V.I.
2008	Recreational zoning	Masliak P.O.
2008	Tourism and recreational zoning	Pokolodna M.M.

the highest point in this rating, which is 5, on the suitability of natural conditions for the organization of recreational and tourism activities. (Mukhina, 1973)

Since the mid-1960s, scientists have begun to pay considerable attention to the study of territorial recreational systems - as the basic units of development of the recreational economy and the centers of territorial division. Thus, Zorin's map of "The demand Areas" was compiled (Zorin, 1975). The study was conducted on the basis of a survey of

citizens, their preferences and desires to relax in a particular region. Demand was calculated per 1 000 inhabitants. According to this study, the Crimean Peninsula, North-Western and Western regions of Ukraine are characterized as having a low demand – 10-49. The Black Sea coast is characterized by demand – 100-199. The central and eastern regions of Ukraine are characterized as having the highest demand – 200-1000. This was one of the first marketing studies of the tourism in the Soviet Union (Zorin, 1975).

At the same time, one of the first zonings of the territory of the USSR was carried out for the purpose of recreation under the leadership of V. Preobrazhensky and B. Likhanov (1975). The results of the analysis of natural and socio-economic conditions, as well as the results of the study of historically formed recreational enterprises were the basis of recreational zoning. The main criteria for allocating the boundaries of recreational areas in this zoning were the following:

- the degree of the development of the network of recreational systems;
- density of recreational enterprises;
- the role of recreational enterprises in meeting the needs for recreation and health in the country.

Based on this approach in the USSR in 1975, it was proposed to allocate 4 recreational areas. The territory of Ukraine fell into 1 and 2 recreational zones, within which 4 recreational districts were allocated in the territory of Ukraine – Crimean, Azov, Odessa and Dnieper-Dniester, within the last one the Carpathian recreational district was separated (shown in the Figure 2a).

able periods in the Soviet Union in order to organize summer recreation and tourism. According to the results of the study, the duration of the comfort period (temperature range of 22–25 °C) in Ukraine was determined and it was found that the duration of comfort increases from north (45 days) to south (85 days) (Danilova, 1980).

In 1978, I.D. Rodichkin proposed a layout of regional recreational systems (shown in the Figure 2b). According to this scheme on the territory of Ukraine the author identified 9 regional recreational systems: Kyiv-Dniprovs'k, Volyn', Seversko-Donets'k, Prydniprovs'k, Pryazovs'k, Odesa-Chornomors'k, Dniester-Buz'k, Carpathian and Crimea. It is clear from this scheme that the author has only identified the areas suitable for the development of recreational and tourism activities (Rodichkin, 1978).

The Scheme of the development and location of resorts, places of recreation and tourism, nature parks and reserves (1979) and the Scheme of the perspective development of tourism of the Ukrainian SSR (1983) (Mis'kii, Panchenko, Mazurkevich, 1990) are

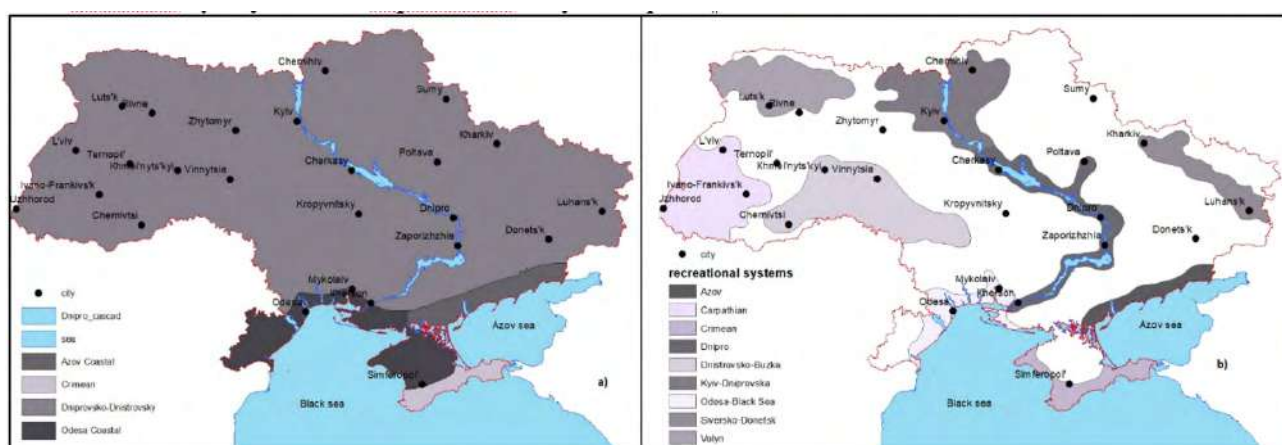


Fig. 2. a) Scheme of recreational zoning within modern Ukraine, 1973; b) Scheme of regional recreational systems of Ukraine, 1978. Source: A) compiled by the authors on the basis of the map "Scheme of recreational zoning of the USSR" on the V. Preobrazhenskii, B. Likhanov., 1975; B) compiled by the authors on the basis of the scheme's of Rodichkin I., 1978

Also, this work presents the characteristics of territorial recreational systems, which coincided with the boundaries of certain areas in Ukraine and differed in a certain specialization. Thus, Odesa, Crimea, Azov and Dnieper-Dniester were characterized by health specialization, and Carpathian – sports and health. The importance of this zoning was that it became the impetus for further studies of territorial differentiation and this zoning was the basis for territorial divisions, according to recreational criteria, until the late 80's of the 20th century. (Preobrazhenskii, Likhanov, 1975) Recreational zoning of V. Preobradzhenskii and B. Likhanov was specified by Pirozhnik I.I. in 1980.

In 1977, N.A. Danilova conducted climatological and recreational studies of the duration of comfort-

also noteworthy. According to T.F. Panchenko, 7 regions and 100 resorts of all-Union significance were allocated on the territory of Ukraine in the scheme of 1979. During such a thorough study in 1983, a comprehensive assessment of tourism resources was carried out and on the basis of estimated data 4 tourism regions (Carpathian, Polissya, Dnipro and Azov-Black Sea) and 35 tourism regions were identified (Panchenko, 2009).

The Kyiv Research Institute of Urban Development with the participation of the Dipromisto Institute (1983) developed a regional scheme for the development and location of resorts, places of recreation and tourism in the Ukrainian SSR (Mis'kii, Panchenko, Mazurkevich, 1990). At that time, the integral resort

and recreational system of the Republic of Ukraine was divided into 5 major territorial systems: Western (8 oblasts - districts), Central (6 oblasts), Southern (4 oblasts), Northeast (4 oblasts) and South-Eastern (3 oblasts). Taxa in the development of the scheme of division of the territory of Ukraine were represented by resort and recreational regions → resort and recreational areas → individual resorts → recreation areas. The largest taxa - resort and recreational regions - were identified on the basis of the most valuable resort and recreational resources, which were concentrated in the same type of natural and geographical systems (including mountains, river basins, sea coasts). By importance, they were divided into regions of union-republican and republican significance (Mis'kii, Panchenko, Mazurkevich, 1990).

Pirozhnik I.I., in 1985, finalized the recreational zoning of Preobrazhensky V. and Likhanov B. with a view to clarifying the boundaries of recreational areas. The key idea of the author was to coordinate recreational zoning, economic zoning and administrative-territorial division. Another important aspect of the revised zoning of 1985 is the analysis of the recreational economy in the context of significant economic areas, highlighting the recreational subregions within them. Accordingly, the author identified the Southern recreational area with 3 subdistricts in the territory of Ukraine – Odessa, Azov and Crimea and the Dnipro-Dniester recreational area. In addition, the author gave a detailed description of recreational subregions (Pirozhnik, 1985).

In the same year, 1985, in the All-Union Research Laboratory for Tourism and Excursions, the tourist zoning of the USSR was developed under the leadership of Zorin I.I. The following were adopted as district-forming features:

- 1) the degree of development of tourism and its material base;
- 2) the place of the district in the inter-district division of labor of tourist enterprises;
- 3) basic tourist functions.

The basis of zoning were 5 tourism zones, which in turn were divided into 31 tourism districts with leading tourist and excursion centers. The study of GNI tourism and excursions was not limited to the development of only a zoning scheme. For each district, the functions of tourism, district specialization, level of development and prospects for development were determined. Subsequently, this development and the results of the study were used in the development of a promising industry scheme for tourism development until 2000. According to the tourism zoning of Zorin I.V. the following districts are distinguished on the territory of Ukraine: Crimean (center - Sevastopol),

Ukrainian Primorsky (center - Odessa), Ukrainian-Moldavian (center - Kyiv) and Carpathian (center - Lviv). (Zorin, 1985)

A significant contribution to the methodology of tourist zoning was made by Krachylo M.P., who in 1987 also developed a scheme of tourism zoning of the Soviet Union. Basing on the tourism zoning in 1987, the author identified the proposed wider range of criteria, in particular:

- 1) the territorial structure of the current state of tourism organization;
- 2) the share of employees in the tourism industry from the total number of employees;
- 3) the nature of the links of tourism services with other sectors of the economy;
- 4) the level of development of the tourism industry;
- 5) availability of tourist resources;
- 6) economic and geographical location;
- 7) modern and long-term needs of the population in tourism services.

On the basis of these criteria in the territory of Ukraine Krachylo M.P. identified 5 tourist areas - Crimean, Azov, Odessa, Dnipro-Dniester and Carpathian (shown in Figure 3a). (Krachylo, 1987)

The zoning of the territory of Ukraine proposed by the specialists of the Faculty of Geography (1989) is based on geographical principles, and the criteria chosen are the physical and geographical parameters of the territory and their spatial differentiation, but climatic and landscape recreational conditions were identified as the key criteria. This zoning was called recreational-climatic and divided the territory of Ukraine into 6 recreational-climatic districts: Western, Central, Eastern, Southern, Crimean and Transcarpathian.

The Ukrainian Geographical Encyclopedia, 1989, offers a comprehensive recreational zoning of the territory of Ukraine. Complex recreational zoning of 1989 represents the division of Ukraine into 4 recreational regions, in particular, the Carpathian, Crimean, Dnipro-Dniester, Azov-Black Sea → 8 recreational areas, namely, Odessa, Priazov's'ky, Feodosiya, Yalta, Evpatoria, Dnipro, Prydniprov's'ky, Prydnistrov's'ky, 7 recreational subdistricts, in particular, Sudak, Yevpatoria, Feodosia, Black Sea, Crimea, Alushta, Yalta. Taxa of recreational regions include subsystems of long-term and short-term rest, sanatorium treatment and tourism, and management subsystems that include services, transport of economic areas. On average, the recreational capacity of the regions in this zoning ranges from 1.5 to 2.0 million vacationers (summer vacation). Recreational regions are due to a spatial combination of features

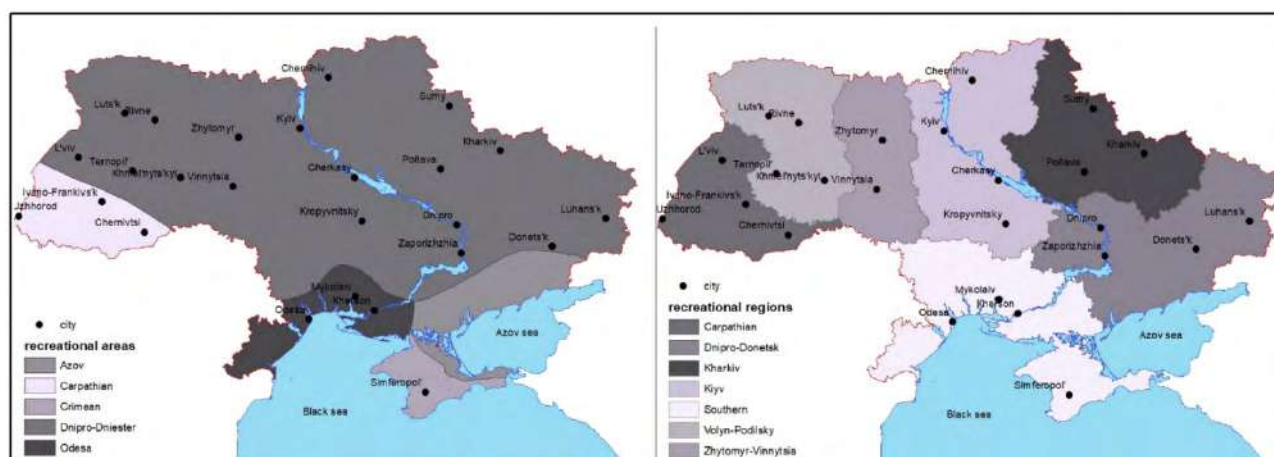


Fig. 3. a) Scheme of tourism zoning within the modern Ukraine, 1987. b) Tourism zoning of Ukraine, 1996

Source: A) compiled by the authors on the basis of the schema's "Tourist zoning of the USSR. Zones and districts", 1987; B) done by the authors on the basis of the schema's Krachylo, Popovich', Fedorenko, 1996

and factors that determine the existence of regions: the presence of recreational landscapes, medical resources, tourism resources, sufficient transport networks and infrastructure, economic and social ties with areas of concentration, etc. (Geographical encyclopedia, 1989).

Shablii O.I. (1994) developed a meaningful comprehensive recreational zoning of the territory of Ukraine based on the availability of recreational resources, analysis of the flow of vacationers, material and technical base. Shablii offered 4 recreational areas: Black Sea-Azov, West-Ukrainian, Central-Ukrainian, Polissya. Recreational zones are proposed to be considered territorial units that are characterized by common natural, historical, cultural, socio-economic resources, typical infrastructural relationships and so on. Recreational areas, in this zoning of Shablii subordinate 9 recreational regions, in particular, the Crimean, Western Black Sea, Eastern Black Sea, Carpathian, Roztochia-Opilia, Prydniprov's'ky, Prydnistrov's'ky, Podilia, Donetsk. Within the Eastern Black Sea region, Berdyans'k district is distinguished, within the Polissya region - Transcarpathian recreational district. (Shablii, 1994).

The tourism zoning of Ukraine (presented in Figure 3 b) proposed in 1996 by the Institute of Tourism of the FPU is based on the study of climatic, historical, cultural, socio-economic conditions and resources, development of tourism in Ukraine and performed for territorial and administrative regions. The authors proposed zoning identified 7 tourist regions: Carpathian, Volyn'-Ternopil', Zhytomyr-Vinnitsia, Kyiv, Kharkiv, Dnieper-Donetsk and South. (Krachylo, Popovich', Fedorenko, 1996)

Recreational and tourism zoning of Ukraine in 1997 (presented in the Figure 4a), proposed by Beidyk O.O. and Liashenko O.D. divides the territory into 6 recreational and tourism areas: Carpathian, Polissya-

Podilsky, Kyiv-Dnieper, Donetsk-Dnipro, Black Sea and Crimean.

Recreational and tourism zoning of Ukraine (1997) was carried out by the authors in accordance with:

- analysis of the share of recreational areas in the land structure (as a percentage from the area);
- analysis of the number of places in organized recreation facilities;
- analysis of the presence of centers (cores) of districts;
- analysis of recreational and tourism specialization of the territory in the national division and integration of labor;
- analysis of the common areas of use of recreational and tourism resources.

This zoning was also carried out on the basis of the current territorial and administrative division of the country. For territorial-administrative regions of Ukraine, in addition, the following indicators were determined:

- a) the share of potential recreational areas in the land structure (up to 20, 20-30, 31-50 and more than 50),
- b) the number of places in organized recreation facilities, in this case sanatoriums and boarding houses with treatment and houses and rest boarding houses (1-2, 3-5, 6-10, 11-25 and more than 99 thousand units). (Beidyk, 1997)

Later, in 2004, Beidyk O.O. conducted an assessment of potential and current recreational and tourist resources of Ukraine. Assessment of recreational and tourist potential of territorial-administrative regions of Ukraine was conducted in 7 blocks: geopolitical, natural, natural-anthropogenic, architectural-historical, infrastructural, biosocial and event. The results of a comprehensive analysis and assessment of recreational and tourist resources

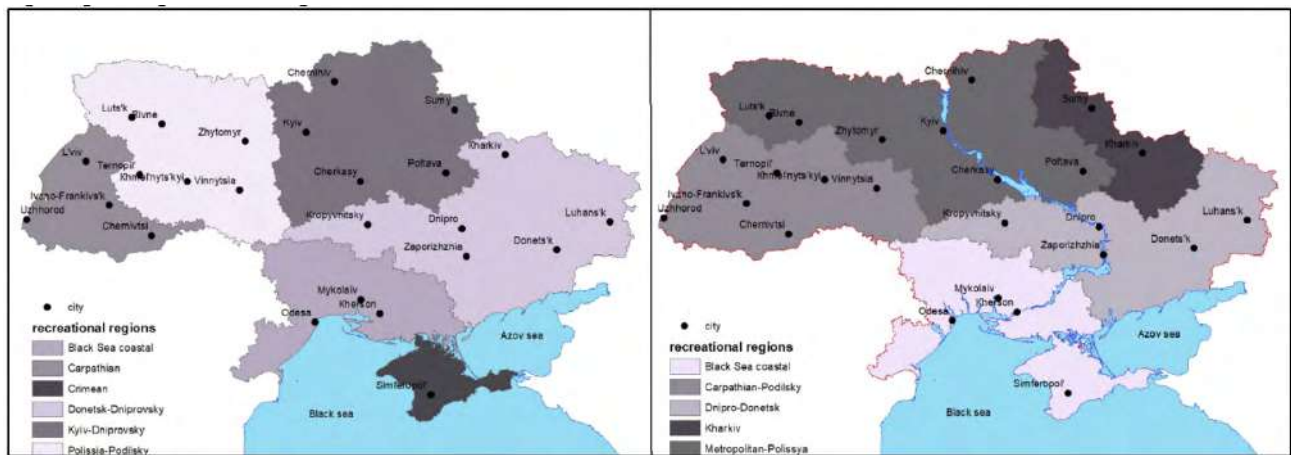


Fig. 4. a) Scheme of recreational and tourism zoning of Ukraine, 1997; b) Scheme of rating recreational and tourism zoning of Ukraine, 2004

Source: A) done by authors based on the schema's of Beidyk and Liashenko, 1997; B) done by the authors based on the schema's of Beidyk, 2004

are the basis for ranking regions and their grouping (by rating): very high → high → medium → low → very low. This rating grouping is reflected in the scheme of ranking recreational and tourist zoning of Ukraine (presented in the Figure 4 b). The scheme of ranking recreational and tourism zoning of Ukraine distinguishes 5 districts: Black Sea (core - Odessa, very high rating); Carpathian-Podolsky (core - Lviv, high rating); Polisko-Stolychny (core - Kyiv, average rating); Kharkiv (core - Kharkiv, low) and Prydniprovsko-Donetsk (core - Dnipro, very low). (Beidyk, 2009)

Smal' I.V., in 2004, proposed a scheme of recreational and tourism zoning of Ukraine with the allocation of 5 recreational and tourism macro-districts - Polissya, Western, Central-Eastern, Primorsky and Crimean. The criteria for this zoning are:

- structure and capacity of recreational and tourist potential (natural and socio-historical);
- the presence of elements supporting recreational and tourist framework;
- index of territorial localization of recreational and tourist activity objects;
- results of branch recreational zoning;
- results of groupings of territorial-administrative units of Ukraine (according to the level of development of accommodation establishments);
- intensity of tourist flows within the administrative-territorial units. (Smal', 2004).

In the study of Mokljak A.V. (2004) tourism zoning should be carried out for the purpose of regional planning and forecasting of tourism development, optimization and management of rational use of tourist resources of territories, etc. (Mokljak, 2004). In his study, the author identified 13 tourism regions within Ukraine:

- 1) Azov with Mariupol' and Melitopol' subregions in the structure;
- 2) Volyn' with Lutsk-Volodymyr and Rivne-Kremenets' subregions in the structure;
- 3) Dnipro with Kyiv and Cherkasy-Kremenchuk subregions in the structure;
- 4) Dniester with Ivano-Frankivsk-Chernivtsi and Kamyanets-Mohyliv subregions in the structure;
- 5) Zaporizhzhia independent tourism region;
- 6) Carpathian with Drohobych, Kolomyia and Transcarpathian subregions in the structure;
- 7) Crimean with Kerch, Simferopol, Evpatoria-Rozdolniansky subregions in the structure;
- 8) Podolsky with Ternopil, Khmelnytsky, Vinnytsia subregions in the structure;
- 9) Polissya with Kovel and Sarny subregions in the structure;
- 10) Roztochans'k-Hologors'k with Roztochansky, Holohorsky subregions and the subregion of the city of Lviv in the structure;
- 11) Slobozhansky region with Izium, Kharkiv, Sumy subregions in the structure;
- 12) Chernihiv-Sivers'k independent tourism region;
- 13) Black Sea with Odessa, Mykolayiv, Kherson subregions in structure.

Stafiyshuk V.I., in 2006, considered the regional features of the geospatial organization of the recreational economy of Ukraine, but in terms of socio-geographical areas: Volyn', Carpathian, Podols'k, Capital, Northeast, Central, Dnipro, Donetsk, Black Sea, Crimea. The proposed view of zoning for recreational purposes is quite successful. The scheme proposed by the author is aimed at coordinating the development of the recreational economy with other sectors of the national economy.

The scheme of geospatial organization of recreational economy of Stafyichuk V.I. is designed to ensure the optimal functioning of recreational systems. The defined network of socio-geographical areas most successfully reproduces the territorial differentiation of recreational potential of Ukraine, as administrative areas that fall within public areas are characterized by common features of the current state of the resort economy, development programs, trends and patterns of recreational development. recreational resources (Stafyichuk, 2006).

Maslyak P.O. in the work “Recreational Geography” (Maslyak, 2008) proposed an alternative scheme of recreational zoning, where on the basis of ethnographic, recreational, physical-geographical and socio-economic features and within the administrative division of Ukraine distinguishes the following recreational areas:

1) Southern recreational area, which includes in its territorial structure the coastal territories of Odessa, Mykolaiv, Kherson, Zaporizhzhia and Donetsk regions, coastal and mountainous parts of the Crimea. The southern recreational area subordinates 3 subdistricts: Western, Crimean, Eastern.

2) Carpathian recreational area, includes the territories of Lviv, Ivano-Frankivsk, Zakarpattia and Chernivtsi regions. The Carpathian recreational area subordinates 3 recreational subdistricts: Precarpathians, Carpathians, Transcarpathia.

3) Polissya recreational area covers the northern part of Ukraine.

4) Right-bank upland forest-steppe recreational area, which in ethnographic terms includes Podillya, part of Volyn` and Kyiv region.

5) Left-bank forest-steppe recreational area, which according to the natural landscape is divided into the Dnipro lowland with the Poltava plateau and spurs of the Central European Upland in Kharkiv and Sumy regions.

The steppe recreation area covers the territory from the south of the border with Moldova and to the east to the border with Russia.

In 2008, Pokolodna M.M. proposed a scheme of tourism and recreational zoning of Ukraine. Tourism and recreational zoning was carried out taking into account the following features:

- the degree of development of the recreational industry in the area;
- the nature of tourism specialization;
- the level of tourism and recreational development of the territory;
- common perspective development of the district;

- combinations of tourist resources;
- intensity of tourist flows.

The result of the division were 6 tourist and recreational areas, namely, Carpathian, Polissya-Podols'k, Dnieper, Donetsk-Slobzhans'k, Black Sea, Crimean). This zoning of the territory of Ukraine differs in that the boundaries of taxa correspond to the boundaries of territorial-administrative units and, thus, unite the administrative entities of Ukraine (Pokolodna, 2008).

Conclusion

The analysis indicates significant differences in the methodological basis of taxonomization and separation of recreational territorial units. As a rule, in world practice, formal approaches to the allocation of territorial units have been and are being applied to the implementation of divisions. Territorial allocations are distinguished in accordance with the forms of nature management, taking into account the legal regulations in the field of land use and the relations of the subjects of natural resources use. In Ukraine, until recent times, the theory of zoning prevailed in scientific developments on zoning, and there was a coordination of resource potentials at the level of administrative areas (except for individual developments that coordinated the development of the recreational sphere with the socio-geographical division). In contrast to scientific works, applied engineering and design developments exist in the form of draft planning schemes and were developed according to nominal approaches to the construction of plans and schemes of territorial development in the field of recreation and tourism. Most of these schemes are developed in the form of frame models of recreational and tourism facilities. Recently, given the strong decentralization reform, cluster analysis methods have been used to allocate territorial units for zoning, in accordance with the regulatory rules in the field of land relations on the ground and the compliance of local schemes with the territorial division of the regional and national level. There are significant differences between sectoral zoning and territorial planning schemes for the development of recreation and tourism in Ukraine during the period of formation and existence of recreational geography, geography of resorts and tourism. The existing schemes of recreational and tourism division of the territory of the country and its separate regions indicate the confusion of terminology, approaches, standards and rules for zoning the territory of the country. In addition, in Ukraine there are sectoral zoning, which is based on the principles of the theory of zoning,

however, most sectoral zonings are not compared and do not correlate. The principles laid down in the conduct of sectoral recreational and tourism zoning are not always coordinated with regulations aimed at regulating the system of spatial planning.

Thus, as a result of the analysis of the existing work, in the field of typology and taxonomy of recreational areas, recreational zoning of the territory of Ukraine, the following conclusions can be made:

- the available results of scientific, scientifically applied researches indicate a tangible recreational and tourist potential of our country, which is formed by all available natural, historical, cultural and socio-economic resources;

- in fact, for decades of research activities in the field of recreational and tourism zoning, formed an information basis for the implementation of the target cadaster, in particular, the compilation and lists of discrete tourist and recreational facilities (resorts, monuments of tangible and intangible cultural heritage, including those with protection status, natural monuments and other objects of the NPF), which are supplemented by attributive descriptions and specifications, descriptions and recreational and tourism assessments of integral regional units and tourism frameworks of territories, etc.;

- in fact, all developments in the field of tourist and recreational division of Ukraine exist either in the form of comprehensive zoning schemes with generalizations on the spatial distribution of individual resources and differentiation of areas by recreation and tourism zones or in the form of specialized schemes of state planning documents on strategic directions of tourism and recreation / resorts development, etc.;

- existing zoning developments are quite heterogeneous in the context of generalization of elements of division schemes (schematic allocations of taxa or detailed drawing of the spatial-planning structure of the territory);

- the urgent issue in zoning is the definition of methodological approaches to harmonize the elements of the recreational and tourism sphere with the territorial and economic structure of the country, as well as the decentralization processes taking place in all spheres of the country's activity;

- the results of the analysis allow to emphasize the urgency of unification of terminology, definition of methodological approaches for taxonomic classification and methods of taxon allocation within the country (its regional units) and harmonization of other legal aspects of recreational nature, in particular, land relations in resource use recreation, tourism and resorts, relations in the field of restoration and protection of recreational resources, etc.

Today the issues are: a) formation of recreational, tourist, sanatorium and resort spaces for the purposes of efficient and rational use of nature, b) development of ways of careful use of natural medical and recreational resources through design of tourism development zones and resorts, c) development of competitive national tourist product - are solved and implemented without a single support agreed between specialists in the field of scientific and engineering of spatial planning schemes, recreational and tourism zoning of the territory of Ukraine.

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