

## Annual report for the year 2021

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:

2012, 9 years

### Central authority concerned:

Name: Ministry of Environmental Protection and Natural Resources of Ukraine

Address: 35, Mytropolyta V. Lypkivskoho str., Kyiv, Ukraine 03035

Tel: +380 44 2063115

Fax: +380 44 2063302

e-mail: [info@mepr.gov.ua](mailto:info@mepr.gov.ua)

www: <http://mepr.gov.ua>

### Authority responsible for its management:

Name: Carpathian Biosphere Reserve

Address: 77, Krasne Pleso str., Rakhiv, Zakarpatska oblast, 90600

Tel: +380 3132 22193

Fax: +380 3132 22659

e-mail: [cbr-rakhiv@ukr.net](mailto:cbr-rakhiv@ukr.net)

www: <http://cbr.nature.org.ua>

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 award 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. continue efforts to provide the Carpathian Biosphere Reserve with more appropriate funding and to raise more additional funds from external sources;***

Funding of the Carpathian Biosphere Reserve (CBR) is accomplished by means of the State Budget of Ukraine according to the current Legislation. At the same time, costs from local budgets, charity funds, institutions, organizations and from individual citizens or other sources are not forbidden by the Law, and can also be involved. There's an annual growth of budget. In 2021 it was 85 million UAH from the state budget. A significant increase in funding during last years was caused by the allocation of special funds for the land tax payment which were to be made by the Reserve into the budgets of the territorial communities in the area of CBR's activity. A total of 41 million UAH has been allocated in 2021. Part of this money is used for implementation of the projects that are important for both the CBR and local communities.

In 2016, the implementation of the Ukrainian-German project "Support to Nature Protected Areas in Ukraine" (SNPA project, 2016-2022) with a total budget of 14 million euro was launched. The main objective of the project is to improve the management and effectiveness of the selected protected areas in Ukraine (the Carpathian Biosphere Reserve is one of them), as well as to increase or maintain a high level of perception of such territories by local communities. In particular, in 2021 the CBR got four-wheeled drive cars and motorbikes for the needs of the ranger service (7 items each), as well as a big number of computers and other office equipment, photo and video cameras, means of communication etc.

***2. accelerate liaison with the authorities of Romania so as to complete the process of establishing a transfrontier Biosphere Reserve within the next two to three years;***

An important objective for the Carpathian Biosphere Reserve is to establish a transboundary biosphere reserve (TBR) in the Maramures Mountains together with the Romanian partner – the Maramures Mountains Nature Park. This activity is envisaged by "The strategy of the Carpathian Convention implementation" adopted by the decision of the Cabinet of Ministers of Ukraine No. 11-p on January 16, 2007.

The given issue was discussed at the International Conference "Natural Resource and Ethnic Cultural Transboundary Potential of the Hutsul Region in Ukraine and Romania: Problems of Preservation and Sustainable Development", which was organized by the CBR in an online format on November 25, 2021.

Also, the working meeting dedicated to the revival of the process around the establishment of a transfrontier Biosphere Reserve was held with the colleagues from the Verkhovyna National Nature Park on December 2, 2021 with the participation of both protected areas. The next step will be a meeting of all the Ukrainian representatives of the PAs that are willing to join the process. The meeting is scheduled for December 15, 2021. It is planned to meet the Romanian partners on this issue in early 2022.

***3. pay more attention to the elaboration and implementation of clear strategies and actions plans for the development of co-ordinated green activities around the Carpathian Biosphere Reserve, working in close co-operation with the local stakeholders and in line with the presidential guidance;***

The Coordination council operates at the Carpathian Biosphere Reserve. According to the Regulations about the Coordination council, it meets for discussing major interaction aspects of the protected area with communities, cooperation possibilities and mitigation of the conflicts of interests. The council, in addition to a wide representation of the reserve's employees, includes representatives of the local authorities, mayors of towns and villages, directors of the state forestry enterprises, major entrepreneurs, and representatives of wide public, NGOs, educators and activists. In 2021, 1 meeting of the Coordination Council took place. At this meeting, important issues of socio-economic development of the region were considered, as well as the ecological situation in the context of development programs, plans for the future and the mechanisms for improving cooperation between the CBR administration and stakeholders.

In parallel to this activity, the Carpathian Biosphere Reserve's representatives regularly visit community meetings of the towns and villages within the reserve's scope of activity, and also meet the initiative groups and NGOs. As well a great number of ecoeducation activities were organized at schools and kindergartens within the Carpathian Biosphere Reserve's scope of activity. The reserve actively disseminates ecological knowledge and information about green economy, sustainable development, balanced nature resource use and alternative energy sources.

**4. provide the Council of Europe with adequate and detailed figures, information and data on the legislation concerning the wolf (*Canis lupus*) in Ukraine and the enforcement of that legislation in the country, especially with regards to Article 6 of the Bern Convention; the State Party should be urged to report on this issue to the Standing Committee of the Bern Convention at its next meeting, and encouraged to strengthen its efforts on reducing the poaching activities in and around the Diploma-holding area;**

Wolf population number in the territory of the biosphere reserve is determined based on inventory (census), which is conducted in the beginning of winter by tracking the animals simultaneously throughout the reserve. The number of wolves ranged from 16 to 44 individuals in the reserve's area during last 5 years (min. in 2021, max. in 2018), which corresponds to a population density of 0.3-1.2 individuals per 1000 hectares. It is likely that these data are somewhat higher due to the large mobility of this predator (there is a possibility that one and the same specimens are captured few times in different parts of the reserve). In addition, during a year all visual observations of the wolves or their tracks are recorded. During the past 5 years, the annual number of registered observations of the wolves ranged from 172 to 269. The obtained data are analyzed and mapped. Recommendations on the regulation of number for the wolves' population and opposing poaching in the area of the reserve are also developed.

**5. devote priority efforts to the monitoring and conservation of the European mink and to the control of the population of the American mink within the Carpathian Biosphere Reserve;**

In the Carpathian Biosphere Reserve only European mink has been noticed. The state of its population is monitored. For the past five years 4-9 observations are registered annually in the Chornohora and Keveliv field divisions of the CBR (min. in 2017 and 2020, max. in 2016). This year, the administration of the reserve should receive photo traps from the international organization "Global Conservation". They will be used for special observations and accounting of European mink. During the reporting year, the European mink was not observed in the territory of the reserve.

American mink has never been registered on the territory of the reserve.

**6. follow up the implementation of the conclusions and recommendations made in the reports on inventory and monitoring, and on the challenges and solutions for the management of the Carpathian Biosphere Reserve, published in 2008 and 2011, giving the Carpathian Biosphere Reserve the capacity to undertake these;**

In 2019, preparation and approval by the Ministry of the new Management Plan for the Carpathian Biosphere Reserve for the next 10-year period was accomplished. In 2020, the active phase of the implementation the 10-year development strategy and the 5-year action plan has begun. Also in 2020, a new forest management project for the territory of the reserve was approved, the materials of which contains some qualitative and quantitative characteristics of each of the forest sites.

In 2019, the reserve's research team finished preparation of the materials for the CBR's territory expansion by adding the primeval and oldgrowth forest sites in the Tlachiv district (over 8,000 hectares). In addition, as part of this expansion process, it is planned to transmit over 9,000 hectares of natural beech and spruce forests within its territory under the direct management of the CBR administration - the ones which were previously subordinated to state-owned forestry companies. The territory expansion project was approved by the relevant Ministries and the Cabinet of Ministers of Ukraine. At the moment the draft of the relevant Decree of the President of Ukraine is expected to be signed at the Administration of the President of Ukraine. In parallel to that, the administration of the CBR has launched a new project of the territory expansion.

**7. strengthen co-operation with the local socio-economic stakeholders, including the forest and the tourism sectors, and develop specific awareness pilot activities targeted on them; these activities should address the issue of climate change, and promote local adaptation measures to global warming, including alternative socio-economic measures, such as schemes for green tourism, carbon sequestration and payment for ecosystem services.**

Around the massifs of the Carpathian Biosphere Reserve, which have significant legislative limitations as for the use of natural resources, a transition zone that is deprived of these restrictions has been formed. This is the territory that serves as a pilot area for the implementation of various socio-economic projects that are consistent with the concept of sustainable development. The administration of the reserve, in close cooperation with local communities and key stakeholders, develops and implements a strategy for implementing this concept.

In the recent years the cooperation between the CBR and the local communities had reached a new, better level. It was agreed that part of the costs to be received by the communities from the CBR as a land tax, will be used to address the issues that are relevant to both local population and the reserve. These are mostly infrastructural projects (repair of mountain roads, construction of new bridges, etc.) and the projects aimed at improving the awareness of the local population on the CBR's activities.

For the full implementation of the strategy, the Coordinating Council of the Reserve, which unites both local authorities and local self-government bodies, as well as key business stakeholders of the region, is a very important instrument. (See also the information on the Recommendation No. 3 attached)

The CBR is contributing significant efforts to preserve the diversity of domestic animals and plants in the region, in particular by promoting them. An example of such activity is continuation of cooperation project on water buffalo grazing in one of the CBR's field divisions - the Narcissi Valley. Today, about 15 water buffaloes are grazed there, 3 of which are owned by the CBR. The reserve plans to increase its own herd to 20 individuals. The reserve also helps to harmonize the relationship between people and large carnivorous mammals. To do this, in 2021 the CBR administration handed over few electric fences to one of the local communities.

**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 2021 in particular.

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 the SNPA project. In particular, in 2021 vehicles were purchased for the ranger service, as well as office equipment and uniforms.

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 Narcissi Valley, 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 Narcissi Valley" massif to maintain meadow plants communities and conservation of *Narcissus angustifolius* population. Activities aimed for the hydrological balance restoration have been held in this protected massif. The situation had been disturbed here before the area became protected. 9 hydrological constructions (flood-gates) were maintained on drainage channels (2 new ones were built in 2021).

**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.

No changes since 2020

**5. Other information:**

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.

On August 9 - 14, the CBR organized a study tour for the students of the University of Sustainable Development (Eberswalde, Germany). It was attended by about 50 students from different countries. The topic of this event was related to the biosphere reserves management in the Carpathian region of Ukraine on the example of the Carpathian Biosphere Reserve.

In April 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 Property "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 Property and its buffer zone.

In order to prepare draft conclusions and recommendations for the extension of the European Diploma's validity for the CBR, a series of online meetings were held on June 17 with the participation of a Council of Europe's expert and a representative of the Berne Convention Secretariat with the representatives of the biosphere reserve administration, local self-government authorities and regional administrative bodies, as well as higher education and research institutions from Ukraine, Switzerland, Austria, Germany, Great Britain and other stakeholders (eco-education, tourism, forestry and agriculture, ethnoculture, non-governmental environmental organizations), whose activities are related to the functioning of the biosphere reserve.

**6. Natural heritage (general abiotic description: geomorphology, geology and hydrogeology, habitats, flora, fauna, landscape) – State of conservation**

The CBR is located on the southern macroslopes of the main watershed of the Ukrainian part of the Eastern Carpathians. The relief of its highland part was formed during the last ice age. The geological basis is formed mainly by sedimentary rocks (Carpathian flysch), although metamorphic and igneous rocks are also presented. The main landscapes are forests and alpine meadows. The main habitats include pure beech, mixed and spruce forests, alpine and subalpine meadows with large areas of crooked woodland. In general, no significant changes in the state of preservation of both landscapes and major habitats under the influence of anthropogenic and other factors were detected.

6.1. Environment: changes or deterioration in the environment, of natural or anthropic origin, accidental or permanent, actual or anticipated

Not identified

6.2. Flora and vegetation: changes in the plant population and in the vegetational cover; presumed causes

There is a constant increase in the upper forest line due to climate change. There was also an increase in the area of *Salix* sp. shrubs in the floodplain meadow ecosystems of the Narcissi Valley, which leads to a decrease in *Narcissus angustifolius* population number.

6.3. Fauna: changes in the sedentary or migratory populations; congregating, egg-laying and breeding grounds

No significant changes were identified. There is an active expansion of the beaver in mountainous regions, where it was not previously observed.

## 7. Cultural heritage and socio-economic context

7.1. Cultural heritage

The territory of the CBR is characterized by a rich cultural and historical heritage. To study the problems of its preservation in the current year, the reserve organized and held the International Conference "Natural Resource and Ethnic Cultural Transboundary Potential of the Hutsul Region in Ukraine and Romania: Problems of Preservation and Sustainable Development". The "bryndzia" sheep cheese museum dedicated to the preservation of local traditions of nature management has been opened in the vicinity of the Carpathian BR. Work on designing of new ecological and educational centres dedicated to cultural heritage has started directly at the reserve.

7.1.1. Changes concerning cultural heritage

No changes.

7.2. Socio-economic context

In 2021, Ukraine has elaborated a national program for the development of tourist and recreational infrastructure for protected areas of Ukraine. The CBR will be one of the pilot areas for its implementation. It will be launched in 2022.

7.2.1. Changes concerning the socio-economic context

No changes.

## 8. Education and scientific interest

8.1. Visitors – Information policy

Within the framework of the SNPA project, a program to optimize tourist and recreational activities on the territory of the CBR is being developed, which provides for the creation of new walking and cycling routes, digitization of materials for visitors, updating the website, training guides, etc.

8.1.1. Arrangements for receiving and informing the public (building, booklets, maps, cards, etc.)

New expositions for the existing visitor centres are created and updated, thus increasing their interactivity. In 2021, the update of the CBR's website in the context of user-friendliness was completed and a number of information materials for visitors have been published there.

8.1.2. Frequentation by visitors and behavior (number, distribution in time and space)

This year the reserve was visited by about 30 000 people; around 50% of them visited the Narcissi Valley in May during the flowering period, and the rest were summer hikers, mainly in the mountains of the Chornohora, Sydovets and Maramures massifs of the reserve.

8.1.3. Special visits (distinguished persons, groups, etc.)

Due to the quarantine restrictions, the number of visits in 2021 was limited, unlike in previous years. This year the traditional educational excursion for the Eberswalde University students took place at the reserve. As part of the project to support Ukraine's biosphere reserves (Succow Foundation), a delegation of representatives of the Ukrainian UNESCO biosphere reserves, research and nature protection organizations visited the CBR.

8.2. Scientific research

The CBR conducts research under the national program "Chronicle of Nature" for protected areas, and also participates in numerous national and international research projects.

8.2.1. Current or completed research (observation, experimentation, etc.; identification or inventory of the species listed in the appendices to the Bern Convention, etc.)

This year another inventory of the permanent sample plot in beech primeval forests (10 ha) was carried out together with the Swiss scientists within the framework of the project "Cooperation in Forest Research Ukraine-Switzerland".

In 2021, the CBR, as one of the partners, launched the international project Life Prognoses - Protection of Old-Growth forests in Europe - is a project funded by the Life+ funded by the European Union. It involves different organizations from 8 European countries.

#### 8.2.2. Scientific publications

Annually the scientists of the reserve prepare about 50 scientific publications, which include articles in leading journals of Ukraine and the world, collections of conference proceedings, monographs and others. The annual scientific journal "Nature of the Carpathians: Annual Scientific Journal of the CBR and the Institute of Ecology of the Carpathians NAS of Ukraine" is published.

### 9. Site description (vulnerability, protection status, ownership, documentation)

#### 9.1. Changes in legislation or regulations

No changes.

#### 9.2. Changes in ownership title (conversion to public property, rentals, etc.)

No changes.

#### 9.3. Extension or transfer, new uses (for example, conversion into total reserve)

For the prepared project of the CBR's territory expansion see paragraph 2.6.

### 10. Site management (management plans, budget and personnel)

#### 10.1. Improvements made

The implementation of the CBR's Management Plan approved in 2019 for a ten-year period is underway.

##### 10.1.1. Ecological action affecting the flora and biotopes; controls of fauna

Employees of the research structural units and the Ranger Service monitor the state of the main habitats and populations of flag species of flora and fauna. Particular attention is paid to large carnivores. This year, additional hydro-technical structures were installed in the Narcissi Valley in order to increase the groundwater level with the aim to ensure preservation of the habitats of this floodplain meadows with their inherent biodiversity.

##### 10.1.2. Protection against the elements (fire, water regime)

Fire-prevention infrastructure is maintained in good condition on a regular basis, annual preventive measures are taken.

##### 10.1.3. Approaches and thoroughfares (paths, roads, car parks, signposting, fencing, etc.)

The infrastructure of the reserve is maintained in proper condition.

##### 10.1.4. Field equipment (hides and study facilities)

In the framework of the SNPA project in 2021, special equipment, computers and vehicles were purchased for the ranger service and the research team.

##### 10.1.5. Waste management

No changes.

##### 10.1.6. Use of renewable energy systems

Pilot mini-projects to provide solar power to the remote segments of the reserve are being initiated.

#### 10.2. Management

On July 1, 2021 a new director started his work at the Carpathian BR

##### 10.2.1. Administrative department: changes made

No changes.

##### 10.2.2. Wardens' department: changes made

No changes.

##### 10.2.3. Internal policing measures

No changes.

##### 10.2.4. Infringement of regulations and damage; legal action

Minor violations of the protection regime are recorded, which are reported in accordance with current legislation. Documents are sent to the appropriate authorities.

### 11. Influence of the award of the European Diploma for Protected Areas

As the CBR is the only one of all the PAs in Ukraine awarded with the European Diploma, it contributes to its image and recognition at both national and international levels. This status provides additional benefits in the context of participation in projects and programs.