



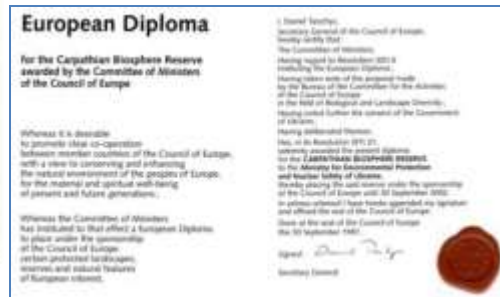
# Carpathian biosphere reserve

Actions adopted to mitigate  
climate change effects in the

## **CARPATHIAN BIOSPHERE RESERVE**

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sustainable development and project cooperation

(Granada)  
**2025**



## Carpathian Biosphere Reserve

**Date of designation:** November 12, 1968

**Status of UNESCO Biosphere Reserve:** February 15, 1993

**Status of biosphere reserve according to UA legislation:** November 23, 1993

**European Diploma for PAs:** 1997, 2002, 2007, 2012, 2022

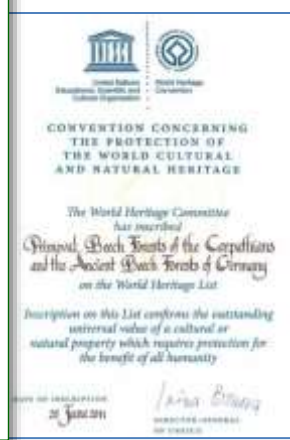
**UNESCO World Heritage Site:** June 28, 2007 (2011, 2017, 2021)

**Emerald Network Site:** November 18, 2016

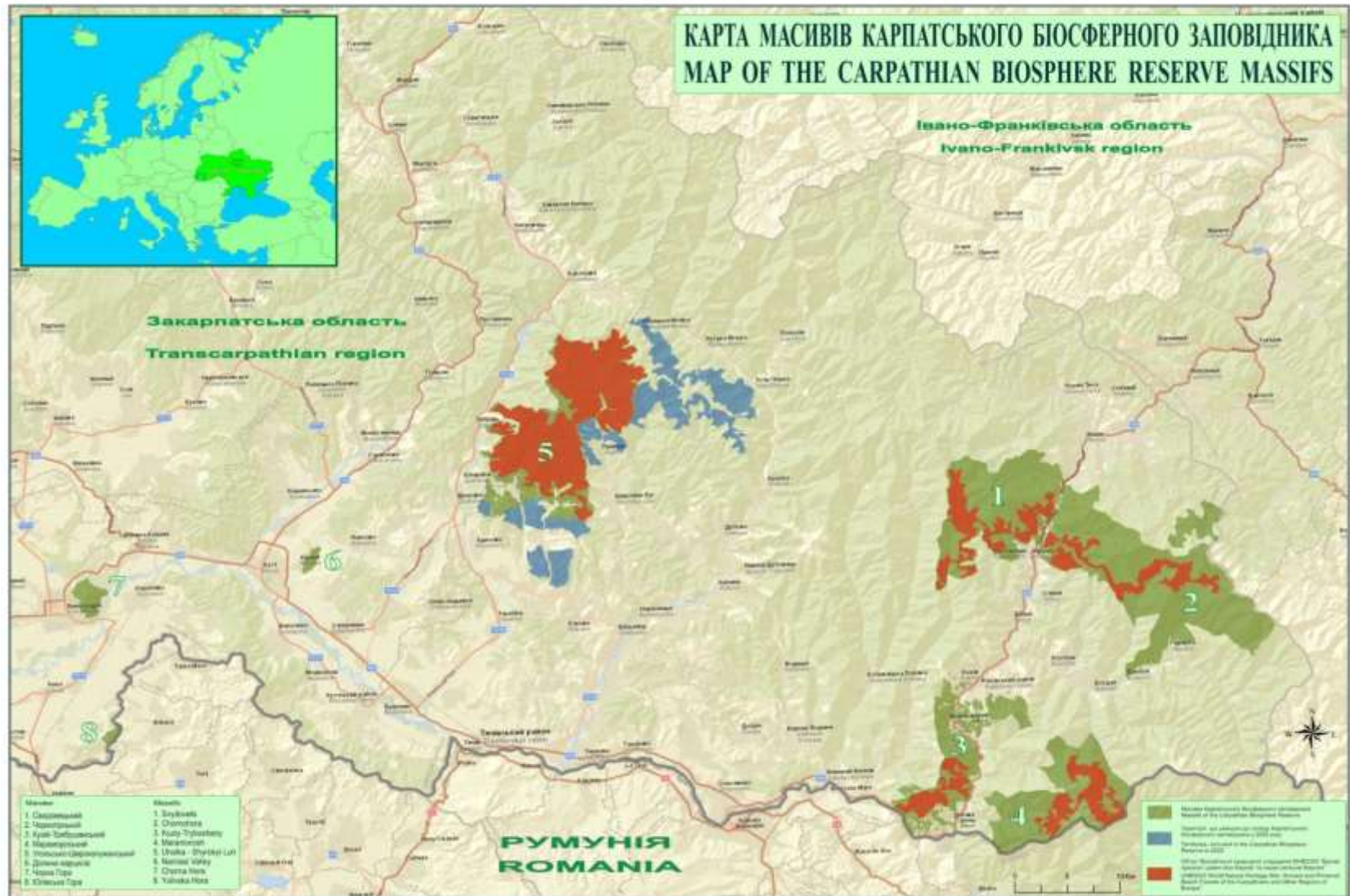
**Certified Wilderness areas according EWS:** 2016-2018

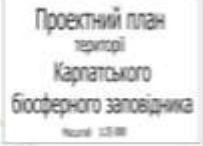
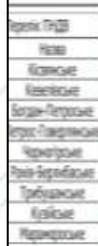
**Status of Ramsar wetlands:** March-April, 2019

**Status of a scientific institution,** confirmed by passing the state certification as a scientific institution of the II classification group.



Total area of CBR constitutes 66 416,4 hectares.  
Last extension in 2022.





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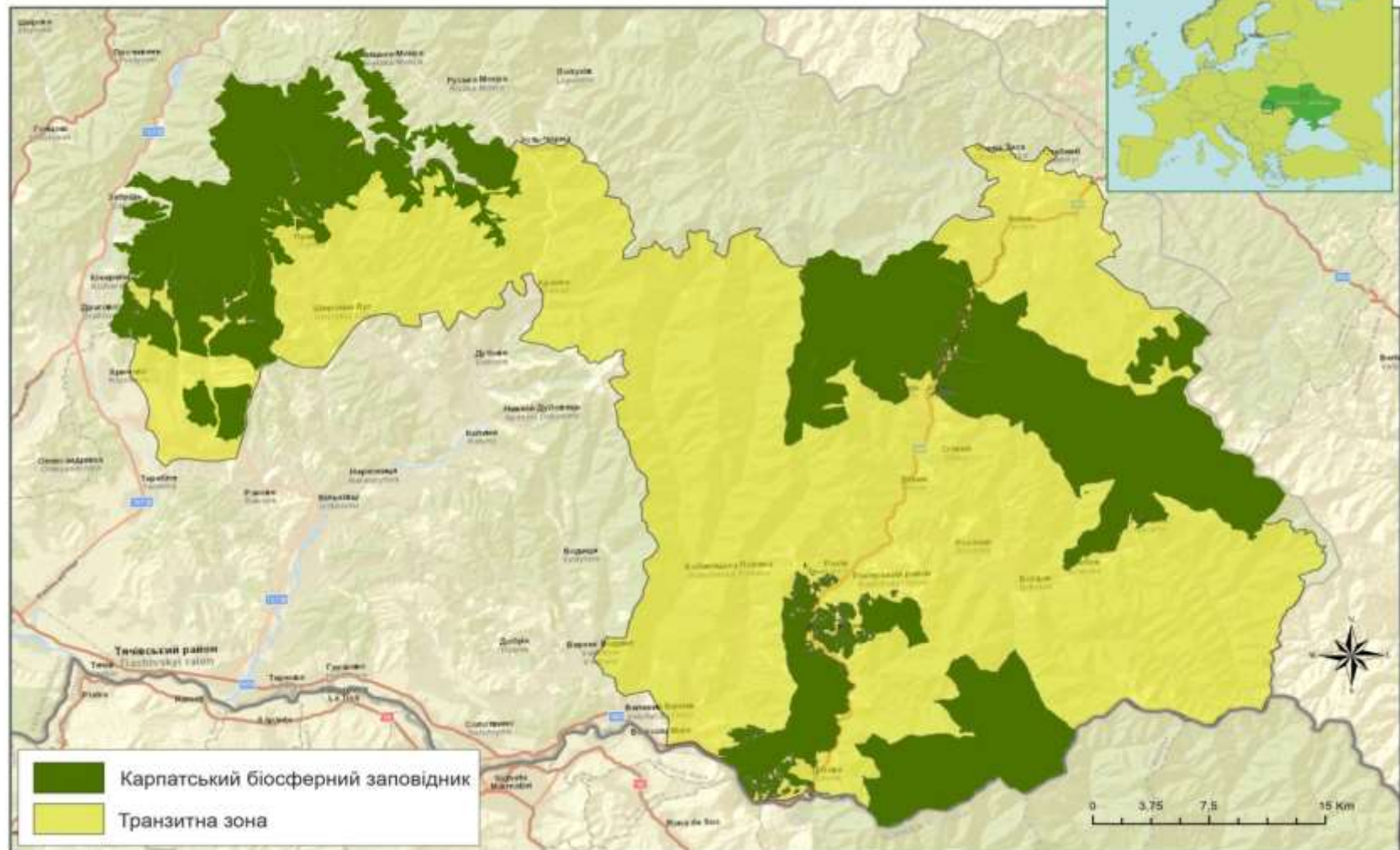
**Zone of regulated protection regime – 1,8%.**

## The area of Carpathian Biosphere Reserve UNESCO – 195 thousand ha

- area of transition zone (territory of sustainable development) constitutes 136,9 thousand ha



### КАРТОСХЕМА КАРПАТСЬКОГО БІОСФЕРНОГО РЕЗЕРВАТУ



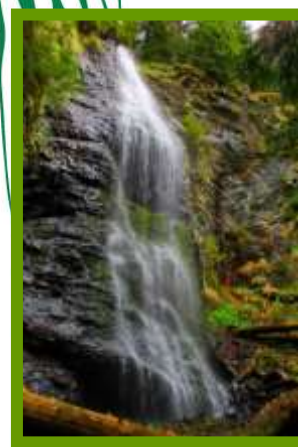
## Location and natural values

**Location:** southern macroslope of the main Ukrainian Carpathians watershed

**Altitudes:** 180 – 2061 m. asl.

### NATURAL VALUES

- European biggest primeval forests: beech, mixed and spruce;
- Practically undisturbed alpine landscapes;
- Viable populations of large mammals (lynx, wolf, brown bear);
- Winter colonies of bats biggest in Ukraine;
- Postglacial alpine lakes;
- Unique biodiversity;
- Largest lowland population of a mountain species *Narcissus angustifolium*;
- Karst limestone caves with endemic troglobiont species;
- Limestone cliffs with rare calcifilous flora.





Карпатський  
біосферний заповідник



COUNCIL  
OF EUROPE

CONSEIL  
DE L'EUROPE



## European Diploma for Pas

**Awarded in 1997**

Missions^and experts:

2002 – Mario Broggi

2007 - Jadwiga Sienkewicz

2012 - Hervé Lethier (Switzerland)

2022 - Bev Nichols



## European Diploma

for the Carpathian Biosphere Reserve  
awarded by the Committee of Ministers  
of the Council of Europe

Whereas it is desirable  
to promote close co-operation  
between member countries of the Council of Europe,  
with a view to conserving and enhancing  
the natural environment of the peoples of Europe,  
for the material and spiritual well-being  
of present and future generations;

Whereas the Committee of Ministers  
has instituted to that effect a European Diploma  
to place under the sponsorship  
of the Council of Europe  
certain protected landscapes,  
reserves and natural features  
of European interest,

I, Daniel Tarschys,  
Secretary General of the Council of Europe,  
hereby certify that:  
The Committee of Ministers,  
Having regard to Resolution (65) 6  
instituting the European Diploma;  
Having taken note of the proposal made  
by the Bureau of the Committee for the Activities  
of the Council of Europe  
in the field of Biological and Landscape Diversity;  
Having noted further the consent of the Government  
of Ukraine;  
Having deliberated thereon,  
Has, in its Resolution (97) 21,  
solemnly awarded the present diploma  
for the **CARPATHIAN BIOSPHERE RESERVE**  
to the **Ministry for Environmental Protection  
and Nuclear Safety of Ukraine**,  
thereby placing the said reserve under the sponsorship  
of the Council of Europe until 30 September 2002.  
In witness whereof I have hereto appended my signature  
and affixed the seal of the Council of Europe.  
Done at the seat of the Council of Europe  
this 30 September 1997,

Signed: *Daniel Tarschys*

Secretary General



# Biosphere Reserve

According to the Law of Ukraine "About the Nature Protected fund of Ukraine" biosphere reserves are nature protection and scientific-research organizations of international importance.

## Main tasks:

- Protection / conservation of natural ecosystems;
- Scientific research and monitoring;
- Ecological education;
- Ecotourism development;
- Implementation of sustainable development principles.

## Staff structure:

about 380 employees: 200 rangers, 30 scientists, 11 specialists on ecological education, 6 specialists on ecotourism and recreation, the rest are working for subsidiary services

## The main tasks of BR in CBR are provided by the following departments:

1. **Protection** - The State protection service (analog of ranger service)
2. **Scientific research** – department for scientific research and laboratories (zoological, botanical, eco-monitoring and forest science)
3. **Ecological education** – department for ecological education, editorial and publishing department
4. **Ecotourism** – department for recreation
5. **Sustainable development** – cross-department cooperation, Coordinating Board.



# Management of biodiversity:

- Programs for the conservation of yew tree (*Taxus baccata*) and European cedar pine (*Pinus cembra*).
- **Restoration of mixed different-aged stands by conversion of spruce monocultures (transformation cuttings).**
- **Program of measures for conservation of the unique site - "Valley of Narcissus".**
- A complex set of measures to preserve mountain meadow ecosystems.
- Monitoring of populations of rare and endangered plant species, in particular myrtle rhododendron, Carpathian bellflowers and narcissus.
- Monitoring of the status of populations of large predators (bear, lynx, wolf) and implementation of measures to preserve them.
- Creation of an electronic database "Mammals of CBR".
- Creation of artificial breeding ponds to support populations of rare species of amphibians.
- Installation of protective metal structures at the entrances of underground hidings of wintering bats.



## Transformation cuttings

The territory of CBR is 89% covered with forests mostly beech (55%) and spruce (37%).

Artificial plantations (mainly spruce) constitute 18% and 10% (more than 1350 hectares) of them were planted in the conditions which are not suitable for spruce forests.

They are monocultured, even-aged and ecologically not stable, especially under the conditions of climate change, they are subjected to diseases and pests.

It was necessary to do urgent adaptation measures to restore close to natural forests – **transformation cuttings** – complex measures of cuttings (selective) and promotion of natural regeneration, aimed at gradual transformation of even-aged monocultures into the mixed, different aged, multilayer forests, close to natural.

CBR established 12 permanent trial plots, developed technology, calculation of optimal percentage of extraction, technological scheme of transformation cuttings, separately for each of plots.

CBR developed and approved on the state level a **Work Program on “Restoration of mixed, multi-aged forest stands by means of transformation of spruce monocultures, as a measure of adaptation of forest ecosystems to climate change”**

## Transformation cuttings



## Transformation cuttings



## Transformation cuttings



**Save Valley of Narcissus** - Conservation of floodplain meadow ecosystems - the Valley of Narcissus - a wetland of international importance (Ramsar Convention). The project is also aimed at preserving an endangered breed of domestic animals - the Carpathian water buffalo. Project activities included mowing and mulching of grass on more than 50 hectares, purchase of instruments to fight with shrubs, construction of hydraulic structures (water-gates, locks and weirs) to regulate the groundwater level, and construction of a barn for keeping buffaloes.



# THANK YOU FOR YOUR ATTENTION!

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[Facebook page: Карпатський біосферний заповідник // Carpathian Biosphere Reserve](#)

Website: <https://kbz.in.ua>

