ANNUAL REPORT FOR DOBROČSKÝ PRALES 2016¹

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(2012)11 on the renewal of the European Diploma for the Dobročský prales National Nature Reserve (Slovakia) adopted at the 1146 meeting of the Committee of Ministers on 20 June 2012, valid by 18 September 2018 /hereafter "Resolution (No 2012)11"/2

Central authority concerned:

Name: Ministry of Environment of the Slovak Republic, division of nature protection and landscape

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Authority responsible for its management:

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1. Conditions

The following condition is determined by 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.

Process of transforming anthropogenic forest in the buffer zone (B zone) of the Dobročský prales National Nature Reserve (hereafter "Dobročký prales NNR") - continued in the reporting period by preferential calamity wood processing: wind calamity in a volume of 96 m³, bark beetle calamity in a volume of 1459 m³. Other interventions in this area have not been implemented.

In the surrounding forest stands, outside of the protected area, prescribed rehabilitation and educational interventions were carried out in accordance with the valid Forest Management Plan (prepared and approved for the years 2016-2025 for forest unit Dobroč) as well as the necessary sanitation measures under the current status of the forest stands with an occurrence of the bark beetle calamity and other types of calamity.

¹ Reported period 1st September 2015 – 31th August 2016

² Originally resolution No (2003)6 and resolution No (2008) 19, respectively

2. Recommendations

Two recommendations have been set up by the Resolution CM/ResDip(2012)11:

1. Promote awareness-raising activities, mainly:

-updating the exhibition on the Dobročský prales NNR in the Pred Skalicou cottage;

-in co-operation with the forestry authorities, installing the information point on the Dobročský prales NNR in the Forestry Museum in the Vydrovská valley, near Čierny Balog.

With respect to the first part of the recommendation the exhibition in the Pred Skalicou cottage was supplemented by the lacking publications and promotional materials made in last years in Slovak and English version: a video film about the Dobročský prales NNR and folded information leaflets in Slovak and also English language. The cottage was subject of standard technical maintenance.

With respect to the second part of the recommendation there was carried out the routine maintenance of the "torso of the Dobročská jedl'a" and closed installed information points in the open air forestry museum. The points inform visitors about the largest silver fir (*Abies alba*) in the primeval forest called "Dobročská jedl'a" and give basic information on the Dobročský prales NNR.

State Nature Conservancy of the Slovak Republic ensured by interest distributing of the newest information leaflets about the Dobročský prales NNR in A3 and the production of a video film "Dobročský prales – Chrám prírody" (Dobročský prales Primeval forest – Nature Cathedral). which were funded from the Swiss-Slovak cooperation program (Swiss financial mechanism - Development of nature conservation and protected areas in the Slovak Carpathians). Both promotional materials are in Slovak and English versions.

The basic information about the Dobročský prales NNR is available to visitors in the open air forestry museum in the Vydrovska Valley in its information centre at the start of "Chodník lesného času", at a stop by the torso of the Dobročská jedľa and also on websites of relevant organizations³.

Distribution of the information leaflets about the Dobročský prales NNR is carried out by the civic association Vydra, the State Enterprise Forests of the Slovak Republic, its branch Čierny Balog, the State Nature Conservancy of the Slovak Republic and Administration of the Pol'ana Protected Landscape Area.

2. Implement other activities listed in the management plan, particularly research and monitoring.

Monitoring of the status of the territory does not indicate any significant changes in comparison with the previous period.

³ http://www.chkopolana.eu/news/narodna-prirodna-rezervacia-dobrocsky-prales/;
http://www.ciernybalog.sk/dobrocsky-prales.phtml?id3=83412;;
http://www.ciernybalog.sk/dobrocsky-prales.phtml?i

http://www.huculskamagistrala.sk/externe/klaster/home.nsf/page/0be66ae90b0a7bd4c1257baa002a74d9?OpenDocument; http://www.enviromagazin.sk/enviro2013/enviro3/22_ste.pdf; http://slovakia.travel/dobrocsky-prales; http://horehronie.sk/sk/atrakcie/prirodne-zaujimavosti/dobrocsky-prales/; http://www.muranskaplanina.com/zaujimavosti-uzemia/priroda/npr-dobrocsky-prales/

Monitoring the number of visitors indicates a slight growth

The occurrence of invasive alien plants has not been recorded.

In the reporting period Technical University in Zvolen (doc. Ing. Vladimír Kunca, PhD., Technical University in Zvolen) carried out research on the abundance of fruiting bodies of fungi with emphasis on the presence and location of dead fir wood in various stages of decomposition for intentions of further research and try to find the missing mushroom *Pseudorhizina undulata* in Slovakia. During that visit only normal and expected fruiting bodies of fungi species were recorded, *Pseudorhizina undulata* has not been found. The research results have not been published yet.

The results of occurrence of fungi research including those of typical native and undisturbed forest (doc. Ing. Vladimír Kunca, PhD., Technical University in Zvolen, 2014) have not been published yet

Research results identified as part of the "Cryptogam symposium on natural beech firests in Slovakia, 2011" organized by the Institute of Botany Slovak Academy of Sciences, were published in 2016 in the scientific publication about the diversity of wood-inhabiting fungi and lichens.

In the reporting period the results of research Faculty of Forestry in Zvolen (prof. Ing. Milan Saniga, DrSc.) were processed in a scientific monograph, which analyzes changes in tree species composition and diameter structure (core zone of primeval forest with an area of 49.98 hectares) and analyzes the structure, texture and regenerative processes on permanent research plots (area of 6.25 hectares) for the period 1978-2015. The scientific monograph was devoted to prof. dr. h. c. Ing. Štefan Korpel', DrSc. who was nearly 90 years old and was a Nestor of research of Slovak primeval forests.

The partial zoological research in the core of the forest focused on invertebrates continued (lead by Ing. Peter Potocký, State Nature Conservancy of the Slovak Republic (Administration of the Poľana Protected Landscape Area) was interrupted (the worker was responsible for other important tasks).

The maintenance of the information objects was ensured by the area manager and Administration of the Pol'ana Protected Landscape Area.

3. Local management

In Zone A (the core zone) of the Dobročský prales National Nature Reserve (NNR), which is a fragment of the original ecosystem of the Carpathian natural forest, only natural processes characteristic for climax forest stage are still ongoing.

Forest manager and administrator of the territory the State Enterprise Forests of the Slovak Republic (its branch Čierny Balog) did not notice any intentional anthropic interference in reported period. In Zone A they do not register any calamity, although recently observed dieback of spruce due to bark beetles attack also in younger age classes, but this is considered to a natural development. Mentioned facts confirm that in primeval forest communities occur natural processes and this part of protected area could be evaluated as a highly stable and condition of habitats favourable.

Managing interventions in Zone B (buffer zone – forests altered with forestry activities) were focused on calamity wood processing: wind calamity in a volume of 96 m3, bark beetle calamity in a volume of 1459 m3 in the reported period. Any other intentional interventions in this part of NNR have not been implemented.

In surrounding forests outside protected areas were carried prescribed renewal and educative interventions under the valid Forest Management Plan for forest unit Dobroč. It was prepared in cooperation with the Administration of the Pol'ana Protected Landscape Area and approved for the years 2016-2025. Planned forestry interventions in Zone A (fifth level of protection) remain fully respecting the mode "without intervention". In zone B (fourth level of protection) were proposed measures in order as far as possible reduce the effects of anthropogenic activities from the surrounding commercial forests to Zone A, to ensure the smooth functioning of the climax ecosystems stages, to increase gradually the ecological stability of forests (especially in parts of higher representation of non-original habitat of spruce). These functions will be provided by the gradual modification of tree species composition in favor of habitats suitable tree species, encouraging natural regeneration, keeping dead woody biomass, the support of deciduous trees and fir. In parts with favorable structure will not be conducted any interventions. Such proposed management enables the differentiation of vegetation and creates conditions for a gradual return to the functioning of natural processes.

4. Borders

During the reporting period there were no changes in borders of the Dobročský prales NNR.

5. Other information

National Nature Reserve (NNR) Dobročský prales primeval forest visited 14 excursions with a total of 289 experts and guests. The State Forest Enterprise, Čierny Balog Branch ensured visiting for 6 groups with a total of 214 experts. Department of Silviculture of the Faculty of Forestry, Technical University in Zvolen carried out 4 visits for 49 experts (students of UR Krakow, doctoral students and teaching staff of LF in Zagreb, foresters from ANW Saxony, Baden-Baden). Department of Applied Ecology of the Faculty of Ecology and Environmental Sciences in Zvolen organized one excursion to one expert. The representatives of the Faculty of Forestry of Technical University in Zvolen accompany one group of 10 experts. Administration of the PLA Polana separately provide 1 tour for an integrated group of visitors with an interest in forests (11 adults, 3 children) and 1 excursion to one expert in forestry.

To the protection zone NNR Dobročský prales primeval forest was accompanied by a civic association "VYDRA - rural development activity" 20 groups (with 311 visitors). Consisted of the 79 primary school pupils (4 groups), 53 Swedish students (2 groups), 37 German students (one group), 39 members of the Club of Slovak tourists from Rimavská Sobota (1 group), 9 participants of recording of the video-invitation for guided tours into the primeval forest (1 group) and 94 individual visitors (11 groups).

The high visiting of the area was in the months of May to August 2016.

In the context of the Presidency of the Slovakia in the Council of Europe prepared the Ministry of Environment an international event – meeting of directors of Nature Conservancies and Biodiversity of EU member states, which took place over three days in October 2016. As part of this event was also included a visit of NNR Dobročský prales.

Through the program 'Slovakia in the pictures ", broadcasted on 07.08.2016 on RTVS, the general public can learn about the attractions of NNR Dobročský prales.

The civic association "VYDRA" edited a DVD with video-invitations of their entertainment and educational programs, part of their acitivies is also the excursion with a guide to NNR Dobročský prales primeval forest. Filming took place on 23 October 2015 and was attended by 9 people. DVD with video invitation were sent out in January 2016 to 1900 primary and secondary schools in Slovakia. It was also created a Youtube channel Vydrovská Valley: https://www.youtube.com/playlist?list=UUZpaqVRM5cE9JHHkjbFEx3Q where videos are placed. Video-invitation "Excursion to Dobročský prales, primeval forest" has an address https://youtu.be/eAOxG4xM9jE.

Nature trail "To Dobročský prales, primeval forest", which was designed in collaboration with site managers (State Forest Enterprise) was successfully completed. It starts in the parking lot at the bus stop "Drábsko, Tlstý javor" near the state route Hriňová-Brezno than follows the forest road to the buffer zone of NNR Dobročský forest, primeval forest. Through the protection zone is heading to the border of the protected area (primeval forest), but does not directly interfere to it. The trail includes 7 information panels. Funding for this activity was provided from the program of Swiss-Slovak Cooperation (Swiss Contribution - Development of nature conservation and protected areas in the Slovak Carpathians).

Published scientific works:

PAROBAKOVÁ, Z. - SANIGA M. - PITTNER, J. - KUCBEL, S. - JALOVIAR, P., 2016: The Structure, Growing, Stock Distribution, Disturbance Regime and Regeneration Processes of Virgin Forest Dobroč (Study Time). Faculty of Forestry, 59 p.

URBAN, P., (on-line). 2015: History of nature protection in Pol'ana mts. (Central Slovakia) – part 1. (from ancient times to the designation of biosphere reserve). Quaestiones rerum naturalium, Vol. 2, No. 2, Faculty of Natural Sciences UMB in Banská Bystrica, pp. 8 – 89. https://www.fpv.umb.sk/katedry/katedra-biologie-a-ekologie/veda-a-vyskum/casopis-quaestiones-rerum-naturalium/archiv.html

ADAMČÍK, S. - AUDE, E. - BASSLER, C. - CHRISTENSEN, M. - VAN DORT, K. - FRITZ, Ö. - GLEJDURA, S. - HEILMANN-CLAUSEN, J. - HOLEC, J. - JANČOVIČOVÁ, S. - KUNC, V. - LACKOVIČOVÁ, A. - LUTHI, M. - ODOR, P. 2016: Fungi and lichens recorded during the Cryptogam Symposium on Natural Beech Forests, 2011. Slovakia Czech Mycology, 68 (1). pp. 1-40.

6. An influence of European Diploma award on the Protected Area

Fulfilling the conditions and recommendations contained in the resolutions contained with awarding of the European Diploma, we noticed the positive impact on protected area. This confirms the long-term interest of scientific and educational institutions in the area, not only from Slovakia but also from abroad. Significant is also the number of students, especially from the universities wishing to write about this area in their diploma thesis and dissertations.

The impact is also visible at the possibility of using funds from the Swiss-Slovak Cooperation (Swiss Contribution - Development of nature conservation and protected areas in the Slovak Carpathians). Within it was built a new nature trail "To Dobročský prales, primeval forest'.

It increases the responsibility of the administrators and forest manager for the implementation of the measures proposed in the management of forest in protection zone of NNR Dobročský prales (zone B) resulting from the Management plan for the protected areas.

October, 2016 Drafted by: Ing. Ivan Rybár, SNC SR, Administration of PLA Pol'ana