

Annual report for the year 2023

State: Ukraine

Name of the area: Carpathian Biosphere Reserve

Year and number of years since the award or renewal of the European Diploma for Protected Areas:

2022, 1 year

Central authority concerned:

Name: Ministry of Environmental Protection and Natural Resources of Ukraine

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Authority responsible for its management:

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1. Conditions: List here all conditions which were attached to the award or the renewal of the European Diploma. Explain either how the conditions have been totally complied with or detail the progress in complying with the conditions. Please also indicate any unresolved difficulties that you have encountered.

No conditions were attached to the renewal of the European Diploma

2. Recommendations: List here all recommendations which were attached to the award or the renewal of the European Diploma. Explain either how the recommendations have been totally complied with or detail the progress in complying with the recommendations. Please also indicate any unresolved difficulties that you have encountered.

1. develop a ranger training programme, including where possible entry level apprenticeships for younger people, which provide a strong career basis for rangers, and assess salaries to ensure that they are sufficient to attract and keep suitably qualified staff;

Under the conditions of war, the ranger service of the Carpathian Biosphere Reserve (CBR) suffered the most, because about 10% of its staff were mobilized to the army and are now fighting in the east of Ukraine. At the same time, CBR closely cooperates with international funds that specialize in supporting rangers and provide serious assistance in material and technical support of their needs. These include the Frankfurt Zoological Society (Germany) and Global Conservation (USA). They also organize regular trainings for the ranger service with the aim of improving their qualification level and mastering innovative technologies such as the SMART patrol and monitoring system. In addition, on a regular basis, internal trainings of ranger service specialists are organized on various aspects of current work in such areas as monitoring and collecting primary data for scientific research, recreational activities and communication with visitors.

In the conditions of war time in 2023, the increase in the salaries for employees of the institution (like all budget institutions of Ukraine) was frozen (stopped).

2. enhance the research and monitoring directed towards better understanding of the effects of climate change on the Carpathian Biosphere Reserve (social, economic and on biodiversity), develop adaptation and mitigation plans and identify nature-based solutions to manage the effects;

CBR has a sufficiently high scientific potential for conducting research and ensure monitoring in the context of global climate change. In order to develop measures to mitigate the impact of climate change on natural complexes, a special program is being developed, which, in particular, involves the establishment of a series of stationary research plots to collect information in all representative types of ecosystems.

CBR participates in the Life Prognoses project, which is aimed on conservation of the European ancient forests. It includes also a powerful climate component.

In 2023, CBR, together with Ukrainian and Romanian partners, prepared a project application for participation in the European Union's neighbourhood and partnership program, which is directed on the search for solutions in the context of global climate changes and ways to mitigate them.

Also, in 2023, additional materials on forest management were prepared regarding transformation cuttings in derivative spruce stands to restore forests close to natural ones.

3. dedicate research on and monitoring of open habitats and their component species in order to better understand the ecological processes needed to maintain them, especially in the light of climate change, wild mammal populations and agricultural practices, and consider and implement relevant adjustments to management;

On the territory of the CBR there are represented a number of open habitats which are important for the conservation of biotic and landscape diversity. These are, in particular, wetlands, flood plain meadows and highland meadows. These types of ecosystems of CBR are given special attention, which is reflected in their study and protection.

CBR wetlands have a status of Ramsar sites, for which special management plans have been developed, which are based on the results of many years of research.

Floodplain meadows, as one of the most vulnerable ecosystems, are a training ground for monitoring and research, on the basis of which a special scientific program for their management has been developed. Also here, over the past few years, have been implemented a several international scientific and environmental projects, the purpose of which is to preserve these unique ecosystems.

Highland meadow ecosystems, which have traditionally, for many centuries, served as a place for traditional farming and the intensity of which has been decreasing in recent decades, are the object of special attention for scientists and conservationists of both the CBR and side institutions and organizations. The goal of cooperation with them is to develop a number of measures that will balance the reduction of the scale of management and nature use. They will be included in the 5-year action plan (2024-2028) within the framework of Management Plan of CBR.

4. undertake research and monitoring to understanding the ecological dynamics of wilderness management, especially how the ecosystem functions in the absence of traditional farming and forestry practices;

Lowland, after-forest and highland meadow ecosystems suffer the most from the loss of traditional practices and scale of management use. The greatest threat to them is forest succession, which has intensified significantly in recent decades.

In order to stop it, several management plans have been developed, which are based on the results of many years of research and monitoring aimed at conservation of the inherent biodiversity. They include, in particular, the mowing and uprooting of those areas, the overgrowth of which leads to the greatest losses or proceeds at a high pace. They will also be included in the 5-year action plan (2024-2028) within the framework of the Management Plan of CBR.

5. review the methodologies for monitoring large mammals, prioritizing the more at-risk carnivores, to achieve reliable estimates of species populations; review the state of knowledge of the ecological role of the large mammals in the Carpathian Biosphere Reserve, and determine optimum population numbers to maintain the coherence of the Carpathian Biosphere Reserve;

The Carpathian Biosphere Reserve is home to almost all species of large mammals of the Carpathians, including large carnivores (bear, lynx and wolf). Only chamois and mountain marmots are absent. Bear and lynx are listed in the Red Data Book of Ukraine.

Monitoring of large mammals, in particular large carnivores, is carried out by registering animal encounters by researchers and rangers using the SMART patrol and monitoring system, registration of animals using camera traps, conducting census' of the number according to special methods. Such monitoring makes it possible to obtain fairly reliable information about the state of populations of these animals.

The number and population density of rare species on the territory of the reserve is close to the optimal natural density. A reliable protection system allows us to guarantee the further conservation of these species on the territory of the reserve.

6. continue to liaise with the relevant authorities to ensure that the environmental impact of the proposed ski resort in the Svydovets mountain range, including any potential negative effects on the Carpathian Biosphere Reserve, are assessed, prevented or effectively mitigated;

The Carpathian Biosphere Reserve is an opponent of the idea of creation of a large ski resort complex in the central part of the Svydovets Range, which is characterized by unique landscapes, biodiversity and wetlands.

In March 2023, the Ministry of Environmental Protection and Natural Resources of Ukraine held two online meetings to discuss the possible environmental consequences of the construction of ski resorts in the Carpathians (in particular, on the Svydovets range), in which representatives of the Carpathian Biosphere Reserve took an active part.

Also, in April 2023, representatives of the reserve took part in a "round table" on this topic, which was organized by the territorial community, on the territory of which the construction of the resort is planned. In order to prevent the construction of the mentioned complex within the planned scale, scientists-ecologists of Ukraine proposed the establishment of a new nature protection site with the inclusion of the most valuable areas of this highland massif.

CBR is also working on a project of extension of the territory, in the framework of which the possibility of including new territories of the Svydovets range into the reserve is being considered.

7. secure and increase the budget allocation for education, awareness-raising activities, scientific programmes, the development of the ranger service and support for socio-economic priorities in the extended Carpathian Biosphere Reserve; continue to develop project-based funding appropriately, ensuring that there is not an over-reliance on project funds to support long-term needs;

Because of the state of war in Ukraine, the state has limited opportunities to finance budget institutions.

Instead, in 2023, the Frankfurt Zoological Society provided significant assistance to the institution. In particular, the reserve's current needs in oil and fuel, car maintenance, insurance, stationery goods, building materials, field equipment and gear, etc. were covered by them. Also, with the donor's funds the roof of the Museum of Mountains Ecology and one of the administrative buildings of the institution were overhauled.

CBR has prepared a budget request for 2024 to the Ministry of Environment, which plans to increase the amount of funding compared to 2023. CBR also prepared several project applications to international funds and organizations for financing separate areas of activity.

8. continue close co-operation between the Carpathian Biosphere Reserve and the State Forest Enterprise, especially in adapting to and mitigating the effects of climate change, including the economic impact on the local communities;

CBR closely cooperates with neighbouring state forestry enterprises, which form the main part of the transition territory of the UNESCO Carpathian BR. As part of this cooperation, is being considered a possibility of extending the territory of the reserve to include in the CBR significant areas of ancient forests, which are of particular importance in the context of global climate change, as deposits of large volumes of carbon.

Programs to mitigate global climate change on forest ecosystems are being developed jointly, which include, in particular, abandoning the practice of creation of artificial plantations and gradually transitioning to natural forests restoration and refusing the practice of continuous felling. Also, an important area of cooperation is the restoration of indigenous tree stands, resilient to climate change.

9. review the viability of traditional farming practices; consider how State funding and other initiatives can support and incentivize traditional farming where it benefits the aims of the Carpathian Biosphere Reserve (including direct payments to farmers for ecosystem services); pilot potential options where possible;

CBR annually pays a significant land tax and other payments to the budgets of local territorial communities. A significant part of these taxes goes to support traditional farming, and first of all to animal husbandry.

The CBR administration provides possible assistance to farms located on its territory. We are talking about the provision of construction timber and fuel wood, repair and maintenance of roads, bridges, farm buildings and other infrastructure.

In addition, CBR is actively searching for international aid, in particular grants, to support local farms. For instance, electric shepherds are in high demand, which ensure both the preservation of the property of local dwellers and protection of large carnivores.

In close cooperation with NGOs, pilot measures are implemented to restore the water buffalo population in the Valley of Narcissus, which at the same time is a combination of measures to restore traditional local farming practices and also helps to support the population of narcissus and other red-listed species.

10. develop a strategy for sustainable ecotourism to support the local economy, secure and focus funding on infrastructure priorities, and create more opportunities for employment for local people to reduce outward migration;

In CBR was established a recreation department, one of the main tasks of which is the implementation of the concept of sustainable tourism. For this purpose, the department is preparing a strategic document on the development of sustainable tourism on the territory of the CBR and adjacent territories. The specified document will be based on the best practices with which CBR employees have a chance to get acquainted within the framework of a number of international projects, in particular SNPA. After approval of this document, its key provision will be reflected in the Management Plan.

Since financial resources are quite limited in the conditions of war situation in Ukraine, the possibilities of the institution to increase funding in this area are very small. However, due to the support from international institutions, in particular the Frankfurt Zoological Society, and the activities of a number of international projects, it is possible to get some funding for priority tasks and objects. In addition, in the current year, cooperation was established with a volunteer organization, which, together with the institution, is working on construction and maintaining the proper functioning of a number of highland eco-points and ecotourism trails.

Also here is functioning a Coordinating Board of CBR, which deals with issues of coordination for sustainable development and recreational cooperation with local stakeholders, and also heads of relevant departments and field divisions participate in meetings and sessions of local self-government bodies. In the current year, a meeting of the Rakhiv sector of the Coordinating Board was held in May, and the Tiachiv sector meeting is scheduled to be held in December.

We have introduced the practice of development of joint programs for the socio-economic development of settlements in the area of activity of the institution, where specific measures aimed at the development and maintenance of recreational infrastructure, roads and bridges, which are used by tourists as well as by local population to maintain traditional farming. In the current year, such a program was implemented with the territorial community of Bohdan.

In cooperation with regard to the recreational direction, an agreement is concluded annually to ensure the development of winter types of recreation on the territory of the institution – skiing on the territory of the Drahobrat tract, according to the planned measures in Management Plan.

11. ensure that the European Diploma logo and the significance of the award are widely promoted in all Carpathian Biosphere Reserve material, events and communications;

CBR actively disseminates information about the European Diploma during all meetings in its presentations, in all the reports and promotion booklets about the reserve. The European Diploma logo is used in presentations and in information materials, on the reserve's website.

The obligation to properly preserve the institution's values and maintain international statuses is included in the Regulations of the CBR.

12. develop a strategy for enhancing ecological connectivity within the Carpathian Biosphere Reserve between the eight original massifs; examine the ecological connectivity issues between the Carpathian Biosphere Reserve and other parts of the Ukrainian Carpathians; continue to pursue trans-border connectivity, for example with Romania.

In 2016, CBR established a UNESCO transition area, which ensured ecological connectivity between most of the reserve's clusters. Currently, development strategies are being developed for this area, which will be based on increasing the ecological connectivity between protected massifs. Work continues also on the establishment of a UNESCO transboundary biosphere reserve together with Romanian protected areas. Its creation will promote cross-border connectivity between the existing protected areas of Ukraine and Romania.

The CBR directly borders with other protected areas in Carpathians – Synevyr and Carpathian National Nature Parks, which makes it possible to strengthen ecological connectivity and implement joint measures.

3. Site Management: List here any changes to the European Diploma holding site management, in relation to both terrestrial and aquatic environments (as appropriate), and in relation to staff and finances, since the last annual report was submitted to the Council of Europe. Please also indicate any unresolved difficulties that you have encountered.

There were no changes in the management of the institution neither in recent years nor in 2023 in particular. Also, It should be noted that for the first time in the new Regulations of the CBR (approved in 2020 and amended in 2022) information on the existence of a transition zone of the CBR was reflected, and in the reserve a separate department was established to manage the issues on implementation of the principles of sustainable development and cooperation with communities in the area of activity of the CBR.

The logistical support of the ranger service is one of the key priorities of the reserve's administration, which is very crucial due to its clustered structure. As per today, a great support is provided by Frankfurt Zoological Society. SMART patrol and monitoring system, registration of animals using camera traps is actively being implemented.

Management problems are also observed in certain types of ecosystems. The most threatened ones are meadow ecosystems, as well as wetlands. One of such problems is the forest succession in the territory of the Valley of Narcissus, where semi-natural flood plains, which can also be treated as wetlands, are present.

During last year, the traditional nature management measures (haymaking and willows cutting) have been carried out in "The Valley of Narcissus" massif to maintain meadow plant communities and conservation of *Narcissus angustifolius* population. The situation had been disturbed here before the area became protected. Activities aimed for the hydrological balance restoration have been held in this protected massif.

In particular, here during 2023 was implemented an international project "Save the Narcissus Valley" with the financial support of EOCA (European Outdoor Conservation Association) and ORTOVOX. Within its framework, 2 hydrological constructions (flood-gates) were maintained on drainage channels (in total, presently there are 10 of them). Also here was built a barn for the year-round keeping of a herd of water buffaloes. Today, about 15 water buffaloes are grazed there. Also, about 50 hectares, which were left out by the local population due to a decrease in the demand for hay were mowed with joint financing from the project funds and with the CBR's own funds.

4. Boundaries: Give details of any changes to the boundaries of the European Diploma holding site since the last annual report was submitted to the Council of Europe. If there are any changes, please attach an appropriate map to this report. Please also indicate any unresolved difficulties that you have encountered.

In January 2022, by the Decree of the President of Ukraine, the territory of the reserve was extended by 8,381.6 ha, and currently it is 66,417.4 ha. Most of the newly added territories are covered with the primeval and old-growth forest. In addition, as part of this extension process, over 9,000 hectares of natural beech and spruce forests were passed within its territory under the direct management of the CBR administration - the ones which were previously subordinated to state-owned forestry companies. Currently, the process of transferring new territories under the management of the CBR administration is ongoing.

A map of the CBR territory can also be viewed at the following link: http://cbr.nature.org.ua/jpg/CBR_CoE.jpg

5. Other information:

Military actions from the aggression of the Russian Federation are happening at a great distance from the CBR and do not directly affect its territory.

In February, May and November, by the order of the Ministry of Environment, the representatives of the CBR participated in 2 meetings of the Joint Management Committee (JMC) of the UNESCO World Heritage Site "Ancient and Primeval Beech Forests of the Carpathians and Other Regions of Europe", and also during the given year the reserve participated in several international seminars dedicated to the management of the UNESCO World Heritage Site and its buffer zone.

CBR was an organizer of the International Scientific Conference "Role of biosphere reserves and other protected areas in implementation of sustainable development strategy in Ukraine" (dedicated to the 55th anniversary of the Carpathian Reserve, and the 30th anniversary since biosphere reserves designation in Ukraine), which was held in November 21, 2023 in online format. Over 100 scientists from Ukraine, Romania, Germany and Poland participated in it.

In November 2023, at the 24th session of the General Assembly of States Parties of the Convention concerning the Protection of the World Cultural and Natural Heritage, Ukraine was elected to the World Heritage Committee for a 4-year period. In this regard, the representative of the reserve was appointed as a national expert on natural heritage to the above-mentioned Committee.

In 2023 CBR successfully passed another state certification as a scientific institution and has received a relevant Certificate from the Ministry of Education and Science of Ukraine.

In November 2023, the reserve's delegation took part in the 1st International Summit of Protected Areas in Borjomi (Georgia). The Borjomi Summit was dedicated to the discussions around the key pillars of protected area policy, protection, and operations including forest and wildlife protection, governance and management, sustainable livelihoods for communities, biodiversity conservation, monitoring, and sustainable and equitable financing.

In April 2023, representatives of the reserve participated in the 6th meeting of the Working Group of the Carpathian Convention "Sustainable Agriculture and Rural Development" (Romania).

At the end of 2023, within the framework of the EU Interreg Danube Region Program, the project ForestConnect - "Towards a Climate-smart Forest Connectivity for Large Carnivores in the Balkan-Carpathian Region" was supported for financing. CBR is one of 15 partners.