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# CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE AND NATURAL HABITATS

## GROUP OF SPECIALISTS -EUROPEAN DIPLOMA OF PROTECTED AREAS 9-10 FEBRUARY 2012, STRASBOURG ROOM 14, PALAIS DE L'EUROPE

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## CARPATHIAN BIOSPHERE RESERVE (UKRAINE)

Appraisal report Mr Hervé Lethier (Switzerland)

Document prepared by the Directorate of Culture and Cultural and Natural Heritage

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### BACKGROUND

The purpose of the visit was to appraise the Carpathian Biosphere Reserve (CBR) suitability for the renewal of the European Diploma for a further ten-year period  $^{1}$ .

The visit took place from 12th to 16th May 2011, on the basis of the annex 3 of the Regulations of the European Diploma of Protected Areas<sup>2</sup>.

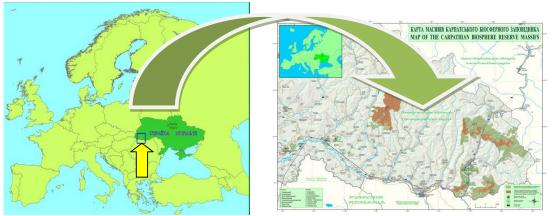
The expert spent 3 days in the area and was accompanied during his visit by Vasyl Pokynchereda (Deputy Director) and Victoria Gubko (Assistant).

At the beginning and at the end of his visit, he met Fedir Hamor (Director of the CBR), representatives from the local municipalities of Bohdan village (the major Petro Ferenz) and Kostylivka (the major, Olga Smetaniuk), the State Forestry Enterprise (Stepan Paparyha), the local Ngo Utsulshchyna (Ivan Berkela<sup>3</sup>), as well as the CBR staff<sup>4</sup>.

#### INTRODUCTION

This diplomed area is located in the Southern Western part of Ukraine, nearby the small town of Rakhiv and close to its border with Romania on the South, and with Slovakia on the North West (Maps 1 and 2).

The CBR is covered with large deciduous forests on 80% of its territory and expands on one oblast<sup>5</sup> and four districts<sup>6</sup>. The diplomed area culminates at Mt Hoverla (2 061 m), the highest peak in Ukraine and includes various ecosystems from the Tisza river valley – living place of the rare and endangered "Danube salmon" (*Hucho hucho*) - to the subalpine and alpine meadows.



**Map 1** - Location of the CBR (Ukraine). clusters) (Source: CBR).

Map 2 – Delimitation of the CBR (7

The European Diploma was given to the CBR in 1997 and renewed last time in 2007<sup>7</sup>, until September 2012.

#### I ASSESSMENT

<sup>5</sup> Zakarpatska.

<sup>&</sup>lt;sup>1</sup> Art. 9, §1, Resolution CM/ResDip(2008)1 on the revised regulations for the European Diploma of Protected Areas.

<sup>&</sup>lt;sup>2</sup> Letter of the Council of Europe, DGIV, DCPCN, Unité de la diversité biologique, FB/mll, 16 May 2011.

<sup>&</sup>lt;sup>3</sup> Also Secretary general of the Rakhiv municipality.

<sup>&</sup>lt;sup>4</sup> Amongst others persons, Vasyl Regush, Roman Kuzminskyi and Vasyl Pokyncheredu.

<sup>&</sup>lt;sup>6</sup> Rakhiv, Tiachiv, Khust and Vynhoradiv.

<sup>&</sup>lt;sup>77</sup> Res. CM/ResDip(2007)3.

#### I-1 **EUROPEAN INTEREST**

The CBR was awarded for its "particular importance for the conservation of biological and landscape diversity in Europe"<sup>8</sup>; its European interest is well documented and recognized in the literature<sup>9</sup>.

The CBR hosts a high number of plants<sup>10</sup> and animals<sup>11</sup> that are protected by the Bern Convention and listed on the Bird and Habitats Directives<sup>12</sup>; many of them are endemic and rare, and some are endangered<sup>13</sup>. The three large carnivores, the brown bear<sup>14</sup>, the wolf<sup>15</sup> and the lynx<sup>16</sup> are still present in this reserve, as well as the fish otter<sup>17</sup>, the European mink<sup>18</sup> and the wild cat<sup>19</sup>, amongst others.

The diplomed area is part of a continuous arc of natural and semi-natural beech forests along the Eastern Carpathians; similar ecosystems are located in Slovakia and Poland. It represents all stages of beech forests and contains amongst the largest remaining primeval and ancient beech forests in Europe where the largest and tallest beech trees specimens in the world<sup>20</sup> can be seen. It comprises 7 clusters<sup>21</sup> (**Map 2**) characterized by large beech forest communities<sup>22</sup>, as well as mix  $oak^{23}$ -beech<sup>24</sup>-fir<sup>25</sup> forests at low elevation<sup>26</sup> and beech-spruce<sup>27</sup>/beech-fir forests at higher elevation<sup>28</sup>. For example, the Uholka-Shyrokyi Luh Massif is the world's largest massif covered in virgin beech forest; its total area comprises 15,033 hectares, 8,835 hectares of which are consigned to the core zone of the CBR and 6.198 hectares to the buffer zone.

It is also a unique area for the conservation of landscapes of outstanding aesthetic value, usually associated to the old-growth forests.

The expert visited three clusters and did not notice evidence of significant degradation during its field visit. The integrity of the diplomed area seems to be still in good conditions compared to the previous mission. Its exceptional European importance, on the basis of which the diploma was renewed in 2007, is still met<sup>29</sup>.

#### I.2 MANAGEMENT

The reserve has been founded in 1968 and extended several times<sup>30</sup>; it acquired the status of Biosphere Reserve in 1993 and was partly<sup>31</sup> listed on the World Heritage in 2007 (**Table 1**). The CBR

<sup>8</sup> General criteria, § A 1 and 3.

<sup>&</sup>lt;sup>9</sup> For further details, see the 2006 mission report (PE-S-DE (2007)7.

<sup>&</sup>lt;sup>10</sup> More than 3 000 plant species (1 359 species of vascular plants) and 300 vertebrates, as well as 15 000 invertebrates have been identified within the diplomed area (Akimov, A.I., 2009 – Redbook of Ukraine). <sup>11</sup> 193 bird species, 14 amphibians, 27 fishes, one cyclostome, etc (Akimov, supra).

<sup>&</sup>lt;sup>12</sup> However, Ukraine is not a member of the European Union.

<sup>&</sup>lt;sup>13</sup> 181 plants and 132 animal species are listed on the Ukraine Red Book (Akimov, supra).

<sup>&</sup>lt;sup>14</sup> Ursus arctos.

<sup>&</sup>lt;sup>15</sup> Canis lupus.

<sup>&</sup>lt;sup>16</sup> Lynx lynx.

<sup>&</sup>lt;sup>17</sup> Lutra lutra.

<sup>&</sup>lt;sup>18</sup> Musteola lutreola. <sup>19</sup> Felix sylvestris.

<sup>&</sup>lt;sup>20</sup> During its visit, the expert saw a beech tree that was more than 500 hundred years old, approaching 50 meters high and a volume of 37 m3. <sup>21</sup> Eight (8) in the past ; one cluster was removed from the initial diplomed area in 2002 (Stuzhista regional landscape park) because it was located very far on the Western part of the country; two others were recently connected after the last extension of the biosphere reserve in 2010.

<sup>&</sup>lt;sup>22</sup> Ex.: Chornohora.

<sup>&</sup>lt;sup>23</sup> Quercus robur and Quercus petraea.

<sup>&</sup>lt;sup>24</sup> Fagus sylvatica.

<sup>&</sup>lt;sup>25</sup> Abies alba.

<sup>&</sup>lt;sup>26</sup> Ex.: Kuziy Trybushan.

<sup>&</sup>lt;sup>27</sup> Picea abies sometimes assoicated with Pinus mugo.

<sup>&</sup>lt;sup>28</sup> Ex.: Maramorosh.

<sup>&</sup>lt;sup>29</sup> Resolution CM/ResDip(2008)1 - General criteria, A1.

<sup>&</sup>lt;sup>30</sup> In 1980, 1990, 1993 and 1997.

<sup>&</sup>lt;sup>31</sup> The core zone of the CBR.

No.	Name	Diplomed area (Carpathian	World Heritage Property		
		Biosphere Reserve)	(core zone of the CBR		
			clusters)		
1 and	Svydovets massif and Chornohora	X	Х		
2	massif				
3	Kuziy-Trybushany	X	Х		
4	Marmarosh	X	Х		
5	Uholka-Shyrokyi Luh	X	Х		
6	Narcissi Valley	X			

Х

Х

was extended again in  $2010^{32}$ , by the inclusion of 7 500 more hectares, practically connecting two clusters that were separated in the past (Map 2).

Table 1 – The CBR and the WH Property, components (Source : CBR).

The legal status of the diplomed area has not changed since the last appraisal. The core zone of the CBR is strictly protected (IUCN Category I a protected area); however, the buffer zone (IUCN Category IV) has been extended in 2010. This legal status fulfills the requirements of the regulations of the European Diploma<sup>33</sup>.

#### I-2-1 Governance

Chorna Hora

Yulivska Hora

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The overall governance of the diplomed area has not changed since the last appraisal; the CBR is still placed under the authority of the Ministry of Environment protection and managed by the National State Agency of protected areas.

The expert met various local stakeholders, representing the State Forest Entreprise (SFE), several local municipalities and one NGO; no one complained about the governance and the management of the CBR; all of them were eager to strengthen their cooperation with the CBR administration and some of them were willing to be more involved in the consultation and decision process, such as for the forest administration. Everyone was aware of and agreed on the utility to preserve the CBR, as well as truly opened to work together with the CBR team, in order to benefit from this exceptional heritage and to develop socio-economic activities compatible with its high values and sensitivity.

Many efforts are already done by the CBR administration to cooperate with external stakeholders ; this cooperation is mainly achieved through the "Coordination Board" which meets annually and when necessary, should there be any urgent issue to address. This Board consists of staff and representatives from the local communities and other key local stakeholders.

The expert discussed with the SFE on the forest management in the buffer zone; he was told that the administrative process for logging in the sectors where those activities can be allowed, is heavy and take a long time to be achieved; he also exchanged with a local stakeholder on the opportunity to develop mass winter tourism in this region. Those discussions were always friendly and positive, everyone was wishing to learn and to cooperate. With regards to the logging and alpine ski activities, the expert recommends that the CBR set up a specific awareness programme for the local community on climate change, and promotes local adaptation measures to the global warming, including promotion of alternative socio-economic measures and more appropriate activities, such as green tourism, carbon sequestration and payment for ecosystem services schemes.

 $<sup>^{32}</sup>$  Decree n° 25/2010 of the President of Ukraine about the extension of the territory of the CBR.

<sup>&</sup>lt;sup>33</sup> General criteria, B1.

### I-2-2 Administration

The CBR professional team comprises 318 staff on December 1,  $2011^{34}$ , with various levels of education<sup>35</sup>.

This team is under the authority of the Park Director who is seconded by 3 deputies in charge of (1) the ranger unit, (2) the scientific activities and (3) the administrative matters. The reserve administration is organized in 9 functional departments<sup>36</sup> and manages 4 scientific laboratories<sup>37</sup>, plus one Museum dedicated to the Mountain ecology ; 2 units are responsible for transportation and maintenance.

The field staff is splitted in 11 field units, each unit being managed by a head assisted by a deputy<sup>38</sup>.

#### Those figures have not significantly changed since the last renewal of the diploma.

#### I-2-3 Budget

The CBR budget has increased during the 2005-2011 period (**Table 2**), from around 315 000 Euros in 2005 to 1 119 000 Euros in  $2011^{39}$ . It is an unusual and positive tendency for protected areas in Europe that must be raised to the attention of the Group of specialists.

Budget Line	2005	2006	2007	2008	2009	2010	2011 (provisional)
Territory organization	-	240	259	-	-	-	1 027 000
		000	178				
Research activities and monitoring	16 889	16 452	16 443	23 232	164	24 534	30 500
					640		
Education and awareness	1 346	4 784	6 611	5 800	12 290	34 411	34 900
Conservation and restoration of	144	177	268	170	165	197	207 637
habitats	954	139	837	743	300	409	
Protection and restoration of fauna	6 689	24 570	46 351	45 507	36 199	68 129	61 406
Fire prevention and other protection	23 101	32 726	69 179	45 035	56 310	84 077	61 264
activities							
Recreation	51 058	77 896	25 432	26 721	67 709	72 589	35 292
General maintenance, repairing and	3 255	3 793	5 199	7012	7 455	8 562	10 971 801
building	237	821	985	379	985	378	
TOTAL	3 499	4 367	5 892	7 329	7 958	9 043	12 429 800
	274	388	016	417	433	527	

**Table 2** – Financial resources in UAH (2005-2010 period) (Source : CBR).

Almost 90% of those resources are provided by the State party and 0,1% come from the own activities of the CBR. Staff salaries represent around 67% of this budget.

Only very few funds come from external sources. The State party should be recommended to strengthen its efforts on fund raising, in order to increase the financial capacity of the CBR that are rather limited and not sufficient to develop larger programmes for education and awareness, as well as for recreational equipments and activities.

<sup>&</sup>lt;sup>34</sup> According to the Ukrainian socio-economic typology: 43 researchers, 17 technicians, 112 assistants and 147 workers.

<sup>&</sup>lt;sup>35</sup> Amongst others, 3 PhD, 5 PhD students, 74 Master degree, 73 bachelors and 24 part-time students).

<sup>&</sup>lt;sup>36</sup> Research and sustainable development ; ranger service ; protection and restoration of natural ecosystems ; ecoeducation and public awareness ; recreation, public relations and international cooperation ; economy and marketing ; administrative matters ; accountability and logistic.

<sup>&</sup>lt;sup>37</sup> Botany; zoology ; forestry ; monitoring.

<sup>&</sup>lt;sup>38</sup> Chornohora ; Bohdan-Petroske ; Uholka ; Shyrokyi Luh ; Marmarosh ; Kisvianske ; Trybushany ; Keveliv ; The Narcissi Valley ; Rakhiv-Berlybash and Petros-Hoverla.

<sup>&</sup>lt;sup>39</sup> 1 UAH equals 0,09 Euros at the time of the mission.

#### I-3 CONSERVATION OF THE BIOLOGICAL AND LANDSCAPE DIVERSITY

#### I-3-1 Generalities

The CBR was established with the aim to protect common and unique natural complexes of the Ukrainian Carpathians<sup>40</sup>. On September 2009, the President of Ukraine ordered a Decree on "*the conservation and the promotion of the Hutsul culture*" to develop additional measures on nature protection. Several measures were related to the preservation of the CBR, amongst others :

- to elaborate and adopt an **action plan** for preserving the Ukrainian part of the UNESCO World Natural Heritage Property "Primeval Beech Forests of the Carpathians";
- within 6 months to elaborate and adopt an **action plan** for developing tourism and other recreation activities, with financial support for the local stakeholders eager to develop such activities ;
- **to secure** the existing and establishing new biosphere reserves, including those belonging to the MAB UNESCO network ;
- **to develop facilities** within protected areas with the support of international and local investors ;
- to **develop tourism and recreation infrastructures** within the Protected areas (Pas) in general<sup>41</sup>;
- to **support legal entities** in their participation in the development of the PAs system.

The President addressed also the following recommendations to the national *Academy of Sciences of Ukraine* :

- to elaborate guidelines for the management of the Pas, in line with the UNESCO standards ;
- to elaborate **a long-term scientific program** for the conservation of the biological diversity ; focused on the flora and fauna species endangered and red-listed ;
- to implement **scientific research programs** within Pas, jointly with the Ministry of environment protection.

Finally, the President ordered the *National Mass Media Committee* to promote the Pas system, to raise public's awareness on nature protection and the ecological responsibility of the civil society.

Further to this order, a draft action plan for the *« conservation of the Ukrainian part of the World Heritage Property and the development of the adjacent villages »* was elaborated and presented for adoption to the Cabinet of Ministers of Ukraine ; this draft plan contained 15 types of activities to perform, most of them related to the preservation and management of the diplomed area (**Table 3**).

1	To mark the UNESCO World Natural heritage Property "Primeval Beech Forests of the
	Carpathians" in situ, and to build information facilities (or visitor centers) in each cluster
2	To ensure appropriate budget for developing protection, research and educational activities at
	the CBR and the Uzhanskyi National Nature Park
3	To bring assistance to the CBR and the Uzhanskyi National Nature Park in fundraising within
	UN, EU and other funding programs
4	To design a project for ecotourism in the Property as an important scientific-information site
5	To support the Ministry for Environmental Protection of Ukraine and the local reserve and park
	administrations in establishing an international cooperation on research and education
6	To promote the Property through the mass Media with the aim to raise up the ecological
	responsibility of the public and to draw attention to the primeval beech forests

<sup>&</sup>lt;sup>40</sup> See also the Orders n°294 dated 3rd August 2001 and n°44 dated 26 January 2005.

<sup>&</sup>lt;sup>41</sup> E.g. visitor centres, rest stations, roads etc.

7	To design a project for building an « international scientific-training centre" for the Carpathian
	primeval forests research based in the CBR; to build this centre
8	To complete the construction of the visitor center at the Uzhanskyi National Nature Park
9	To provide gas supply for the villages adjacent to the property in order to reduce people's
	dependence on timber resources and to secure the protection of the primeval beech forests
10	To improve the road network within Transcarpathia
11	To support infrastructure development planning for the settlements adjacent to the Property
12	To design and publish envelopes, post stamps and cards dedicated to the Property
13	To design souvenirs dedicated to the given Property and to strengthen social advertisement
14	To shoot documentary films and to prepare popular-scientific publications about the Property
15	To design and manage a Property website

 Table 3 – Draft Action plan-priority types of activities (Source : adapted from CBR).

According to the Presidential Order, most activities were to be completed by January 2011. Unfortunately, at the time of the mission, this Order was not still concretely enforced and the draft action plan not adopted.

The national and local authorities should be strongly encouraged to fully enforce the Order of the president mentioned hereabove, and to adopt the draft action plan for the conservation of the World Heritage Property that includes the core zone of the CBR. They should also be invited to provide appropriate funding in order to start the implementation of this plan in the nearest future and, if necessary, to raise external funds.

#### I-3-2 Challenges and solutions for long term conservation

A report recently published addressed this matter<sup>42</sup>; it summarizes the conclusions of a project carried out by the CBR administration, in cooperation with foreign partner institutions<sup>43</sup>.

This project aimed at designing « *open standards for conservation* » on the basis of a systematic and adaptative conservation management approach. It concludes on a series of 8 so-called « *strategies* » and operational measures identified by the CBR administration, after the consultation of stakeholders :

- to improve and enforce the forest law; a specific legal regime for the protection of the primeval forests in Ukraine should be set up;
- to mobilize the international carbon finance on the conservation of those primeval forests ;
- to support alternative sources of energy and reduce the consumption of fuelwood; in some sectors, illegal logging for fuelwood may threaten the diplomed area;
- to build up an International Centre for Research and Conservation of the primeval forest ecosystems in the Rakhiv district ;
- to strengthen and to extend international partnerships between Ukraine and other European countries ;
- to improve the network of ecoeducation and visitors centres of CBR ;
- to support the development of tourism ;
- to carry out demonstrative projects of conservation.

The State party should be congratulated for the work done with the methodological support of foreign experts ; somehow, those priorities build up the vision of the CBR administration for the long-term conservation of the diplomed area. They should be merged with the draft Action plan mentioned hereabove (Table 2)<sup>44</sup>.

 <sup>&</sup>lt;sup>42</sup> Ibish, P.L. and al, 2011 - CBR, challenges and solutions for protected area management in Ukrainian Transcarpathia, 111 p + attachments.
 <sup>43</sup> This project followed up the conclusions of an international workshop on the *«Implementation of the Ukrainian State Nature Conservation Programme 2020 »*, held in Vilm, Germany from 3 rd to 6th December 2010.

<sup>&</sup>lt;sup>44</sup> This vision should be consistent with the operational actions plans already implemented by the CBR administration on specific matters : research and monitoring ; education and awareness ; forest management ; nature protection activities ; fire prevention ; recreation ; fauna protection ; ecosystem restoration.

#### I-3-3 Research activities and priorities

The CBR is one of the greatest scientific and educational centre in the Carpathian Region ; it manages four scientific laboratories and a Museum, a network of monitoring plots, phenological stations, hydrological and weather stations, as well as a GIS laboratory. The CBR administration cooperates with many national and international research institutions as a natural laboratory<sup>45</sup>.

The state of knowledge on biodiversity in the diplomed area, has been analyzed and summarized recently<sup>46</sup>. Five (5) main objectives have been identified amongst other fields of research activities :

- to include the virgin forests in the National Ecological Network; this measure would contribute to the development of the Paneuropean ecological network as required by the regulation for the European Diploma<sup>47</sup>;
- to give the virgin forets a specific legal status (see here above § I-3-2);
- to set up a conservation and management « system » for the virgin forests ;
- to raise awareness of the local stakeholders, including foresters, on the eco-friendly management tools for the virgin forests ;
- to set up and develop a comprehensive monitoring system.

The State party should be recommended to implement those priorities; they will contribute to secure the long term preservation and management of the diplomed area and participate in the maintenance of its integrity, as well as to the long term preservation of its values and interest for the conservation of the biological diversity in Europe.

#### I-3-4 State of conservation of biodiversity

The demography of the main species of mammals has followed positive tendencies during the last five years; it is the case for the three large carnivores (**Figure 1**) and for the ungulates (**Figure 2**). However, the figures are very low for all species<sup>48</sup> and the expert did not notice any sign<sup>49</sup> of large vertebrates during his field visit. The average densities of ungulates and large carnivores in the diplomed area, are considered to be much lower than the optimum met in the Ukrainian Carpathians as a whole<sup>50</sup>, depending of the quality of the site. For both species of deers, the densities are not different within and outside the CBR. The situation is slightly different for the wild boar whose density is higher inside the diplomed area, thanks to the presence of the old beech forests.

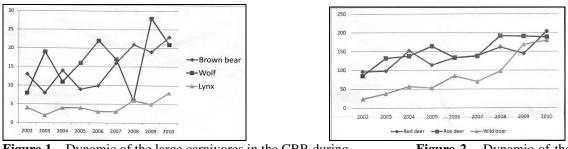


Figure 1 – Dynamic of the large carnivores in the CBR during<br/>ungulates in the in the CBR<br/>the 2002-2010 period (Source : CBR)during<br/>during(Source : CBR).during



luring the 2002-2010 period

49 Prints, scats, ...

<sup>&</sup>lt;sup>45</sup> Com. Pers. Hamor, F.

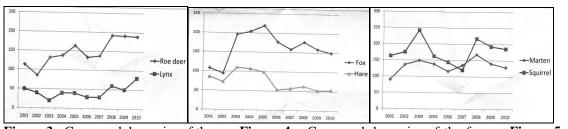
<sup>&</sup>lt;sup>46</sup> Hamor, F and Veen, P., 2008 - Virgin forests of Transcarpathia, inventory and management, Rakhiv, 2008, 86 p.

<sup>&</sup>lt;sup>47</sup> Art. 1 – purpose : « ... The Diploma represents an important contribution to the Pan-European Ecological Network".

<sup>&</sup>lt;sup>48</sup> Especially in the year 2002, but it was due to a hard winter with heavy snow.

<sup>&</sup>lt;sup>50</sup> Turianin, I. – 1975. Game fauna and animals important for fir production in Transcarpathia.

Poaching around the core zone of the CBR could be one reason of this very low density of large animal in general. However, **Figures 3, 4 and 5** shows knowledgeable data on the interspecific correlations between several preys and predators ; those figure may also be interpretated in a way that the demography of those species are only influenced by natural and not anthropogenic factors. If it is the case, disturbance, illegal activities and poaching would not be significant in the CBR.



**Figure 3** - Compared dynamics of the **Figure 4** – Compared dynamics of the fox **Figure 5** – Compared dynamics of the roe deer and the lynx during the 2002-2010 and the hare during the 2002-2010 period pine

marten and the squirrel during the period (Source : CBR), (Source : CBR). 2002-2010 period (Source : CPR)

(Source : CBR).

Furthermore, the dynamic of the wolf is very irregular in the reserve and it shows unusual and sharp fluctuations on the long period. The Council of Europe has also recently received reliable information, telling that the wolf would be hunted et even trapped in this country, without limitation. The hunting law adopted in 2000 (art. 33)<sup>51</sup> in Ukraine, would also list the wolf amongst the harmful species, that can be killed all over the year and without limitation<sup>52</sup>.Ukraine ratified the Bern Convention with a reservation on this species<sup>53</sup> that can be regulated but only *« to a limited extent and under appropriate supervision »*.

The expert strongly recommends that this issue be addressed by the Standing Committee of the Bern Convention at its next meeting. The State party should be asked to provide further information on the legal status of the wolf in the hunting law, and appropriate data on its state of conservation in the country in relation to its international commitments under the Bern Convention, especially with regard to the art. 6 of the Convention<sup>54</sup>. It should also be encouraged to pay a particular attention to the poaching activities and to develop a specific awareness programme for the local hunter organizations.

Regarding the bird species that are also good bio indicators, the situation is stable during the five last years (**Table 4**).

<sup>&</sup>lt;sup>51</sup> <u>http://zakon.radsa.gov.ua/cgi-bin/laws/main.cgi?page=2&nreg=1478-14</u>.

<sup>&</sup>lt;sup>52</sup> The expert was told that subsidies are also given to hunters for killing wolves ; 1 000/1 300 specimens of wolf are estimated to be killed every year in Ukraine, compared to the total wolf population estimated to 2 500 individus officially.
<sup>53</sup> Extract : « 1. It is allowed in Ukraine, in restricted number and under conditions of relevant control, towards such species mentioned in

<sup>&</sup>lt;sup>53</sup> Extract : « 1. It is allowed in Ukraine, in restricted number and under conditions of relevant control, towards such species mentioned in Appendix II to the Convention: - **spot regulation of number of** *Canis lupus* ... **with a view to prevent their negative influence on other species, serious harm to livestock and other objects of property;** ...

<sup>2.</sup> It is allowed to use the following means and methods of killing, capture and other forms of exploitation, mentioned in Appendix IV to the Convention: - **traps - for exploitation of** *Canis lupus*, mentioned in Appendix II.... to the Convention ». <sup>54</sup> Bern Convention - Art. 6 : « *Each Contracting Party shall take appropriate and necessary legislative and administrative measures to ensure* 

 $<sup>^{54}</sup>$  Bern Convention - Art. 6 : « Each Contracting Party shall take appropriate and necessary legislative and administrative measures to ensure the special protection of the wild fauna species specified in Appendix II .... e) the possession of and internal trade in these animals, alive or dead, including stuffed animals and any readily recognisable part or derivative thereof, where this would contribute to the effectiveness of the provisions of this article ».

Species	2007	2008	2009	2010	2011
Ciconia nigra	7 ind.	6 ind.oc.	4 ind.oc.	5 ind.oc.	6 ind.oc.
Hieraaetus pennatus	0 pairs	0 pairs пар	1 pair	1 pair	1 pair
Aquila pomarina	6 pairs	5 pairs	5 pairs	6 pairs	5 pairs
Aquila chrysaetos	4 pairs	3 pairs	3 pairs	3 pairs	3 pairs
Falco peregrinus	1 pair	1 pair	1 pair	1 pair	1 pair
Tetrao urogallus	appr. 400 ind.	appr. 400 ind.	appr. 400 ind.	appr. 400 ind.	appr. 380 ind.
Crex crex	24 ind.oc.	appr. 40 ind.	appr. 30 ind.	appr. 25 ind.	appr. 25 ind.
Bubo bubo	3 pairs	4 pairs	3 pairs	3 pairs	3 pairs
Aegolius funereus	4 pairs	5 pairs	5 pairs	6 pairs	5 pairs
Glaucidium passerinum	3 pairs	4 pairs пари	4 pairs пари	5 pairs <del>nap</del>	6 pairs nap
Strix uralensis	appr. 35 pairs	appr. 30 pairs	appr. 35 pairs	appr. 35 pairs	appr. 35 pairs
Prunella collaris	appr. 60 pairs	appr. 60 pairs	appr. 60 pairs	appr. 60 pairs	appr. 60 pairs
Monticola saxatilis	2 pairs	2 pairs	2 pairs	2 pairs	2 pairs

Table 4 – Dynamics of the rare bird species in the CBR during the 2007-2011 period (Source : CBR).

# On the basis of those figures, it can be concluded that the state of conservation of the CBR seems not to have suffered from significant degradations since the last renewal of the European diploma.

This conclusion does not mean that there is no pressure nor threat on the diplomed area; a recent evaluation of those threats was made on the CBR, during an expert meeting held in January 2010; **Table 5** shows the results of this evaluation where high threats appear in each scope. Those results may be a little bit pessimistic, however, it is clear that the CBR is under growing local pressure.

The State party should be encouraged to address the most critical issues that may affect the integrity of the diplomed area, amongst them and in priority :

- **logging of the primeval and most ancient beech forests**; it is crucial that logging activities are strictly forbidden on those forests;
- **poaching** ; many terrestrial and aquatic species of high ecological value are met in the CBR. Amongst them, the wolf is one of the most vulnerable ; as said before, the CBR administration should strengthen its cooperation with the hunting organizations in order to stop the destruction of the wolf in the whole territory of the CBR, including the buffer zone, and to reduce poaching as much as possible, around the diplomed area ;
- **habitat fragmentation**: this is one of the top threats for the conservation of the biological and landscape diversity in Europe; the recent extension of the diplomed area contributed somehow to reduce the level of this risk. Fragmentation in general has direct and very negative effects on the large carnivores dynamics; concrete measures linked to the restoration of the terrestrial and aquatic natural habitats should be developed by the CBR administration, in cooperation with the local stakeholders, otherwise, the CBR will slowly loose its integrity and it exceptional European interest.

Targets→ Threats↓	Alpine grassland ecosystems	Cave ecosystems and karst formations	Forest ecosystem, resources and services	Large mammals (carnivores and ungulates)	Nareissus Valley	Primeval forests	Water and riparian ecosystems and processes	Summary Threat Rating
Disturbance by tourism and recreation	Medium	Low	Low	Low		Law		Low
Official logging (selective & clearcuts)			High			Very High		High
Commercial musroom collection			Low	-	125	Medium	Sec. 1	Low
Illegal logging in riperian forests			1.4				Medium	Low
Number outbreaks of bark beetles			Very High			High		High
Xerophication	14 3 1 2 3	1021123	1000	1222 0010	Very High	C. State	133863	High
Speleology and rock- climbing		Medium						Low
Mining and extracting activities		High						Medium
Illegal fishing	1 - 1 - 1				10,212)	1.1.1.1	Low.	Low
Water pollution and waste	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1				111000	A Solar	High	Medium
Riverbed changes		131					Very High	High
Peaching	12	1		Very High				High
Habitat fragmentation	1000	1.1.1		Medium	Suc-		1.00	Low
Illegal/unofficial logging and forest clearing		1	Low			High	1000	Medium
Erosion	Low	- ards	No. C.		ton all	-	1001-2	Low
Obliteration on the border with forest	High					10		Medium
Official hunting		6 6 5	1000	Medium			10.000	Low
Change of land use	High	1						Medium
Trampling by tourists	1				Low			Low
Vandalism and pollution		Very High			1.00		-	High
Isolation	1		- Contractor	1000	High		-	Medium
Grazing			Low	1993	P	Low	1000	Low
Spring grass incinerations	Medium	-	1	11 (25)		1	-	Low
Natural succession (willow)				1115	High			Medium
Total	High	High	High	High	High	High	High	Very Hig

Table 5 – Threat rating in the CBR (Source : Ibisch, P.L., 2011).

## I-4 LAND USE MANAGEMENT

#### I-4-1 Zonation

There are four zones in the CBR :

- the **core zone** (31% of the total superficy of the diplomed area), assigned to strict conservation and scientific research; only few areas are opened to visitors in order to avoid anthropogenic pressure on the most valuable ecosystems that constitute the heart of the CBR;
- the **buffer zone** (28%), where some regulated sustainable activities are allowed ;
- the **transition zone** (35%) devoted to traditional utilizations of natural resources;
- the « *regulated conservation zone* » (6%), established along trails entering the core zone with associated strict regulations for visitors. This zone is specific to the CBR.

This zonation structure has not changed since the last renewal of the European diploma; it is well adapted to the local context and fully compatible with the regulation for the European Diploma.

#### I-4-2 Socio-economic activities

The utilization of the natural resources is one of the significant components of the socio-economic development in the CBR ; it is especially important for tourism, at the regional level.

Four groups of activities are of particular importance for the conservation of the CBR.

#### 1.4.2.1 Forest uses

Basic economical logging is permitted only outside the core zone and this activity is fulfilled by the SFE. Within the territory directly managed by CBR, economical logging is forbidden. Logging motivated by other purposes is insignificant<sup>55</sup>; in the past, this timber was used for the internal needs

<sup>&</sup>lt;sup>55</sup> However, according to the inventory held in 1998, the average annual volume of logging was 3.700 m3 (Source, CBR).

of the CBR and the staff. The CBR must also supply the highlands farms located within (25 farms) and close to its forest massifs (22 farms), with firewood.

The CBR administration sells firewood collected from sanitory logging and allows traditional uses of non timber products where permitted by the legislation and the CBR regulations. These activities are limited according to the functional zonation of the reserve ; for example, local communities may be allowed to collect firewood and to use pastures in the buffer and in the transition zones exclusively.

The level of use of timber products within the CBR looks acceptable compared to its capacity.

#### 1.4.2.2 Hay mowing

This activity is directly managed by CBR; it concerns 325 ha of the territory directly managed by the CBR administration. Again, mowed lands are mostly used by the CBR administration for internal needs; only parts of them can be distributed by the village councils to the local population, but only according to the CBR regulation.

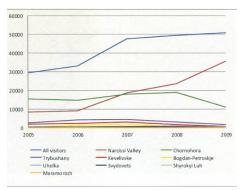
#### 1.4.2.3 Cattle and sheep grazing

This activity exists within the CBR's territory mainly on subalpine meadows – the "*polonynas*" – and on some meadows located within the forest. The distribution of those pastures is performed by the local authorities and the permits for cattle/sheep grazing on the territory directly managed by CBR are issued by the reserve administration.

#### 1.4.2.4 Recreational uses

The CBR hosts tourism activities<sup>56</sup>; those activities are performed by individuals or groups of visitors and they have significantly increased from 2005 to 2009 (**Figure 6**). The number of visitors in 2009 was a little bit higher than 50 000 persons<sup>57</sup>. Since 2010, this frequentation has decreased due to the economic crisis.

The pressure of tourism has increased since 2005 but it is not considered by now as a threat for the conservation of the CBR. Those activities are regulated and the visitors must stay on opened trials ; they are not allowed to visit the most sensitive parts of the diplomed area.



**Figure 6** – Trends of tourism in the CBR during the 2005-2009 period (Source : Ibisch, P.L., 2011).

#### 1.4.2.5 Forest non timber products

<sup>&</sup>lt;sup>56</sup> A study was carried out in 1999 under the auspices of the Council of Europe, in the CBR, on the development of tourism in the Stuzhytsa/Ushanski National Park ; however, this cluster has been removed from the diplomed area in 2002 (PE-S-T0 (99)3).
<sup>57</sup> Those figures are slightly different from those given by the CBR administration which estimate that 83 500 visitors in average visit the

<sup>&</sup>lt;sup>57</sup> Those figures are slightly different from those given by the CBR administration which estimate that 83 500 visitors in average visit the diplomed area annually.

Mushrooms and berries collection is very popular in Ukraine. Those activities may have negative impacts on the biological diversity of the diplomed area; they are considered to be a medium threat in the primeval forest ecosystem or even a low threat, within the other ecosystems represented in the CBR<sup>58</sup>.

To conclude, illegal cuts and grazing rarely occur on the territory of the CBR, within the buffer zone and the transition zone, and their impacts upon the protected territory is considered minor<sup>59</sup>. Very few offences are reported annually<sup>60</sup>.

The other socio-economic activities performed within the CBR do not represent an imminent threat for the diplomed area in general, and they will not ever, as far as they stay compatible to its carrying capacity. Several signs however, reveal they can have a negative effect, locally and/or on some specific resource<sup>61</sup> and/or ecosystem<sup>62</sup>. The CBR administration must stay vigilant and continue to strengthen its awareness plans and programmes.

#### I-5 DIVERSE

#### I.5.1 INTERNATIONAL COOPERATION

The CBR has a strong tradition of cooperation with foreign institutions. For long, the CBR administration cooperates with the Swiss Federal Institute for Forest, Snow and Landscape Research (WSL) and with the Eberswalde University for Sustainable Development, Germany.

Many officials from abroad use to visit the diplomed area, coming in the past from Switzerland, Germany, Czech Republic, Slovakia, Romania, Poland, the Netherlands and the United States.

In 2005 the CBR has signed a MoU with the Maramures regional park, Romania, in order to develop scientific, tourism and cultural cooperation. Both parties have established a permanent coordination working group involving key stakeholders from their respective countries, as well as a bi-lateral working group to elaborate common strategy and work plans on a series of topics<sup>63</sup>. They meet 2-3 times per year and will try to strengthen their cooperation through a new project "BIOREGIO", launched in 2011 and placed under the auspices of UNEP, the Carpathian Convention and EURAC ; this project is funded by the EU.

#### I.5.2 RELATIONSHIP WITH THE LOCAL STAKEHOLDERS

The expert met several local stakeholders during his visit ; he had fruitful discussions with representatives from two local municipalities and from the SFE which is a key institution for the conservation of the diplomed area.

# The CBR administration seems to have frequent and constructive contacts with the local stakeholders.

#### **II RECOMMENDATIONS**

#### **II-1 APPLICATION OF THE PREVIOUS RECOMMENDATIONS**

#### The European diploma was renewed to the CBR in 2007, with the following recommendations :

<sup>58</sup> Ibisch, P :L., 2011.

<sup>&</sup>lt;sup>59</sup> Annual reports, 2007. 2008 and 2010.

<sup>&</sup>lt;sup>60</sup> 15-20 per year, most on illegal cutting, some on illegal fishing, illegal grazing and illegal collection.

<sup>&</sup>lt;sup>61</sup> Ex. : wolf.

<sup>&</sup>lt;sup>62</sup> Ex. : forest resources along the aquatic ecosystems.

<sup>&</sup>lt;sup>63</sup> Ex. : implementation of joint projects on the MAB programme, coordinated conservation management, monitoring, sustainable tourism, staff training, capacity building, ecological education and ecological responsibility, sustainable development.

1. to provide the reserve with sufficient resources to function properly, and ensure that negative influences do not affect the status of the reserve or the surrounding area : the financial capacities of the CBR remain low ; however, the figures provided by the CBR administration show a important and encouraging increase in the budget of the diplomed area, since 2007. The State party should be acknowledged for the progress made and encouraged to continue its efforts and to raise additional funds from external sources as well ;

2. to continue to work for the best possible use of land within the Carpathian Biosphere Reserve and support the diplomatic efforts of the Ukrainian and Romanian governments to establish a Ukrainian-Romanian biosphere reserve in the Maramoroski mountains : a MoU has been signed with the Maramuresh regional park, Romania, in 2005 ; however, the cooperation between both protected areas need to be concretely strengthened ; it is expected and hoped that the BIOREGIO EU project will facilitate this cooperation and contribute to establish a transfrontier Biosphere reserve in the mid-term. The State party as well as the Romanian part, should be encouraged to accelerate their efforts in order to reach this goal in the next two or three years ;

3. in accordance with the resolutions of the Framework Convention on the Protection and Sustainable Development of the Carpathians, establish appropriate areas – along similar lines to the Carpathian Biosphere Reserve – for the sustainable use of forests, ecological tourism, public environmental education and the implementation of demonstration projects focusing on environmental management, with due regard to sustainable management principles : many activities have been performed by the CBR administration since the last renewal, that respond partly to this recommendation ; more attention should be given by the State party and by the CBR administration on the elaboration and implementation of clear strategies and actions plans for the development of coordinated green activities around the CBR, in close cooperation with the local stakeholders and in line with the presidential guidance ;

**4.** step up the action taken by the Ukrainian Government and public non-governmental organisations interested in researching and protecting biological and landscape diversity with a view to having the Reserve's old-growth forests included in the UNESCO list of natural world heritage sites : this recommendation has been fully implemented ; the core zone of the CBR has been listed in 2007, on the World Heritage List, as the "*Primeval Beech Forests of the Carpathians*" WH Property ;

5. closely monitor the implications for the reserve's status and nature conservation of the study on the environmental impact of human activities (tourism and leisure), and take action in the event of any negative effects : impressive works have been done by the CBR administration since the last mission, on the inventory and the management of the CBR, as well as on the challenges and solutions for its protection and management in the future ; those surveys provide the State party and the CBR administration with a strong baseline to build up a clear vision of the long term conservation and management of the diplomed area. The State party and the CBR administration should be urged to implement the recommendations made in those reports and fully enforce the 2009 Order of the President of Ukraine in favour of "the conservation and promotion of the Hutsul culture".

#### **II-2 FINAL RECOMMENDATIONS**

In the light of those comments, the expert suggests to extend the validity of the Diploma for a further ten-year period, to the Carpathian Biosphere Reserve of Ukraine, with the following recommendations addressed to the national and local authorities of Ukraine and Romania (Rec. 2).

**Rec. 1** To continue their efforts on providing the CBR with more appropriate funding and to raise more additional funds from external sources as well ;

**Rec. 2** To accelerate their diplomatic efforts towards the authorities of Romania, and complete the process of establishing a transfrontier Biosphere Reserve in the next two or three years coming ;

**Rec. 3** To pay more attention to the elaboration and implementation of clear strategies and actions plans for the development of coordinated green activities around the CBR, in close cooperation with the local stakeholders and in line with the presidential guidance (Ref.: Presidential Order dated September 2, 2009, on the conservation and the promotion of the Hutsul culture);

**Rec. 4** To provide the Council of Europe with adequate and details figures, information and data on the legal regime of wolf (*Canis lupus*) in Ukraine and its enforcement in the country, especially with regards to the art. 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 diplomed area ;

**Rec 5** To concretely follow up and give the CBR the capacities to implement the conclusions and recommendations made in the reports on inventory and monitoring, and on challenges and solutions for the management of the CBR, published in 2008 and 2011 ;

**Rec. 6** To strengthen its cooperation with the local socio-economic stakeholders, including the forest and the tourism sectors, and to develop specific awareness pilot activities targeted on them. Those activities should address the issue of climate change, and promote local adaptation measures to the global warming, including alternative socio-economic measures, like green tourism, carbon sequestration and payment for ecosystem services schemes.

St Cergue, 3 December 2011.