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CRITERIA FOR ASSESSING UNIQUE NATURAL FEATURES AND AREAS FOR PROTECTED AREA DESIGNATION

Abstract: The article examines scientific approaches to the expansion and optimization of the network of protected natural areas (PAs) within the framework of the "30×30" goals of the Kunming–Montreal Global Biodiversity Framework, aimed at effectively conserving at least 30% of the planet's territory by 2030. In this regard, the study explores the theoretical and methodological foundations for assessing unique natural objects and territories as protected areas, as well as their significance in ensuring ecological sustainability and maintaining functional landscape connectivity. The author has developed an integrated assessment scale consisting of 17 criteria that take into account landscape typicity, uniqueness, representativeness, biological significance, degree of anthropogenic transformation, fragmentation, ecological connectivity, hydrological functions, and recreational value. The article also substantiates the possibilities of identifying typical and unique landscapes based on a basin approach, geosystem stability, and the concept of an "ecological framework," as well as their inclusion in protected area systems and application in environmental planning. The results of the study provide a basis for developing scientific and practical recommendations aimed at improving the ecological effectiveness of protected area systems, conserving biological diversity, and forming regional ecological networks.

Keywords: biodiversity, protected natural areas, landscape fragmentation, typical landscape, unique natural object, ecological connectivity.

Introduction. Since the second half of the twentieth century, the period known as the "Great Acceleration" has profoundly affected global biodiversity, triggering what is widely recognized as the sixth mass extinction in Earth's biosphere. During this period, the disruption of the balance between human society and nature accelerated transformations in natural, biogeochemical, biological, and landscape diversity. More than 70% of the Earth's terrestrial surface has been modified by human activities, while the current rate of species extinction is hundreds of times higher than the natural background rate [12].

The primary drivers of this process include the fragmentation of natural landscapes caused by the expansion of agricultural land and human settlements. These impacts are further intensified by global climate change, unsustainable exploitation of natural resources, and environmental pollution. The escalating ecological crises at the global scale demand urgent and effective responses from the international community. One of the most effective approaches to mitigating these threats and maintaining the stability of the biosphere is the establishment, expansion, and effective management of Protected Areas (PAs)**.**

According to the 2025 World Database on Protected Areas (WDPA)**,** protected areas currently cover approximately 16.4% of the Earth's terrestrial surface and 8.3% of marine and coastal areas worldwide [17]. Despite this progress, the existing global network of protected areas is insufficient to ensure the comprehensive conservation of biological and landscape diversity. Consequently, contemporary research increasingly emphasizes expanding protected areas, shifting from the traditional concept of nature protection toward a strategy of landscape-based ecological stabilization, and developing integrated ecological networks (econets). Achieving these objectives requires improving the criteria for assessing unique natural features and areas for protected area designation, as well as enhancing ecological connectivity by linking representative, rare, and high-value natural features and geosystems through ecological corridors.

The World Commission on Protected Areas (WCPA) places particular emphasis on implementing Target 3 of the Kunming–Montreal Global Biodiversity Framework (GBF)**.** This target aims to ensure that at least 30% of the Earth's land and marine areas are effectively conserved through protected areas and other effective area-based conservation measures by 2030, while promoting equitable and effective management. Within this framework, protected areas are recognized not only as instruments for biodiversity conservation but also as essential components of ecological infrastructure that enhance ecological resilience, sustain ecosystem services, and strengthen climate change adaptation. From this perspective, the assessment of unique natural features and landscapes for protected area designation is closely aligned with the priority objectives of the Kunming–Montreal Global Biodiversity Framework**.**

Achieving global biodiversity recovery largely depends on the integrity and effectiveness of protected area systems. However, the geographical and ecological representativeness of protected areas remains insufficient at both global and, particularly, regional scales. Moreover, many of the criteria currently used to identify and designate areas important for biodiversity conservation are considered inadequate [13]. These challenges highlight the need for studies aimed at identifying representative and unique geocomplexes within natural-geographical or administrative units, as well as establishing appropriate conservation and land-use regimes for these areas. In this context, the development of scientifically robust principles, criteria, and indicators for assessing unique natural features and areas for protected area designation represents an important and timely scientific and practical challenge.

Literature Review and Methodology. The development of principles and criteria for assessing unique natural features and landscapes for protected area designation represents one of the key directions in contemporary nature conservation research. International organizations such as **UNESCO** and the **International Union for Conservation of Nature (IUCN)** recognize protected areas not only as instruments for conserving biological and landscape diversity but also as components of ecological networks that reflect the interdependence between humans and nature.

Issues related to the assessment of unique natural features and areas for protected area designation have been examined by numerous researchers, including Hockings, M., Stolton, S., & Dudley, N. (2004); Kochurov, B. I., & Buchatskaya, N. V. (2007); Stishov, M. S. (2012); Beshko, N. Yu., et al. (2013); Stishov, M. S., & Dudley, N. (2018); Solovyov, A. N. (2020); Martsinkevich, G. I., et al. (2020); Sannikov, P. Yu. (2023); Abduganiev, O. I. (2023); and Opekunova, M. G., et al. (2024). The scientific literature demonstrates that unique natural features and landscapes have been assessed using a wide range of approaches, which can generally be classified into the following categories: (i) evaluation of ecological and biological value together with aesthetic and tourism potential; (ii) assessment of cultural and historical significance; (iii) consideration of geological and geomorphological characteristics; and (iv) evaluation of the recreational and socio-economic functions of natural areas.

Recent studies identify concepts such as landscape diversity, biodiversity, ecological resilience, ecosystem services, and landscape connectivity as fundamental theoretical frameworks for landscape conservation. Within the field of landscape ecology, particular attention is devoted to assessing geosystem fragmentation, species migration potential, and the functional connectivity among natural areas. These approaches provide the basis for viewing protected areas as integrated ecological networks rather than isolated conservation units.

The literature review indicates that no universally accepted methodology currently exists for assessing unique natural features. Instead, assessment criteria vary considerably among countries depending on their environmental conditions, bioecological characteristics, and socio-economic priorities. For example, in many European countries, the evaluation of geoheritage and UNESCO Global Geoparks primarily emphasizes geological rarity, representativeness, and scientific value. In contrast, studies conducted in many Asian countries place greater emphasis on ecotourism potential and the conservation of cultural landscapes.

The research methodology is based on a system-based landscape approach, which provides a comprehensive assessment of the natural, ecological, aesthetic, and social functions of unique natural features and areas. Within this framework, geographical, geoecological, and cartographic methods were employed. At the initial stage, the natural components of the study area—including topography, the hydrographic network, vegetation cover, soil properties, and lithological characteristics—were systematically analyzed. The subsequent stage focused on evaluating the ecological significance of the identified natural features, the degree of anthropogenic disturbance, and their recreational potential. This process included the inventory, assessment, and mapping of unique natural features and areas. Geographic Information System (GIS) analysis was used as one of the principal analytical tools [1, pp. 45–52]. GIS analysis enables the efficient identification of well-preserved natural landscapes and regional biodiversity hotspots.

To evaluate the identified sites, an integrated ranking method was applied, whereby each site was assigned a score based on a set of predefined indicators. The assessment incorporated criteria including natural uniqueness, significance for biodiversity conservation, aesthetic value, historical and cultural importance, and current ecological condition. Criterion weights were determined using an expert evaluation approach, and an overall integrated index was subsequently calculated for each site. Furthermore, GIS technologies were extensively employed to analyze the spatial distribution of unique natural features, assess their ecological connectivity, and determine their conservation status. This integrated approach made it possible to characterize the spatial structure of the protected area network, identify the key elements of the ecological network, and formulate priority conservation measures.

Results and Discussion. At present, global biodiversity and landscape diversity have reached a critical state and are increasingly threatened by rapid degradation and loss. In response to this challenge, the **Fourteenth Meeting of the Conference of the Parties (COP14) to the Convention on Biological Diversity (CBD)** adopted decisions that laid the foundation for a new global strategic framework extending to **2050**, emphasizing the further expansion and effective management of protected area networks worldwide.

According to G.M.**Mace et al. (2018),** achieving the objectives of this framework requires even more ambitious conservation actions by **2030**. Their projections indicate that, under a business-as-usual scenario, biodiversity and landscape diversity will continue to decline until 2030, followed by an accelerated deterioration that could ultimately lead to ecosystem collapse. In contrast, if biodiversity conservation measures are implemented effectively and consistently across countries, ecosystem stability can be maintained and, in many cases, ecological recovery can be achieved **[11, pp. 448–449]**.

In accordance with the objectives established under the new Global Biodiversity Framework (GBF), particular emphasis has been placed on increasing the coverage of IUCN Protected Area Management Categories I–IV to at least 30% of the total area of each natural-geographical region or administrative unit. To facilitate the inclusion of unique natural features and areas within protected area networks, and to identify sites and zones essential for maintaining ecological stability, the assessment criteria presented in Table 1 are proposed.

Table 1.

Assessment Criteria and Scoring Scale for Evaluating Unique Natural Features and Areas for Protected Area Designation

№	Assessment Criteria	Score				
		1	**2**	**3**	**4**	**5**
I.	**Landscape Diversity Assessment**					
1.	Size of the assessed feature or (degree of representativeness)	Facies	Tract	Terrain	Landscape	Covers more than two landscape types
2.	Landscape configuration and ecological connectivity	Linear and elongated pattern with minimal ecological connectivity	Complex and fragmented pattern with weak functional connectivity	Mixed pattern with potential ecological corridors	Relatively intact pattern with a high level of functional connectivity	Compact and intact pattern with high structural and functional connectivity
3.	Landscape integrity and degree of fragmentation	Stage E. The landscape is almost completely fragmented. Natural landscapes remain only as small, isolated patches lacking ecological connectivity.	Stage D. Landscape integrity has been substantially disrupted. Natural areas have been displaced to the periphery and occur as isolated patches within an anthropogenic matrix.	Stage C. Transitional stage characterized by a balance between natural and anthropogenic landscapes. Natural landscapes begin to lose their dominance and become concentrated into several large habitat patches.	Stage B. Primary linear infrastructure has emerged, and the functional integrity of the landscape has begun to decline.	Stage A. The landscape remains intact, with the core area fully preserved. There are no significant barriers to species movement, and ecological connectivity is maintained.
4.	Landscape Ecological Condition Index *(ёки* Landscape Ecological Condition Coefficient*)*	<0.5.	0.5-0.9	0.9-1.1	1.1-1.5	1,5
5.	Diversity of Unique Natural Features and Areas	1-3	3-5	5-7	7-10	> 10
6.	Geological Diversity Index (Geology and Landforms)	1	2	3	4	>5
7.	Number of River Catchments	1	2	3	4	>5

№	Assessment Criteria	Score				
		1	**2**	**3**	**4**	**5**
II.	**Biodiversity Assessment**					
1.	Number of Plant Communities (Phytocoenoses)	100-300	300-400	400-500	500-700	> 700
2.	Number of Rare Plant Species Listed in the Red Data Book	1-5	6-10	11-15	18-20	> 25
3.	Number of Rare Animal Species Listed in the Red Data Book	1-2	2-5	5-7	7-10	> 10
4.	Number of Species Listed in the IUCN Red List and the CITES Appendices	1	2	3	4	>5
5.	Number of Plant Communities (Phytocoenoses)	1-2	2-5	5-7	7-10	> 10
6.	Number of Rare Plant Species Listed in the Red Data Book	1	2	3	4	>5
III	**Ecological Connectivity Assessment**					
1.	Type and configuration of ecological corridors	No ecological corridors; habitats are completely isolated.	Only artificial or engineered corridors (e.g., irrigation ditches and canals) with low permeability are present.	Only linear corridors exist, but they do not form an integrated ecological network.	Linear and stepping-stone corridors are relatively well developed but remain only partially connected.	Continuous and wide natural ecological corridors (e.g., river floodplains and forest belts) connect all core areas.
2.	Suitability for species movement	Species movement is impossible; gene flow has ceased.	Only short-distance movement by a limited number of small species is possible.	Potential connectivity exists for certain taxonomic groups.	High potential connectivity; effective movement pathways for species are largely maintained.	Full functional connectivity; uninterrupted movement of organisms and ecological flows is maintained.
3.	Landscape resistance (matrix) and functional permeability	Very high resistance (urban areas, highways, industrial zones).	High resistance; pronounced fragmentation and low naturalness.	Moderate resistance; corridors exist through heterogeneous (mosaic) landscapes.	Low resistance; natural habitats predominate and facilitate species movement.	Very low resistance; optimal ecological corridors effectively connect all core areas.

Landscape Diversity. Landscape diversity is a fundamental principle governing the development and functioning of natural environments. An optimally designed protected area (PA) network should adequately represent the major landscape types of a region together with their defining characteristics. Consequently, landscape diversity constitutes one of the principal criteria for evaluating the representativeness of protected area systems. When assessing geocomplexes for protected area designation, particular attention should be given to their degree of representativeness and uniqueness, as well as to their ability to reflect the essential characteristics of a natural-geographical region.

Representative landscapes are identified based on several key attributes, including their spatial extent (i.e., dominance within a natural-geographical region), the presence of characteristic natural vegetation and soil cover, and the occurrence of relatively stable geocomplexes that are minimally affected by external disturbances. Such landscapes generally possess region-forming characteristics and provide the basis for the delineation of natural-geographical units. In contrast, unique landscapes typically occupy relatively small areas but are distinguished by their exceptional features, distinctive properties, and scientific significance. They are of natural origin and represent the unique characteristics of regional geographical complexes [2, pp. 106–107].

The inclusion of both representative and unique landscapes within the protected area network ensures a more comprehensive representation of the defining characteristics of each natural-geographical region. Therefore, the number of protected areas serving as landscape reference reserves within the ecological network should, at a minimum, correspond to the number of natural-geographical regions in the study area. Accordingly, in the Fergana Valley, at least six protected areas should perform the function of landscape reference sites, corresponding to the six identified natural-geographical regions.

These reference areas serve as natural benchmarks against which anthropogenically modified landscapes can be compared. They provide an essential basis for evaluating the environmental impacts of human activities, assessing the ecological condition of transformed landscapes, and supporting scientifically sound decisions on the sustainable use and management of natural resources [8].

Integrity of Landscape Component Diversity. Unique natural features consist of rare natural complexes or sites that clearly represent specific characteristics of geocomplexes and possess high scientific value for observation, monitoring, and research. When assessing these areas for protected area designation, particular attention should be given to the integrity of landscape diversity and the functional relationships among their constituent components and morphological units. The higher the degree of preservation of landscape diversity and its components, the greater the stability of biological diversity, species composition, and the ecosystem's capacity for self-maintenance and natural regeneration [10].

Within a protected area network, the representation of geological, hydrological, biological, geomorphological, and soil diversity should be evaluated separately for each natural-geographical region. This is essential because the conservation of landscape component diversity maintains the integrity and functional connectivity of landscapes while sustaining the natural balance of matter and energy flows within ecosystems. An effective protected area network should therefore ensure comprehensive representation of these key environmental components. A target coverage of 100% is recommended for the identified unique natural features, accompanied by an assessment of the existing natural monuments and other protected sites within the network. Such an approach makes it possible to identify valuable natural features that remain outside the current protected area system and to incorporate them in accordance with established conservation criteria.

Ensuring that all major soil types occurring within the Fergana Valley are represented in the protected area network is particularly important for conserving regional soil diversity and maintaining natural soil cover. Therefore, the proposed protected area network gives special priority to the comprehensive representation and long-term conservation of soil diversity.

Biodiversity Indicator. Wild animals living under natural conditions, together with native wild plant species, constitute an important component of the national natural heritage and are protected under environmental legislation. Based on field survey data and published scientific sources, an inventory of priority landscapes for conservation, unique natural features, and species listed in the Red Data Book of the Republic of Uzbekistan and the IUCN Red List of Threatened Species (2019) was compiled for the Fergana Valley.

Areas exhibiting the highest levels of biodiversity, including biodiversity hotspots and species distribution ranges, were identified for each landscape within the natural-geographical regions. This analysis enabled the preparation of preliminary maps highlighting areas of high biodiversity value that perform key ecological functions. Based on the identification of biodiversity hotspots and ecological network gaps within the Fergana Valley, recommendations were developed for the establishment of new protected areas. The conservation and restoration of biodiversity in the Fergana Valley require particular attention because the region exhibits one of the highest levels of landscape fragmentation not only in Uzbekistan but also across Central Asia.

Landscape biodiversity is commonly evaluated using measures of species richness. The composition, diversity, structure, and ecological condition of biotic communities, together with their capacity for natural regeneration and self-maintenance, provide important indicators of geosystem resilience, the acceptable level of anthropogenic disturbance, and the selection of appropriate conservation and restoration strategies. This approach also facilitates the evaluation of the effectiveness of conservation measures implemented in the Fergana Valley. Within the existing protected area network, the level of protection afforded to species listed in the Red Data Book of Uzbekistan and the IUCN Red List, together with the conservation of their distribution ranges, should be assessed using the criteria presented in Table 1. As a mandatory conservation target, the protected area network should ensure 100% coverage of all identified rare and endemic species and their habitats [8].

Regulating human activities within protected areas (PAs) creates favorable conditions for the survival, reproduction, and long-term persistence of native species. As a result, these areas may also be colonized by species whose conservation was not originally considered during the establishment of the protected area. At the same time, it is important to identify alien and invasive species that are not native to the ecosystems of Uzbekistan, as they may spread through human activities or naturally disperse from neighboring regions.

In the Fergana Valley, invasive species affecting agroecosystems include the Comstock mealybug (Pseudococcus comstocki), the Colorado potato beetle (Leptinotarsa decemlineata), the grape leafroller moth, and the mulberry moth. These species have become established components of local food webs and are among the most economically damaging agricultural pests in the region. Declining soil fertility, increasing weed infestation, and the spread of invasive insect pests in agricultural landscapes indicate disruptions in the ecological balance and functioning of regional ecosystems.

For species listed in the Red Data Book, Forest Genetic Reserves (FGRs) provide important refugia for the conservation of genetic diversity. Therefore, particular attention was given to identifying FGRs within each natural-geographical region and developing recommendations for their effective protection. Forest Genetic Reserves are unique forest areas that conserve populations, subspecies, and ecotypes possessing characteristic phytocoenotic, silvicultural, and ecological attributes representative of specific natural and climatic regions, thereby serving as valuable resources for genetic conservation and forest breeding [9]. Land designated for the protection of Forest Genetic Reserves should be incorporated into the protected area network in accordance with the relevant legal and conservation regulations.

An important criterion for the conservation of Key Ornithological Territories (KOTs) is that 25–30% of their total area should be designated as protected areas. Accordingly, at least 30% of the existing KOTs within the region should be incorporated into the protected area network under an appropriate conservation status. T his requirement reflects the fact that many KOTs are adjacent to areas with different conservation designations and contrasting land-use regimes. For example, such sites may occur within or around artificial water bodies associated with industrial facilities, reservoirs, or water bodies located in urban and rural settlements.

Ecological Stability. Anthropogenic influence is evident, to varying degrees, across all landscape types. Although nature and society are closely interconnected, their interactions require a balanced approach that recognizes the fundamental role of natural systems in sustaining ecological processes. Consequently, conservation planning should be guided by the principle of maintaining the integrity and resilience of natural ecosystems. The extent, intensity, and spatial patterns of landscape transformation vary considerably depending on the type and scale of human activities.

Ensuring ecological stability and the optimal spatial allocation of large protected areas requires the identification and conservation of river catchments. According to N. F. Reimers and F. R. Shtilmark (1978), the upper reaches of river basins are among the most environmentally sensitive and vulnerable areas. These catchments play a critical role in maintaining regional ecological balance because they regulate the primary flows of water, matter, and energy that sustain ecosystem functioning [8]. Therefore, the contribution of protected area networks to regional ecological stability should be evaluated within a river basin (catchment-based) framework, which provides an ecologically meaningful basis for conservation planning and management.

Catchment boundaries were delineated using 1:25,000-scale digital topographic maps. For each identified river catchment, the proportion of land currently included within the protected area network was determined. In arid regions, allocating 30–50% of the catchment area to protected areas is generally regarded as an optimal threshold for maintaining ecological stability. The boundaries of river catchments were delineated using digital topographic maps at a scale of 1:25,000. For each delineated catchment, the proportion of protected areas (PAs) was calculated using the following equation:

$$P = \frac{S_{PA}}{S_{CB}} \times 100\%$$

where: P is the proportion of protected areas within the river catchment (%); S_{PA} is the area of protected areas within the assessed river catchment (km² or ha); and S_{CB} is the total area of the river catchment (km² or ha).

The resulting indicator was used to evaluate the level of conservation coverage within each river catchment. In arid regions, allocating 30–50% of the catchment area to protected areas is considered optimal for maintaining ecological stability and preserving the natural hydrological processes responsible for river flow formation.

To improve the protected area network, it is necessary to define appropriate conservation categories and management regimes for the proposed unique natural features and areas. When assigning a conservation status to these sites, it is recommended to apply the assessment criteria presented in Table 1. Furthermore, the cumulative assessment score can be used to recommend the most appropriate conservation category and management regime for each unique natural feature or area, as presented in Table 2.

Table 2.

Proposed Scale for Determining the Conservation Status and Protection Regime of Unique Natural Features and Protected Areas

No.	Protected Area Category	Score	Level of Significance		
			Local Significance	National Significance	International Significance
1.	Natural Monument (Point Feature)	10-20	✓		
		20-25		✓	
2.	Natural Monument (Areal Feature)	25-30	✓		
		30-35		✓	
3.	Nature Nursery	35-40	✓		
		40-45		✓	
4.	Micro-Reserve	45-50	✓		
5.	Nature Reserve (Zakaznik)	50-55	✓		
		55-60		✓	
6.	Nature Park	60-65	✓		
		65-70		✓	
7.	Landscape Reserve	70-75		✓	
8.	State Nature Reserve (Strict Nature Reserve)	75-80		✓	
		80-85			✓

Based on the assessment results, recommendations are developed to improve the protected area network in both quantitative and qualitative terms. Quantitative improvements involve expanding the total area under protection, whereas qualitative improvements focus on increasing the representation of protected species' habitats, unique natural features and areas, Forest Genetic Reserves, and other conservation priorities.

The natural-geographical regions of the Fergana Valley are subject to varying levels of anthropogenic pressure, and the distribution and conservation status of their unique natural features and areas change progressively from the floodplains of the Syr Darya River toward the foothill (*adyr*) and mountainous landscapes. The mountainous and foothill regions, which occupy the largest proportion of the valley, are characterized by a high diversity of unique natural features and comparatively well-preserved natural ecosystems.

At this stage of the study, the representativeness of the protected area network is evaluated in relation to the natural-geographical regions of the Fergana Valley. This analysis enables the identification of unique natural features and areas that are not currently included within the existing protected area network. Based on the assessment results, recommendations are proposed regarding their appropriate conservation status and functional role within the protected area network. The proposed assessment criteria for unique natural features and areas are expressed through a point-based scoring system, using standardized indicators and measurement units to ensure a consistent and objective evaluation.

Conclusions and Recommendations. The Great Acceleration has exerted profound global impacts on biodiversity, intensifying the fragmentation of natural landscapes and accelerating ecosystem degradation. With more than 70% of the Earth's terrestrial surface having been modified by human activities, the expansion and effective management of protected area (PA) networks have become an urgent global priority. In accordance with Target 3 of the Kunming–Montreal Global Biodiversity Framework (GBF), at least 30% of the Earth's land and marine areas should be effectively conserved by 2030. In this context, protected areas should be regarded not only as instruments for biodiversity conservation but also as essential components of ecological infrastructure that maintain ecosystem resilience and environmental sustainability.

The proposed assessment framework enables the identification of unique natural features and areas with high ecological, scientific, cultural, aesthetic, and recreational value within natural-geographical regions or administrative units. The boundaries of each identified site are delineated using high-resolution remote sensing imagery interpreted in a GIS environment, thereby ensuring accurate spatial representation and supporting evidence-based conservation planning.

A comprehensive geospatial database is developed for both existing and proposed protected areas. The database includes information on the area, boundaries, recommended conservation category, management objectives, and the unique natural features occurring within each protected area. Such a database provides an effective foundation for protected area planning, monitoring, and management.

The integration of an integrated ranking method with Geographic Information System (GIS) analysis enables the rapid identification of biodiversity hotspots and priority conservation areas. The proposed assessment framework, consisting of 17 evaluation criteria, incorporates landscape representativeness, uniqueness, ecological integrity, and landscape connectivity, thereby providing a scientifically robust basis for protected area designation. To enhance regional ecological stability, it is recommended that 30–50% of the area of river catchments be incorporated into the protected area network.

The development of protected area systems should prioritize the establishment of continuous ecological networks (econets) rather than isolated protected sites. Particular attention should be given to strengthening ecological connectivity through river floodplains, riparian habitats, and forest belts. In addition to protecting unique natural features, the protected area network should ensure adequate representation of the characteristic zonal landscapes of each natural-geographical region, which serve as landscape reference sites. Finally, the point-based assessment system developed in this study provides a practical scientific basis for assigning appropriate conservation categories—including State Nature Reserve (Strict Nature Reserve), National Nature Park, Natural Monument, Nature Reserve (Zakaznik), and Micro-Reserve—to unique natural features and areas according to their conservation value.

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