# **ANNUAL REPORT FOR THE YEAR 2021**

State:	Republic of Belarus
Name of the area:	Berezinsky Biosphere Reserve
Year and number of years since the award	1st Year after renewal of the European
or renewal of the European Diploma for	Diploma for Protected Areas in 2020
Protected Areas:	(until <b>2030</b> )
Central authority concerned:	
Name:	State Nature Protection Institution "Berezinsky Biosphere Reserve"
Address:	211188, Tsentralnaya St. 3,
	Domzheritsy, Lepel District,
	Vitebsk Region, Republic of Belarus
Tel.:	+375 (0) 2132 377-44
Fax:	+375 (0) 2132 377-42
e-mail:	info@berezinsky.by
www:	berezinsky.by
Authority responsible for its manageme	nt:
Name:	Presidential Affairs Management
	Department of the Republic of Belarus
Address:	220016, K. Marx Street, 38, Minsk,
	Republic of Belarus
Tel.:	+375 (0) 17 222-61-54
Fax:	+375 (0) 17 222-35-56
e-mail:	info@pmrb.gov.by
www:	pmrb.gov.by

## 1. Conditions:

1. Maintain the protection regime and the ownership of the land

Ownership of the Berezinsky Biosphere Reserve remaines unchanged and thus, there are no changes in the Reserve's current protection status. Protection regime of the reserved area is carried out in accordance with the Law of the Republic of Belarus "On Specially Protected Natural Areas", which was put in force on November 15, 2018; Forestry Code of the Republic of Belarus on December 30, 2015; Administrative Offense Code of the Republic of Belarus on April 21, 2003, by the forces of the state forest guard (which is part of both the staff of the SNPI "Berezinsky Biosphere Reserve" and the State Inspectorate for the Protection of Fauna and Flora under the President of the Republic of Belarus).

All lands of the Berezinsky Biosphere Reserve are protected lands, are only owned by the state and are not subject to denationalization or transfer to private ownership.

2. Based on the findings of the studies on the effect of the road M3 on the fragmentation of the biosphere reserve, create at least three passages for large fauna above the road by the end of 2022. Vegetate the passages with native plants to improve the natural environment and encourage fauna to use them

Monitoring is continued to assess the impact of the M3 road on natural complexes of the reserve, incl. their fragmentation, as well as registration of cases, places and time of death of large mammals when colliding with cars. Designing of environmental protection measures to reduce the negative impact of the highway M3 is continued during documentation development on justification of investments in the site «Highway M-3 Minsk-Vitebsk» renovation.

### 2. Recommendations:

1. Draft and adopt by 2021 a new management plan for the long-term conservation of the Berezinsky State Biosphere Reserve for a duration consistent with the renewal of the European Diploma; and include specific provisions dedicated to climate change and how to address this issue in relation to the long-term preservation of endemic species

In 2021, the development of a draft management plan for the Berezinsky Biosphere Reserve for 2021-2030 has been completed, the procedure for its public discussions was organized. Taking into account the proposals and comments that will be received during public discussions, the draft document will be finalized and sent for agreement and approval in accordance with the legislation of the Republic of Belarus.

The new management plan of the Berezinsky Biosphere Reserve includes the implementation of the research work «Biological and landscape diversity of the Berezinsky Biosphere Reserve, pathways for conservation and sustainable use in relation to climate change».

2. Sufficient resources need to be generated both by the government and by the reserve to protect effectively biodiversity and to continue scientific research. In addition to extrabudgetary sources of income, other sources should be tapped. Co-operation with non-governmental organisations (NGOs) and/or enterprises committed to corporate social responsibility should be promoted

In order to increase efficiency of protection of the natural systems and to conduct the scientific research, a full range of activities scheduled for 2021 has been performed in accordance with the State program "Environment protection and sustainable use of nature resources", including sub-programme:

a number of measures aimed at control the invasive alien species of the wild plants has been implemented; information and indication signs and publicity boards have been constructed and installed along the boundaries of the Reserve; the areas of ecological systems (grasslands, fens, islands) have been cleared out from tree and shrubbery vegetation and reeds; 11 artificial nests for birds belonging to the species included in the Red Data Book of the Republic of Belarus have been created.

On the basis of the Berezinsky Biosphere Reserve, the research and practice seminar "Enhancing the role of scientific personnel and research work of state environmental institutions in the preservation of unique natural complexes, fauna and flora" was held in which the representatives of the reserve, all the ational parks and the National Academy of Sciences of Belarus took part.

One of the employees of the scientific department of the Berezinsky Biosphere Reserve took part in the training event on counts of birds of prey on the territory of the republican hydrological reserve «Mokh Mire» as an expert. He shared with the locals and keepers of the important bird area his experience on long-term monitoring of ospreys and white-tailed eagles included in the Red Data Book of the Republic of Belarus on the territory of the reserve, and also took part in field surveys – studies of the avifauna of the reserve. The event was held within the framework of the international technical assistance project, which is being implemented by the NGO "Akhova Ptushak Batskaushchyny" (APB-BirdLife Belarus).

Employees of the State Research and Production Association "Scientific and Practical Center of the National Academy of Sciences of Belarus for Bioresources" have completed the research work within the framework of a three-year (2019-2021) project on the topic "Updating data on the fauna of spiders and hay-makers (Arachnida: Aranei, Opiliones) of the Berezinsky Biosphere Reserve with the preparation of an electronic catalog" at the expense of the Belarusian Republican Foundation for Fundamental Research.

3. Continue the ongoing studies on the dynamics of the mammal populations, fauna movements and their migration between the core and the buffer zones, in order to follow the progress of the effect of hunting on the current situation and to manage the populations accordingly

Systematic observations of wild species of animals – hunting and fishing objects as well as wild animals included in the Red Data Book of the Republic of Belarus and protected in accordance with international obligations of the Republic of Belarus – are carried out.

Dynamics of the number, distribution and migration of the protected species of large mammals (badger, bear, lynx, and bison) are under control.

An application has been submitted to the Belarusian Republican Foundation for Fundamental Research for a competition of fundamental research projects on the topic « Current number and structure of the brown bear population in the Berezinsky reserve».

Measures for the conservation and sustainable use of the free-living micropopulation of bisons inhabiting the territory of the Berezinsky Nature Reserve have been implemented in accordance with the State program "Environment protection and sustainable use of nature resources" for the year 2021. The network of photo-traps (20 photo-traps in total) continues to be actively used in the places of big mammals' (ungulates and predators) migration. The quadcopter are infra—red imager are used for the research works as well.

4. Continue with the efforts between the appropriate ministries to ensure that the development of tourism is well controlled.

Tourism development in the Berezinsky Reserve is controlled effectively on the basis of scientific research. One-day weekend excursions into the wildlife of the Reserve are regularly conducted. Primary emphasis is put on environmental awareness of the youth: regular classes, trainings, competitions, summer field camps and other activities with pupils of schools are held, as well as eco-educational tours, field practices and volunteer camps with the students of higher educational institutions of the Republic of Belarus and neighboring countries. In cooperation with the Belarusian Association of Agro- and Ecotourism "Country Escape" the implementation of the initiative "Junior Rangers in Belarus" has been started in the Berezinsky biosphere reserve, incl. development of the Adventure Guide for Junior Forest Rangers was begun.

Adequate information policy (advertising on the Internet and in the media) is being implemented to attract visitors for the purpose of their environmental education and upbringing.

A new ornithological route «Nesting path» has been set up. The ecological walking route «Along the forest wildlife path» was equipped with new ladders, stands and plaques were updated. The tourist equipment was purchased.

On the basis of the Berezinsky Biosphere Reserve the off-site seminar was held «Development of ecological and mythological tourism in Belarus». This event was organized by the State Institution "National tourism agency", subject to the Ministry of Sport and Tourism of the Republic of Belarus.

5. In order to mitigate possible risks and hazards connected with climatic change and possible large-scale disturbances on the reserve (contamination by various pollutants, changes of the hydrological regime, invasive alien species, increasing frequency of extreme events, etc.) continuous analysis of the long-term data series should be made in order to detect early the effects on Berezinsky ecosystems. For instance, possible reduction of rainfall, changes in snow cover dynamics, rising temperatures, maladjustments among species potentially due to increasing aridity or to modifications of the annual cycle, etc., should be monitored. The risk of fire should be seriously considered as an increasing danger and additional preventative measures should be considered for implementation

Implementation of the research subject "Biological and landscape diversity of the Berezinsky Biosphere Reserve, pathways for conservation and sustainable use in relation to climate change" has been started. In accordance with this recommendation, the studies are conducted on the partitions: "Assessment of the long-term dynamics of the vegetation cover of the Berezinsky Reserve through geoanalysis based on the use of modern geoinformation technologies" and "Dynamics of phenomena and processes at the natural complexes of the Berezinsky Biosphere Reserve. "Nature records".

The annual analysis of monitoring data for precipitation, temperature and snow cover is organized. Monitoring system infrastructure and network of observation points are constantly maintained in working order. The data of the complex monitoring of the ecosystems of the Berezinsky Reserve are collected, accumulated and processed in accordance with the regulations of the National system of environmental monitoring.

# 3. Site Management

On the date 01.12.2021, 434 employees work in the Reserve, 264 of them are financed from the state budget. Since the beginning of 2021 year 10 young specialists have been hired to work in the Reserve after graduation.

A single-family cottage type house has been built in Domzheritsy for the employees.

Financing from the state budget is 3.631 million Belarusian rubles in the yearly balance of the Reserve. A part of the monetary funds comes from tourism and other economic activities on the territories outside the Reserve.

Development of a comprehensive ten-year management plan for the Berezinsky Biosphere Reserve has been completed, including its directive part for 2021-2025.

## 4. Boundaries

There has been a change of the boundaries of the Berezinsky Biosphere Reserve in the 2019 year, as a result the Reserve's area has been increased by 880 ha and stands at 86 072,8 ha. This year the boundaries of the reserve have not changed.

### 5. Other information

Due to the coronavirus disease pandemic (COVID-19), employees of the Berezinsky Biosphere Reserve did not take part in any international conferences or seminars abroad.

Berezinsky Biosphere Reserve extensively uses the logo of the European diploma. At the official website http://www.berezinsky.by/ in the sections "About the Reserve" and "Our partners" the logo and a brief information on European Diploma award is given, as well as a link to the Council of Europe website. It is possible to acquaint oneself with the original document of the European Diploma awarded to the Berezinsky Biosphere Reserve in 1995 in the Museum of nature conservation history.

Director of the Berezinsky Biosphere Reserve



Andrej M. Prokoshin