

# ANNUAL REPORT FOR 2018<sup>1</sup>

## “DOBROČSKÝ PRALES NATIONAL NATURE RESERVE”

State: **Slovak Republic**

Name of the area: **Dobročský prales National Nature Reserve**

Year and number of years since the award or renewal of the European Diploma of Protected Areas: ***The Resolution CM/ResDip(2018)12 on the renewal of the European Diploma for the Dobročský prales National Nature Reserve (Slovakia) adopted at the 1321<sup>st</sup> meeting of the Committee of Ministers on 4 July 2018, valid until 18 September 2028 /hereafter “Resolution No (2018)12”<sup>2</sup>***

### Central authority concerned:

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## 1. Conditions

The following condition is determined by the Resolution No (2018)12:

***Conduct a study involving all stakeholders to verify necessity of a new forest road into the buffer zone and identify measures guaranteeing a least intervention solution to minimise the impact of the road, provided that the construction is not carried out during the vegetation period and in the breeding season, and that the felling itself does not include heavy machinery; a natural re-cultivation of the road should be foreseen once the forestry work has been carried out; report to the Council of Europe before starting the road works.***

The forest manager and administrator of the territory - the Forests of the Slovak Republic, state enterprise – branch Čierny Balog (hereafter “FE Čierny Balog”) does not consider the road construction in the near future because of higher priority of sanitary logging in other part of the buffer zone. If further analysis will proof necessity of this road, then the most likely possible timing of its construction will be in the period 2020-2021.

Despite of this, the evaluation of the new forest road was carried out by the State Nature Conservancy of the Slovak Republic, Poľana Protected Landscape Area - Biosphere Reserve (hereafter “Poľana PLA-BR”) staff on 20<sup>th</sup> August 2018 with purpose to fulfil this condition. In the field it was found that the road proposal is suitably located. The new road would connect existing older roads and thus it would make accessible also hardly approachable parts in the buffer zone. Afterwards management interventions planned on modification of the tree species composition could be performed more effectively.

<sup>1</sup> Reported period 1<sup>st</sup> September 2017 – 31<sup>th</sup> August 2018

<sup>2</sup> Originally resolution No (2003)6, resolution No (2008)19 and resolution No (2012)11, respectively

In case of building the road, the assessment will be done according to valid legislation. Professional evaluation and involvement of all relevant stakeholders will be part of the process

## 2. Recommendations

Four recommendations set up by the Resolution No (2018)12 are:

**1. Add a chapter on scientific research to the management plan defining clearly the needs of the management of the nature reserve and including a timetable to avoid surveys that are not directly connected to the further development of the area.**

The Management Plan for the Dobročský prales National Nature Reserve (hereafter “Dobročský prales NNR”) (Special Area of Conservation SKUVE0047 Dobročský prales) for the period 2018–2047 was approved on 1<sup>st</sup> June 2018 and is available in Slovak language<sup>3</sup>. Planned research activities are included in chapters 2.3 (Rules and Measures Proposal) and 3 (Aims and Interventions in Reserve Zones). They can be carried out only by scientific institutions (e.g. Technical University in Zvolen, Institute of Forest Ecology of the Slovak Academy of Science in Zvolen, Matej Bel University in Banská Bystrica). Research must be permitted by the Ministry of Environment of the Slovak Republic.

In the future it will be necessary to revise the whole research conception in the reserve with regard to financial and scientific aspects.

With regard to recommendation in Resolution CM/ResDip(2012)11 “implement other activities listed in management plan, particularly research and monitoring,” a research on disturbance regime of the Dobročský prales NNR led by Prof. Milan Saniga (Department of Silviculture, Faculty of Forestry, Technical University in Zvolen) has been performed during the reported period. At the same time, a research aimed on expected effect of climate change on dynamics of the tree species composition was successfully finished. Its results were published in the scientific journal *Forest* entitled as “Structural diversity in a mixed spruce-fir-beech old-growth forest remnant of the Western Carpathians” by PAROBKOVÁ et al. (2018)<sup>4</sup>. The authors found out an increasing proportion of Common beech species in all layers of the stand. Increasing structural diversity of stands is considered as suitable method how to reduce negative effects of ongoing climate changes. Then using of selection system as a silviculture method is required. Results shows that single-tree selection technique is suitable for regeneration of shade-tolerant tree species (Common beech, Silver fir) while light demanding species (maples, European ash) require larger canopy gaps for the onset the regeneration and thus group-tree selection is needed. Conclusions of this study will be applied during next management interventions in the buffer zone of the Dobročský prales NNR. Dr. Roman Cséfalvai was studying aquatic invertebrates in August 2018 in the Dobročský prales NNR. This research will continue during next years to get a comprehensive overview about the species.

**2. Develop, according the precautionary principle, a strategy on how to deal with invasive alien species, in case of their appearance.**

Monitoring of invasive plant species in the Dobročský prales NNR and adjacent areas (August 2018) found only a single alien species – Canadian goldenrod (*Solidago canadensis*). Goldenrods were located on five sites in two valleys (Brôtovo, Za Dlhým grúňom). Each clump of this plant was fixed by the GPS and consecutively extracted, thus eliminated.

The area of the Dobročský prales NNR itself is without the presence of invasive species up to now. Potential threat by the Canadian goldenrod spreading will be significantly reduced if annual monitoring and immediate elimination are performed. This activity will be done in co-operation of the FE Čierny Balog and the Poľana PLA-BR. Appropriate method of elimination is mowing and mulching of the goldenrod stands before flowering to avoid seed production and dispersal of propagules. Digging and pulling out could be used for smaller groups of individuals. All these interventions should be done repeatedly each year in the long term.

<sup>3</sup> <http://www.sopsr.sk/web/?cl=119>

<sup>4</sup> Parobeková, Z., Pittner, J., Kucbel, S., Saniga, M., Filípek, M., Sedmáková, D., Vencúrik, J., Jaloviar, P. Structural Diversity in a Mixed Spruce-Fir-Beech Old-Growth Forest Remnant of the Western Carpathians. *Forests* 2018, 9, 379.

**3. Prepare a study on the effects of climate change and global warming, both on the nature reserve itself and on the regional forests, including the strategy on how to manage the surrounding forest to avoid negative impact in the nature reserve.**

In February 2019, the research staff of the Department of Natural Environment (Faculty of Forestry) of the Technical University in Zvolen will propose to conduct some study on the effects of climate change and global warming on forests. Further details of this research will be agreed, namely financial resources and time schedule. Later on - based on this study results - a strategy of forest management in the target area will be developed.

**4. Explore the possibility of moving the exhibition from the Pred Skalickou cottage to the Forest Museum.**

At the meeting with director of the FE Čierny Balog on 20<sup>th</sup> August 2018 it was decided to relocate the exhibition to the open air forestry museum in Vydrovská valley as a part of the educational trail opposite the stop of the torso of so-called "Dobroč fir". Installation of the exhibition will be installed into the wooden summer house. In front of the summer house two information panels will be placed. One will refer to the European Diploma itself and the other one to reasons of award to the Dobročský prales NNR. The new place of the exhibition will ensure higher visitor rate (average visitor rate in the forestry museum is cca 50 000 visitors per year) and thus will improve promotion of the Dobročský prales NNR as well as its European Diploma award. These activities will also increase public awareness about the Dobročský prales NNR as recommended in the Resolution No. CM/ResDip(2012)11.

Until the summer house is finished, the exhibition will be open to public during excursions in the Pred Skalickou cottage. Regarding to above-mentioned recommendations, the exhibition equipment was complemented with promotional leaflets, publications and DVDs about the Dobročský prales NNR. The building with the exhibition and its surrounding were subject to the standard and regular technical maintenance.

### 3. Local management

The Management plan for the Dobročský prales NNR valid to 2047 was approved on June 2018. Current state of the protected area is described here:

Zone A (core zone):

- primeval forest area with the highest - fifth level of protection (according to national legislation),
- aim is to maintain favourable conservation status of protected habitats and species of European importance,
- measures are to preserve natural development of climax stage - "without intervention".

Zone B (buffer zone):

- stands protecting core area with fourth level of protection (according to national legislation),
- habitats of non-favourable conservation status, high portion of Norway spruce,
- aim is to approach quality of stands in the core area,
- measures are to focus on modification of tree species composition and natural structure of stands.

The FE Čierny Balog fully respected non intervention mode in the core zone during the reporting period. There was only sanitary logging carried out in the buffer zone (wind calamity – 17 m<sup>3</sup>, bark beetle calamity – 800 m<sup>3</sup>). There is a long-term problem of bark beetle infestation spreading in the whole region, including the buffer zone. This causes higher priority of a sanitary logging against interventions focused on tree species composition modification (pointed out within the Resolution CM/ResDip(2012)11 "*Pursue the process of transforming anthropogenic forests into semi-natural forests, mainly in the buffer zone of the Dobročský prales National Nature Reserve, in compliance with the management plan*").

### 4. Borders

No changes.

## 5. More details

Interest of the scientific society and public in the Dobročský prales NNR is increasing also thanks to the European Diploma.

Ing. Boris Pekarovič (former employee of the FE Čierny Balog) produced a video entitled "Important places of the Čierny Balog Village" including also chapter about the Dobročský prales NNR (<https://www.youtube.com/watch?v=7bG9Aoy4ch4>). English version is also available (<https://www.youtube.com/watch?v=xxl-TvjU3Rw>). The video was broadcast in a Canadian TV channel.

The report prepared by expert Robert Brunner from his visit of the Dobročský prales NNR was presented at the Standing Committee of the Council of Europe meeting in Strasbourg on 5-8 December 2017. When the report was released, the Poľana PLA-BR immediately evaluated problematic issues and possible solutions and provided responses to conditions and recommendations from this report (February 2018). Communication with the expert was very intensive. There was an effort to incorporate report conclusions to the management of the Dobročský prales NNR as soon as possible and it has been done in the Management Plan for Dobročský prales NNR. The FE Čierny Balog was a very active partner in the process of implementation of Robert Brunner's requests.

The information about the renewal of the European Diploma for the Dobročský prales NNR was published on the websites:

<https://mybystrica.sme.sk/c/20871601/dobra-sprava-pre-region-dobrocicky-prales-obhajil-europsky-diplom.html>

<https://spravy.pravda.sk/domace/clanok/477018-poloniny-a-dobrocicky-prales-obhajili-europsky-diplom/>

<http://www.minzp.sk/tlacovy-servis/tlacove-spravy/tlacove-spravy-2018/tlacove-spravy-jul-2018/poloniny-dobrocicky-prales-obhajili-europsky-diplom.html>

Annexes:

1. Evaluation of new forest road in the field – photos
2. Excursions in Dobročský prales NNR – photos
3. List of participants from the meeting on resolution CM/ResDip(2018)12

In Zvolen, 4. December 2018

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