



MINISTRY OF ENVIRONMENT AND SPATIAL PLANNING  
KOSOVO ENVIRONMENTAL PROTECTION AGENCY  
KOSOVO INSTITUTE FOR NATURE PROTECTION



# STATE OF NATURE REPORT 2015-2017

Prishtina, 2019



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KOSOVO ENVIRONMENTAL PROTECTION AGENCY  
KOSOVO INSTITUTE FOR NATURE PROTECTION



# STATE OF NATURE REPORT

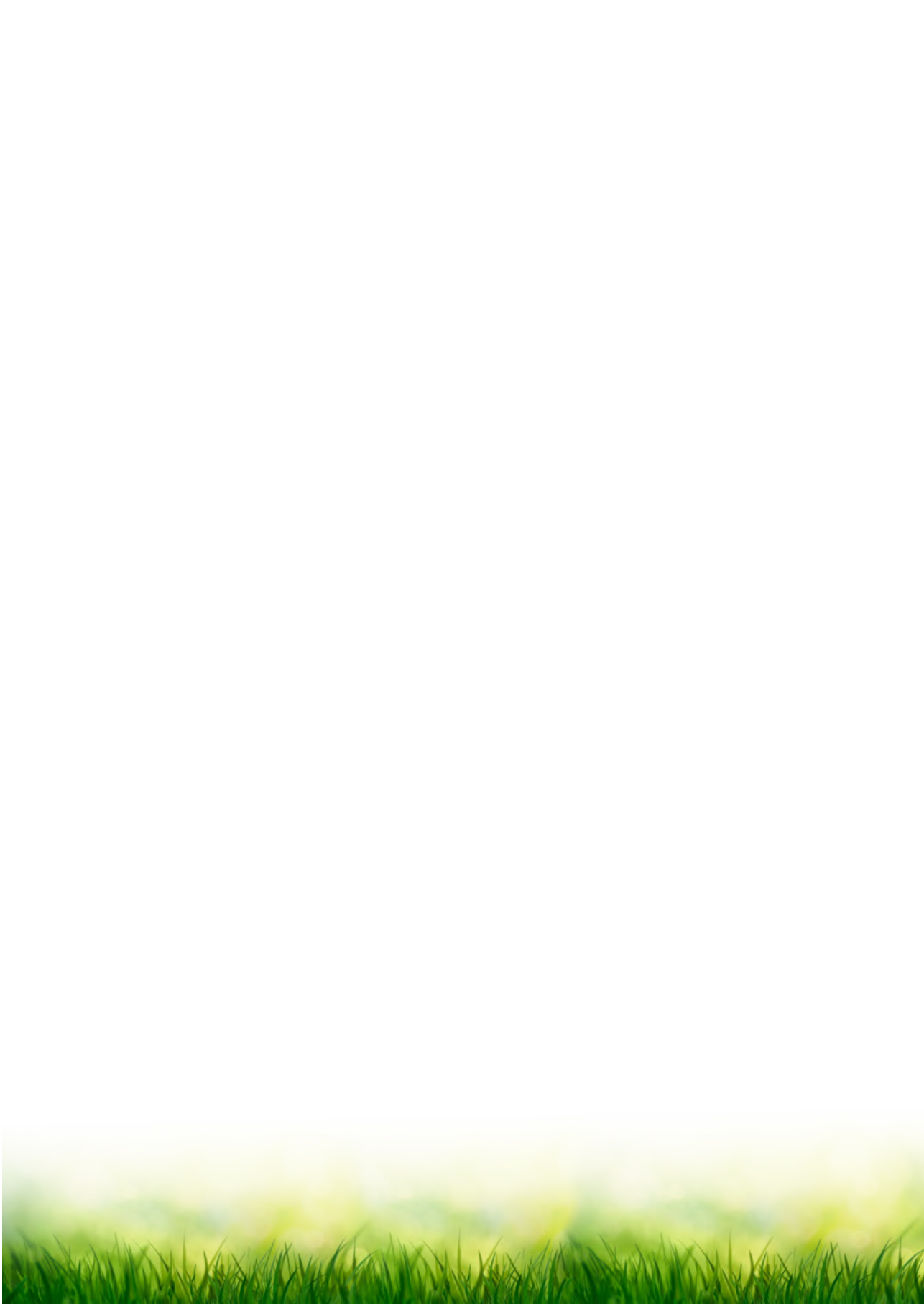
**2015-2017**

**Prishtina, 2019**

*“Nature and biodiversity, environment and national heritage  
are everyone’s responsibility”*

**Constitution of the Republic of Kosovo**





**Dear readers,**

*Man is part of nature and not its possessor, so his demands and interests must be in harmony with the laws of nature and its ecological balance.*

Natural heritage of a country is one of the most important assets of it. National Parks, forest ecosystems, nature monuments and water resources, despite they are habitats for many rare species of plants and animals they cover on themselves many phenomena and rare interesting geological, morphological, hydrological and landscape characteristics which are also important sources for economic development, social welfare, education and recreation. However, uncontrolled and unplanned using of these values and natural resources can bring unrecoverable damages which will consequently have both, extinction of rare plants and animals and damage the rare natural phenomena. Considering this fact, Kosovo's institutions have put in their priorities the protection and conservation of rare natural heritages. Today, Kosovo has about 11.5 % of its territory protected by law, under which are included the protected areas of different categories such as national parks, nature reserves, nature parks, protected monuments and other natural areas of special importance. Also, with the aim of ensuring efficient management and sustainable development of these values except the respective legislation in the field of nature protection and biodiversity are drafted strategies, action plans, spatial plans and programs even for nature of Kosovo in general or for certain areas in particular. In order to promote the natural heritage values of Kosovo and awareness of the general public about their importance, they become part not only for national projects and initiatives but also for regional and international projects. Nevertheless, it is needed further continuous commitment of all institutions and other organizations, but also of our society to protect and conserve these natural values and use them in a sustainable manner for the benefit of present generations and future ones. Man is part of nature and not its owner, therefore its demands and interests must be in harmonization with the nature legislation and with its ecological balance.

Dr.sc. Ilir Morina  
Chef Executive of KEPA



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## Abbreviations

PAK	<i>Privatization Agency of Kosovo</i>
KEPA	<i>Kosovo Environmental Protection Agency</i>
KFA	<i>Kosovo Forestry Agency</i>
BDTF	<i>Biodiversity Task Force</i>
EU	<i>European Union</i>
BIMR	<i>Regional Network for Biodiversity Information Management and Reporting</i>
KCB	<i>Kosovo Consolidated Budget</i>
EDC	<i>Economic and Development Cooperation</i>
BORN	<i>Natural Cross-Border Values</i>
CDDA	<i>Common database on designated areas</i>
CITES	<i>Convention on International Trade in Endangered Species</i>
DANP	<i>Directorate for Administration of National Park</i>
DMMU	<i>Environmental and Water Protection Department</i>
DNP	<i>Directorate of National Park</i>
ECRAN	<i>Environment and Climate Regional Accession Network</i>
EEA	<i>European Environment Agency</i>
EIONET	<i>European Environment Information and Observation Network</i>
EKMN	<i>Kosovo Office for Nature Protection</i>
ENVSEC	<i>Environment and Security Initiative</i>
ERA	<i>Non-Governmental Environmental Organization</i>
ERASMUS	<i>Cooperation of the European Community with University Students</i>
ESAV	<i>Ecosystem Services Assessment and Valuation</i>
EUNIS	<i>European University Information Systems Organization</i>
EURING	<i>European Union for Bird Ringing</i>
FAO	<i>Food and Agriculture Organisation</i>
FOUR PAWS	<i>Austrian Animal Protection Foundation</i>
FMNS	<i>Faculty of Mathematics-Natural Sciences</i>
GIS	<i>Geographic Information System</i>
GIZ	<i>German Technical Cooperation</i>
GPS	<i>Global Positioning System</i>
OGK	<i>Official Gazette of Kosovo</i>
OGRK	<i>Official Gazette of the Republic of Kosovo</i>
KINP	<i>Kosovo Institute for Nature Protection</i>
IPA	<i>Instrument for Pre-Accession Assistance</i>
ISP	<i>Institute for Spatial Planning</i>
ISCC	<i>Interim Secretariat of the Carpathian Convention</i>
IUCN	<i>International Union for Conservation of Nature</i>
JICA	<i>Japan International Cooperation Agency</i>

<i>KEERC</i>	<i>Kosova Environmental Education &amp; Research Center</i>
<i>KPMM</i>	<i>Independent Commission for Mines and Minerals</i>
<i>MLGA</i>	<i>Ministry of Local Government Administration</i>
<i>MASHAV</i>	<i>Israel's Agency for International Development Cooperation</i>
<i>MAVA</i>	<i>Norwegian Foundation</i>
<i>MAFRD</i>	<i>Ministry of Agriculture, Forestry and Rural Development</i>
<i>MESP</i>	<i>Ministry of Environment and Spatial Planning</i>
<i>NMSI</i>	<i>Nature Monument of Special Importance</i>
<i>MED</i>	<i>Ministry of Economic Development</i>
<i>NGO</i>	<i>Non-Governmental Organization</i>
<i>UN</i>	<i>United Nations organization</i>
<i>ORF-BD</i>	<i>Open Regional Fund for South-East Europe – Biodiversity</i>
<i>NP</i>	<i>National Park</i>
<i>KEAP</i>	<i>Kosovo Environmental Action Plan</i>
<i>RCC</i>	<i>Regional Co-operation Council</i>
<i>REC</i>	<i>Regional Environmental Center</i>
<i>SIDA</i>	<i>Swedish International Development Cooperation Agency</i>
<i>KES</i>	<i>Kosovo Environmental Strategy</i>
<i>TAIEX</i>	<i>Technical Assistance and Information Exchange Instrument</i>
<i>TEM</i>	<i>Transboundary Ecosystem Management</i>
<i>UNDP</i>	<i>United Nations Development Program</i>
<i>UNEP</i>	<i>United Nations Environment Programme</i>
<i>UNSECO</i>	<i>United Nations Educational, Scientific and Cultural Organization Programme</i>
<i>UP</i>	<i>University of Prishtina</i>
<i>VGJRV</i>	<i>Hunting Area of Special Importance</i>
<i>VIER PFOTEN</i>	<i>Foundation for Animal Protection</i>
<i>EIA</i>	<i>Environmental Impact Assessment</i>
<i>WWF</i>	<i>World Wildlife Fund</i>
<i>SAC</i>	<i>Special Area of Conservation</i>
<i>SPA</i>	<i>Special Protection Area</i>

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## 1. INTRODUCTION

### 1.1. GENERAL CHARACTERISTICS OF KOSOVO

**Region:** South-East Europe

**Latitude:** 41° 51' 21 and 43° 16' **Longitude:** 19° 59' and 21° 47'

**Official name:** Republic of Kosovo

**Capital city:** Prishtina

**Area:** 10,908 km<sup>2</sup>

**Population:** 1,771,604 (2015 estimate)

**Population density:** 162 residents in 1km<sup>2</sup>

**Overall border length:** 743. 5 km

**Length of borders:** The border of the Republic of Kosovo with neighbouring countries mainly passes through mountains and is of natural character.

- Republic of Albania in the south-west 113.5 km
- Republic of Macedonia south 170.7 km
- Republic of Montenegro in the north-west 79.1 km
- Republic of Serbia in the north and east 380.1 km

**Relief:** hilly-mountainous

- 63 % hilly-mountainous
- 37% field

**Average altitude:** 810 m

- The lowest point is 270 m (White Drin valley, bordering Albania)
- The highest peak is 2656 m (Gjeravica peak)

**Climate:** mild continental

**Longest river:** White Drin (Drini i Bardhë) 111.5 km

**Main lake:** Ujman (Gazivoda) 9.10 km<sup>2</sup>

**Number of protected areas:** 184 (2017)

**Surface area of protected areas** (2017) area 126119 ha



- *Strict reserves:* 19, (10885 ha)
- *National parks:* 2, (115957 ha)
- *Nature Monuments:* 156, (6059 ha)
- *Nature Park:* 1, (5934 ha)
- *Protected Landscape:* 5, (2437 ha)
- *Special bird protection area* 1 (109 ha)

**Biogeographical areas:** continental and alpine

- Continental area - 90% of Kosovo's surface area
- Alps - 10% of Kosovo's surface area

**Forests:** total area 481000 ha (44 %)

- High forests: 24%
- Medium forests: 62%
- Shrubs: 14%

**Flora:** over 3000 species of vascular flora

**Fauna:** about 350 species of vertebrates (220 species of birds, about 20 species of reptiles, over 10 species of amphibians, over 30 species of fish) and about 600 species of invertebrates (of which about 180 species of butterflies).

**Number of municipalities:** 38

**Number of settlements:** 1469

## 1.2. PURPOSE OF THE REPORT

Drafting of the Report on the State of Nature in Kosovo is under the responsibility and duty of the Kosovo Institute for Nature Protection, as regulated by the Law of Nature Protection, Article 142.

The main purpose of the report is to inform the public about the state of nature, protected areas and biodiversity of Kosovo, but through this report, it is also intended to influence the improvement of policies for the management and conservation of the values of natural heritage and biodiversity. This report can also serve as a good guideline for orientation of projects and donor support in the nature protection sector.

The report contains data on the legal, strategic and institutional framework in the nature sector, the state of nature protected areas, biodiversity, rare plant and animal species, forest ecosystems, ecotourism, interventions in protected areas and activities carried out with the aim of nature protection. The measures taken for nature protection, the conclusions and recommendations are also an important part of the report.

The data presented in this report were collected during site visits by KINP, the managing bodies of the protected areas, as well as other governmental and non-governmental institutions. Part of the Report is also information from laws, strategies, publications, reports and other relevant documents for the nature protection sector.

The data of the Report refer to the 2015-2017 period, but in some cases, in the absence of data and for comparison aspects, data for previous periods were presented.

### 1.3. BACKGROUND OF NATURE PROTECTION IN KOSOVO

First steps of nature and environmental protection in Kosovo begun in the late 50s. In 1968, the nature protection unit is established within the Office for Protection of Cultural Monuments of Kosovo. In 1974, with the Decision on the division of Nature Protection Section from Kosovo's Office for Protection of Cultural Monuments of Kosovo, the Office for the Protection of Nature is established, which continued to work with the same name under the Law on Kosovo Office for Nature Protection. In 1988, the Assembly of Kosovo adopted the Law on Protection and Development of Natural Values and the Values Created by the Work of Human Environment. Under this Law, a year later, the Assembly of Kosovo adopted the Law on the Kosovo Office for Protection of Nature and Environment.

In 2000, the former Kosovo Office for Protection of Nature and Environment is registered in the UN Interim Civil Administration with the name "Institute for Protection of Kosovo's Nature and Environment" with headquarters in Prishtina. In May 2000, the Environmental Protection Department is established, and the following existing institutions are incorporated and operate within it: Institute for the Protection of Kosovo's Nature and Environment, Hydro-meteorological Institute of Kosovo and "Sharr Mountains" National Park Directorate.

After the formation of Kosovo's governing bodies (2001), the Ministry of Environment and Spatial Planning is also established. In 2002 the Kosovo Assembly adopted the Law on Environmental Protection No. 2002/8 (Rreg. 2003/22), this law foresees the establishing of the Kosovo Environmental Protection Agency that includes Nature Protection Institute and the Hydro-meteorological Institute.

In 2006, the Assembly of Kosovo adopted the Law on Nature Protection (Reg. 2006/22), according to this law the Institute carries out the nature protection activities (Article 9 paragraph 2). In 2010, the Assembly of the Republic of Kosovo adopted the Law No. 03/L-233 on Nature Protection.

Since 2006 the nature protection sector acted within KEPA, while in 2013, the Kosovo Institute for Nature Protection is established.

Currently, the duties and responsibilities for nature protection are carried out by the Kosovo Institute for Nature Protection, which operates under KEPA, with an insufficient staff of only four (4) officials.

## 2. LEGAL AND INSTITUTIONAL FRAMEWORK FOR NATURE PROTECTION

### 2.1. Legal framework

Nature Protection has its basis in the Constitution of the Republic of Kosovo, whereby Article 52 states the responsibility for the environment. During 2015-2017, the existing legal framework for nature protection was improved and supplemented with some sub-legal acts in compliance with the requirements for harmonization with the EU legal basis.

Within the obligations arising from the Law on Nature Protection No. 03/L-233 - 2010, during this period, eighteen (18) decisions were approved by the Government of Kosovo, also three (3) Administrative Instructions and four (4) Decisions of the Minister were approved, which have an impact on nature protection.

#### 2.1.2 Sub-legal acts adopted

- Administrative Instruction of MESP – No. 02/2015 for Permission of Scientific Research in Nature (03.03.2015);
- Administrative Instruction of MESP – No. 03/2016 on Determination of Tariffs for Issuance of Consents, Permits, Licenses, Certificates and Verifications Prescribed by Legislation on Nature Protection (11.08.2016);
- Administrative Instruction of MESP – No. 12/2017 for Proclamation of Strictly Protected Wild Species (22.08.2017);
- Decision of the Minister No. 54/2015 for Early Protection of a part of the Pashtriku Mountain and Vermica Lake, as potential area for being proclaimed Protected Nature Value in the Nature Park category (13.11.2015);
- Decision of the Minister No. 55/2015 for Early Protection of the Area of Nerodime River Bifurcation, as a potential area for being proclaimed Protected Nature Value in the category of Nature Monument of Special Importance (13.11.2015);
- Decision of the Minister No. 514/15 for Approval of the Red List of Vascular Flora of Kosovo (04.02.2015);
- Decision of the Minister No. 1212/15 on the approval of the "Sharri" National Park Management Plan (17.03.2015);
- Decision of GRK No. 01/74 for strict protection of the pure Heldreich's pine (*Pinus heldreichii*) forests at "Pisha e Madhe", part of the mountainous massif Koxha Ballkan, "Sharri" NP (10.02.2016);
- Decision of GRK No. 02/74 for strict protection of the pure Heldreich's pine (*Pinus heldreichii*) forests at the "Armen's Peak", "Sharri" NP (10.02.2016);



- Decision of GRK No. 03/74 for strict protection of the pure Heldreich's pine (*Pinus heldreichii*) forests in "Oshlak", "Sharri" NP (10.02.2016);
- Decision of GRK No. 04/74 for strict protection of the natural habitat of the Balkan Lynx (*Lynx lynx balcanicus*) in "Rusenica", "Sharri" NP (10.02.2016);
- Decision of GRK No. 05/74 for strict protection of the protected natural habitat of Forzicia (*Forsythia europaea*) "Gubavci" in "Bjeshkët e Nemuna" NP (10.02.2016);
- Decision of GRK No. 06/74 for strict protection of the Heldreich's maple (*Acer heildreichii*) and Balkan Pine (*Pinus peuce*), in the "Mountains of Prilep" in "Bjeshkët e Nemuna" NP (10.02.2016);
- Decision of GRK No. 07/74 for strict protection of the "Kozhnjer Mountain" - Rops Peak at "Bjeshkët e Nemuna" NP (10.02.2016);
- Decision of GRK No. 08/74 for strict protection of the mountain area "Bistra", "Sharri" NP (10.02.2016);
- Decision of GRK No. 09/74 for strict protection of the mountain area "Dupnica", "Sharri" NP (10.02.2016);
- Decision of GRK No. 10/74 for strict protection of the mountain area "Kobilica", "Sharri" NP (10.02.2016);
- Decision of GRK No. 11/74 for strict protection of the mountain area "Luboteni", "Sharri" NP (10.02.2016);
- Decision of GRK No. 12/74 for strict protection of the area of the spring and upper watercourse of "Lumbardhi", "Sharri" NP (10.02.2016);
- Decision of GRK No. 13/74 for strict protection of the mountainous area characterized by the colony of Fageto - Taxetum baccata - important autochthonous forest colony of the Tertiary relict yew (*Taxus baccata*) with beech (*Fagus mosaicae*) in "Gryka", "Sharri" NP (10.02.2016);
- Decision of GRK No.14/74 for strict protection of the endemorelic forests of the Heldreich's pine (*Pinus heildreichii*) and herbaceous vegetation rich in rare and endemic plants in "Koritnik", "Sharri" NP (10.02.2016);
- Decision of GRK No. 15/74 for strict protection of the area of high mountains in serpentine with the rare and specific forest ecosystems of Heldreich's pine (*Pinus heildreichii*), Balkan pine (*Pinus peuce*), European silver fir (*Abies alba*), Norway spruce (*Picea abies*), mugo pine (*Pinus mugo*) and beech (*Fagus moesiaca*) in "Pashallare", "Sharri" NP (10.02.2016);
- Decision of GRK No. 16/74 for protection of the natural habitat of the special species of Bulgarian fir (*Abies borisii - regis*) and Brown Bear (*Ursus arctos*) in "Bredhik", "Sharri" NP (16.02.2016);

- Decision of GRK No. 17/74 for strict protection of the area of high mountains in silicate, characterized by specific biological, geological, geomorphologic, hydrographic and landscape values in "Shutman", "Sharri" NP (16.02.2016);
- Decision of GRK No. 18/74 for strict protection of the mountainous area in serpentine and the habitat of the steno-endemic species of Dieck's Maple (*Bornmuelleria diecki*) in "Lëndina e Shenjtë", "Sharri" NP (16.02.2016);
- Decision of MESP No. 142/2016, dated 14.09.2016 and conclusion No. 152/2016, dated 29/09/2016 for establishment of the inter-institutional coordination group for establishment of the NATURA 2000 network. The Working Group has been clarified for the tasks and has adopted the terms of reference;
- Decision No. 20/2016 of MESP on compensation fees, permissible actions, damage prevention measure and additional criteria for determination of the compensation for the damage caused by strictly protected wildlife species in domestic animals (02.09.2016);
- Licensing of natural and legal persons for drafting a report on the assessment and compensation of damage caused by strictly protected wildlife species (10.11.2016);
- Decision of the Prishtina MA for re-categorization of the Natural Regional Park "Gërmia" in the category - Protected Landscape (18.01.2017);
- Decision No. 23/2017 on protected wild species for which removal from nature and sustainable use is permitted (25.04.2017).

### 2.1.3. Acts under procedure 2015 - 2017

- Action Plan for Biodiversity 2016 - 2020 (approved on 30.05.2018);
- Concept Document on Improving the Kosovo National Parks Management;
- Drafting of the Spatial Plan for NP "Bjeshkët e Nemuna";
- Drafting of the Management Plan for NP "Bjeshkët e Nemuna";
- The decision of the Municipality of Ferizaj to categorize the Nerodime River Bifurcation.

### 2.1.4 Assessment of the legality of municipal acts

Based on the request of the MLGA, the Division for Nature Protection has assessed the legality of municipal assembly decisions for 46 natural monuments and for one protected landscape.

### **2.1.5 Permits and licenses for nature protection that are issued by DMMU**

During the period 2015-2017, the Nature Protection Division has issued eight permits for the implementation of scientific researches in nature, based on requests made mainly by local and foreign university institutions and non-governmental organizations. Also in 2016 was issued a permit on the transfer-import of three bears from the Republic of Albania to the Republic of Kosovo, by the Foundation for Animal Protection “Vier Pforten Kosova“, Prishtina. This is a result of the implementation of Administrative Instruction No. 26/2012 on the cross-border movement and trade in wild protected species, although we are not a signatory party to the CITES Convention.

MESP during 2016 issued five licenses for natural and legal persons who, after attending adequate trainings organized by MESP, will prepare a report on the assessment and compensation of damage caused by the strictly protected wild species of animals.

So far in Kosovo, there are no wildlife crossings in the highways built, even though the legal infrastructure obliges them to consider its building in those areas where wildlife have their habitat.

### 3. INSTITUTIONAL FRAMEWORK

#### 3.1. Decision making bodies

- Assembly of the Republic of Kosovo
- Functional Committee of the Assembly on Agriculture, Forestry, Rural Development, Environment and Spatial Planning

Responsible Bodies for Management of Nature Protection are the following:

- Ministry of Environment and Spatial Planning – MESP  
Nature Protection Division  
Institute for Spatial Planning
- Kosovo Environmental Protection Agency - KEPA  
Kosovo Institute for Nature Protection – KINP  
Directorate of National Park “Sharri”  
Directorate of National Park “Bjeshkët e Nemuna”
- Ministry of Agriculture, Forestry and Rural Development –  
MAFRD
- Kosovo Forestry Agency  
Kosovo Forestry Institute
- Ministry of Culture Youth and Sport  
Museum of Kosovo
- Local Level – Municipalities;
- Scientific Institutions;
- Environmental Civil Society Organizations.

### 3.2. Implementation of the Strategy and Action Plan for Biodiversity 2011 - 2020

Strategy and Action Plan for Biodiversity is a fundamental document for protection of nature, which determines long-term objectives for conservation of biodiversity and landscape diversity, protected nature values, and also the manner of implementation in harmony with general economical, social, cultural development in Republic of Kosovo.

SAPB 2011-2020 has determined four strategic objectives as follows:

**SO1:** Development of legal and institutional framework in line with EU standards and its effective implementation.

**SO2:** Conservation, protection and improvement of state of plant and animal species, natural habitats and representative landscapes in natural balance.

**SO3:** Ensuring integrated protection of nature through cooperation with other sectors, sustainable use of biodiversity and equal sharing of benefits.

**SO4:** Promotion of effective education and communication for biodiversity.

These four strategic objectives are outlined in the Action Plan which identified a list of 11 (eleven) measures that are implemented through actual projects, in order to achieve these objectives.

**Measure 1.** Harmonization and strengthening of the legislation for nature protection with EU Directives and Regulations, and also signature of main Conventions - this measure is related to the harmonization of legislation (2 laws on National Parks, 2 Regulations, 20 Administrative Instructions and 35 Decisions are issued), and it is reached 80 to 100%, depending on the Directive. As far as the enforcement of legislation is concerned, we have encountered difficulties regarding the lack of enforcement and implementation capacities. So far, the signing of the Convention has not been reached, due to the current situation of Kosovo (membership in the United Nations).

**Measure 2.** Strengthening and institutionalizing of competent bodies for implementation of measures and actions for conservation of biodiversity – there have been actions undertaken, with the purpose of increasing the human capacity, via trainings, for implementing biodiversity conservation measures. ECRAN project - Environment and Climate Regional Accession Network funded by the European Commission has contributed in building the human capacities of Kosovo's institutions on biodiversity conservation issues.

**Measure 3.** Increasing surfaces with Nature protected areas to 10% of territory of Republic of Kosovo and their effective management - In terms of this measure, increasing of the protected areas territory reached 11,5 %, whereas effective management has not achieved a satisfactory degree.

**Measure 4.** Research and inventory of species and natural habitats - In 2017, a project was carried out which included the preliminary inventory of the types of plants, animals, types of natural habitats and their mapping in the Republic of Kosovo.

**Measure 5.** Ex – situ protection of plant and animal genetic resources - Plants Gene Bank is functionalized within the Faculty of Agriculture in the University of Prishtina "Hasan Prishtina", while the Animals Gene Bank is not established yet.

Building of the shelter “PYLLI I ARINJVE” in Badovc by the Foundation for Animal Protection VIER PFOTEN Internacional from Austria has positively affected in solving the issue of Brown Bears.

**Measure 6.** Preparatory works for the establishing of “Natura 2000” - the Study on Kosovo's readiness for the Natura 2000 establishment process is completed, together with the establishment of cross-sectoral Coordination Group for Natura 2000.

**Measure 7.** Promotion of economic values of biodiversity and conservation of biodiversity shall become part of other sectorial policies through implementation of Impact Assessment of intervention in Nature and Environment. Sectors that are influential in policy making are required to take into account issues that have an impact on biodiversity conservation and Environmental Impact Assessment measures are applied for all projects and interventions in high biodiversity areas such as National Parks etc.

**Measure 8.** Issue of Spatial and management plans for Nature protected areas - Spatial Plans for NP "Sharri", NMSI "Mirusha waterways" has been issued, while SP of NP "Bjeshkët e Nemuna" is in approval procedures, whereas only NP "Sharri" possess a Management Plan.

**Measure 9.** Increasing awareness and cooperation among all sectors on biodiversity- this measure is partly implemented through lectures in schools, organization of the Biodiversity Day and publication of leaflets on this topic.

**Measure 10.** Development and implementation of projects for increasing of awareness on the importance of nature, biodiversity, landscapes and their economic and financial values – small projects are carried out in this regard, supported by the Kosovo budget and donors such as the Ministry of Foreign Affairs of Norway and MAVA Foundation, Swedish SIDA, the German GIZ who supported the drafting of the Red Book of Vascular Flora of the Republic of Kosovo. Also, the Project for Sustainable Management of the Protected Landscape "Gërmia" was carried out, funded by the European Commission.

The project “Sustainable Land Use Management and Conservation of Biodiversity in Dragash Municipality” funded by the Government of Finland and implemented by UNDP.

The project by Japanese JICA & MASHAV has supported the MESP, namely the Municipality of Suhareke, in order to contribute to the human capacity building of local communities for the sustainable use of natural resources and the development of rural economies based on Japanese and Israeli experiences.

**Measure 11.** Strengthening of taxonomic sciences and implementing of programmes at the University for maps, managing and protection of biodiversity – there have been attempts to develop specific modules through the new curricula, in cooperation with PU "Hasan Prishtina" Department of Biology.



The Ministry of Environment and Spatial Planning, with the support of TAIEX, during 2016 has made a mid-term evaluation for reviewing the "Strategy and Action Plan for Biodiversity 2016-2020", therefore a Working Group was established in this regard. MESP led the process, while the staff of Nature Protection Division coordinated and communicated with members of the working group during the review and updating process of this strategic document, which is under the procedure for approval.

*Table 1. Harmonization with European Union Directives in the field of nature protection*

No.	Title of Directive	Ratification year	Purpose	Harmonization with national legislation (%)
1	Directive 2009/147/EC on the conservation of wild birds	First adopted by the Member States in 1979, is the European Union's oldest piece of nature legislation.	The directive provides a comprehensive framework for the protection, management and control of all wild birds naturally occurring in the EU. The directive instructs Member States to take measures to maintain populations of all bird species naturally occurring in the wild state in the EU (Article 2). Such measures may include the maintenance and/or reestablishment of habitats in order to sustain these bird populations (Article 3)	95%
2	Directive 1999/22/EC ZOOS- relating to the keeping of wild animals in zoos	29 March 1999	The objectives of this Directive are to protect wild fauna and to conserve biodiversity by providing for the adoption of measures by Member States for the licensing and inspection of zoos in the Community, thereby strengthening the role of zoos in the conservation of biodiversity.	80%
3	Directive 92/43/EEC On the conservation of natural habitats and of wild fauna and flora	21 May 1992	The aim of this Directive shall be to contribute towards ensuring biodiversity. Measures taken pursuant to this Directive shall be designed to maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest. Measures taken pursuant to this Directive shall take account of economic, social and cultural requirements and regional and local characteristics.	96%
4	EU Water Framework Directive (2000/60/EC).	23 October 2000	Maintenance of "high ecological status" of water where it exists, preventing any deterioration of the current state of waters and achieving at least "good status" in relation to all waters by 2015.	48.8%
5	Directive 2004/35/EC on environmental liability with regard to the prevention and remedying of environmental damage (Directive on Environmental Liability)	The Directive entered into force on April 2004. It treats only harmful actions which occur after the last term of transposition at the level of Member States 30 July 2010.	Environmental Liability Directive aims to make legally and financially responsible all damagers for damage to the environment (water, soil and nature).	76%

Source: DMMU/MESP

## 4. CLASSIFICATION OF PROTECTED AREAS

Classification of Protected Areas is based on the Law No. 03/L233 on Nature Protection and is partially in line with the International Union for Conservation of Nature (IUCN). Nature protected areas under this Law are classified into 7 categories:

### 4.1. STRICT NATURE RESERVES

Strict nature reserve is the area of land and/ or water unchanged or little changed and is dedicated exclusively to the preservation of untouched nature, scientific research of biological diversity, monitoring of the state of nature and education if they do not jeopardize the development of free natural processes. For research and educational visits within the strict reserve it should be issued the permission from the Ministry. Within the Strict Reserve it is prohibited the conducting of economic and other activities. For strict nature reserves, 1st degree of protection is applied which is declared by the Government.

*Of the general territory of protected areas, strict nature reserves take up 10885.82 ha. In Kosovo, so far we have 19 strict nature reserves.*

### 4.2. National Park

National park is a large area of land and/or water, with extraordinary and diversified natural values, including one or more of natural ecosystems conserved or least-changed and especially dedicated for conservation of nature authentic values. A national park is intended for scientific, cultural, educational and recreational purposes. In the national park shall be permitted operations and activities with which it's not risked the original nature. In the national park are prohibited economical uses of nature goods.

In the national park shall be permitted tourist – hospitality (hotel) and recreation activities which are in function of visits, education, health– touristic and recreation needs, extensive traditional agriculture, fishery, if they don't present any danger to the species existence and natural - balance in accordance with this Law and management plan.

*Kosovo has two National Parks promulgated by the Assembly of Kosovo: NP "Sharri" with an area of 53 469 ha and NP "Bjeshkët e Nemuna" with 62.488 ha. The national parks cover a total area of 115,957 ha.*

### 4.3. Special Protected Area – SPA and SAC

Special protected area is a wide area of the land and/or water, with special importance because it's unique, rare or representative or is a habitat of wild species and especially is important for scientific research.

Special area could be: floristic, mycological, forestal and of other vegetation, zoological, ornithological, ichtiological, geological, pale-ontological, hydro-geological, hydrological etc.

In the special protected area are prohibited interventions, works and activities, which could destroy characteristics because of which it is declared as special area: collecting and destroying plants, disturbance, capture and killing of animals, introducing of new biological species, melioration interventions, different forms of economic or and other uses.

In the special protected area shall be permitted interventions, works and activities, which sustain and improve conditions that are important for conservation of the features, because of which it's declared as a special area.

*Kosovo has only one Special Protected Area of Birds – Wetland of Henci - Radeve covering an area of 109 ha.*

### 4.4. Nature Park

Nature Park presents large natural or partly artificial area of the land and/or water, with ecological features of national and international importance with emphasized values of landscapes diversity, - educational, cultural - historical and tourist – recreational values.

In the nature park shall be permitted economic and other activities that do not risk the role and important characteristics of the nature park.

The method of execution of the economic activities and use of nature goods in the nature park shall be determined by nature protection conditions.

*Within this category, "Pashtrik Mountain and Vermica Lake" are put in preliminary protection, as a protected cross-border area between Kosovo and Albania, with a total area of 5934 ha.*

### 4.5. Nature Monument

A nature monument is the individual unchanged segment or a group of segments of living or non-living nature distinguished by ecological, scientific, aesthetic or cultural-historical and/ or tourist value. Nature monument may be: geological - pale-ontological, mineralogical, hydrologic, geologic structure, sediment, geomorphologic - cave, chasm, cliff walls, hydrologic – water

sources, water flow, waterfall, lake, botanic - rare exemplars or important for vegetative world of one locality, small botanic or zoological locality, important for its scientific values.

In the nature monument or in his immediate vicinity which is component part of protected area, shall not be permitted activities that endanger characteristics and its values.

*In Kosovo there are 156 Nature Monuments under protection with an area of 6059.78 ha. Out of them, 110 with botanic character, 20 hydrological, 10 geomorphologic and 16 speleological.*

#### **4.6. Protected Landscape**

Protected landscape is natural or factitious nature area with high landscape and biological diversity values, or cultural - historical, or landscape with unique conservation characteristics for certain region that is dedicated for relaxing and recreation. In the protected landscape are forbidden interventions and activities that destroy characteristics for which it is declared protected.

*Within this category are: Gërmia, Shkukza, Complex of Pines "Strazhë", Kaçanik, Pishat e Deçanit. The total area of the Protected Landscape category is 2059 ha.*

#### **4.7. Monuments of Park Architecture**

Park architecture monument is an artificially created space: botanic garden, arboretum, city park, tree lining and other forms of parks and gardens, respectively individual trees or group of trees with high aesthetic, cultural -historical, ecological or scientific values. In the park architecture monument and in its immediate vicinity, which is component part of protected area, shall not be permitted works and activities which could change or destroy values for which ones it is protected.

*Within this category of protection is still not classified any protected area in Kosovo. In the future, inventory of city parks in Kosovo shall be performed.*



## 5. CHRONOLOGY OF DECLARATION OF PROTECTED AREAS

In the chronology of declaration of the nature protected areas in Kosovo can be distinguished three very important periods of time which are linked with the general developments in Kosovo.

The period 1950 – 1970, represents the initial phase of nature protection and the declaration of nature protected areas in Kosovo. It starts with the declaration of the first area in 1950 that was “Gazimestan”. Until the beginning of 70s, the number of protected areas was gradually increasing reaching up to 19 areas. In this period were put under protection the following: Shpella e Gadimes and some other monuments of botanic importance such as: Rapi (Plane tree) in Marash, Trungjet in Isniq, etj.

The period 1970-1988 is characterized by the declaration of the greatest number of nature areas. The reason for this success is the establishment of the Kosovo Office for Protection of Nature in 1974, by the Assembly of Kosovo. During this period, 32 nature areas have been put under protection in total from which will be distinguished: the reserve “Bifurkation of Nerodime River”, First National Park “Mali Sharr”(1986), Spring of Drini i Bardhë with the Cave and Waterfall in Radavc (1983) and some other monuments of nature.

The period after 2000 is characterized with the reestablishment and re-functioning of Kosovo institutions, including also the institutions for nature and environmental conservation, respectively the Institute of Nature Protection. During this time period, 150 new nature areas have been taken under legal protection and over 50 others have been proposed. Among the protected areas should be mentioned the National Park “Bjeshkët e Nemuna”(2013), NP “Sharri” (extended), Wetland of Henci – Radeve etc., whereas most of them are natural monuments with botanic, hydrologic, geomorphologic character, etc.

*Fig. 1. Number of Nature Protected Areas 1950 - 2017*



Source: KINP



During the period 2015-2017, a total of 78 new protected nature areas have been added to the total number of protected areas, of which: 18 strict reserves<sup>1</sup> (The mountain of Kozhnjer /the Peak of Ropsit, the peak of Arnenit, Lumbardhi, Bistra, Shutmani, Gryka, etc.) 57 monuments of nature (Nerodime River Bifurcation<sup>2</sup>, Cave of Peshteri in Zatriq - Rahovec, Long Stone in Stagovo - Kaçanik, Devetaku Cave and Source in Devetak - Shtime, Oak Tree (*Quercus* sp.) In Llapashticë e Epërme - Podujevë /, *Quercus petraea* in Shitarica - Vushtrri, etc.), 1 nature park (Pashtrik Mountain and Vërmica Lake) and 2 protected landscapes (*Gërmia*<sup>3</sup> and Complex of pines in Strazhe - Kaçanik) etc.

## 6. . NATURE PROTECTED AREAS

Currently the number of nature protected areas in Kosovo (2017) is 184 and includes a territory of 126,119.29 ha, or 11.56% of the territory of Kosovo. These areas include: 19 Nature Strict Reserves (“Rezervati i Arnenit”, “Maja e Ropsit”, “Rusenica”, “Kamilja”, etc.), 2 National Parks (NP “Sharri”, NP “Bjeshkët e Nemuna”), 157 Nature Monuments (“Burimi i Drinit të Bardhë me Shpellën e Radavcit”, “Shpella e Gadimës”, “Ujvarat e Mirushës”, “Gryka e Rugovës”, “Kanioni i Drinit të Bardhë të Ura e Fshajtë”, “Trungu i Rrapit në Marash” etc.), 1 Nature Park (“Mali Pashtrik dhe Liqeni i Vërmicës”), 4 Protected Landscapes (“Shkugëza” and “Pishat e Deçanit” etc.) and 1 Special Protected Area of Birds (“Ligatina e Hencit-Radeves”).

Greatest territory of protected area is taken up by the National Parks: “Bjeshkët e Nemuna” and “Sharri”, Nature Park “Mali Pashtrik dhe Liqeni i Vërmicës”, Protected Landscape “Germia” and NMSI “Ujëvarat e Mirushës” etc.

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<sup>1</sup> During this period, redefining the borders and new decisions are issued on some of the strict reserves that have been announced even earlier since the 1950s of the last century.

<sup>2</sup> Monument of Nature "Nerodime River Bifurcation" until 2015 was protected as Special Nature Reserve

<sup>3</sup> Expanding the protected area



Table 2. Nature Protected Areas according to categories (2017)

IUCN Category	Name	No.	Surface/ha	Participation in %
I	Nature Strict Reserves	19	10,885.82	0.99
II	National Parks	2	115,957	10.6
III	Nature Monuments	157	6,084.79	0.56
V	Nature Park	1	5,934	0.54
V	Protected Landscape	4	2,412	0.22
V	Special Protected Areas of Birds	1	109.5	0.01
	Total	184	126119.29 <sup>4</sup>	11.56 %

Source: KINP

## 6.1. STRICT RESERVES

In Kosovo, currently the number of Strict Reserves is nineteen (19), out of which eighteen (18) are located within the territory of the National Parks. In the National Park “Sharr” there are fifteen (15) reserves, as follows: Lëndina e Shenjtë, Shutmani, Bredhiku, Pashallar, Gryka, Lumëbardhi, Luboteni, Koritniku, Kobilica, Dupnica, Bistra, Rusenica, Oshllaku, Maja e Arnenit and Pisha e Madhe. While in the National Park “Bjeshkët e Nemuna” there are three (3) reserves: Bjeshka e Kozhnjerit-Maja e Ropsit, Malet e Prilepit and Gubavci, while in Leposavic is the Kamilja reserve.

### Monitoring of Strict Reserves

Kosovo Institute for Nature Protection (KINP) is the institution responsible for the professional monitoring of protected areas and biodiversity. In the framework of the work plan during the period 2015-2017, the KINP carried out monitoring visits in order to assess the overall state of these Strict Reserves. Regarding the issue of administration, this is regulated through the Directorates for the Administration of National Parks that are responsible for the administration of the territory of the National Parks and Strict Reserves which are within them.

<sup>4</sup> Clarification: this area of protected areas does not include protected areas located within the National Parks “Sharri” and “Bjeshkët e Nemuna”.

### 6.1.1. Lëndina e Shenjtë

Lëndina e Shenjtë is located in the mountains of Mushtisht, at an altitude of 1150-1372 meters with a surface area of 17.98 hectares. In this area, apart from the steno-endemic type *Burnmullera dieckii*, there are rare and endemic species such as: Heldreich's pine (*Pinus heldreichii*), mugo pine (*Pinus mugo*), *Stachys scardica*, *Polygala doerfleri* etc. Medical types are: common hedgenettle (*Stachis officinalis*), European goldenrod (*Solidago virgaurea*), cowslip primrose (*Primula officinalis*), cross gentian (*Gentiana cruciata*), angular Solomon's seal (*Polygonatum officinale*), green-veined orchid (*Orchis morio*), spring gentian (*Gentiana verna*), etc. Regarding the fauna in this area, there are species such as: roe deer (*Capreolus capreolus*), wild pig (*Sus scrofa*), badger (*Meles meles*), beech marten (*Martes foina*), common buzzard (*Buteo buteo*), common cuckoo (*Cuculus canorus*), and green woodpecker (*Picus viridis*).



Image 1. *Pinus heldreichii*



Image 2. *Burnmullera dieckii*

### 6.1.2. Shutmani

Strict Reserve "Shutmani" is located on silicate and limestone rocks, at an altitude of 1,400 to 2,658 meters and covers an area of 5057 hectares. In these areas there are plant species such as: *Achillea abrotanoides*, *Achillea chrysocoma*, *Achillea atrata*, *Alkana scardica*, *Allium sibiricum*, *Alyssum scardicum*, *Armeria alpina*, *Barbarea balcana*, *Cardus scardicus*, *Campanula albanica*, *Cicerbita pancicii*, *Crocus scardicus*, *Dianthus scardicus*, *Dianthus superbus*, *Discorea balcanica*, *Draba scardica*, *Draba korabensis*, *Gentianella bulgaria* var. *albanica*, etc. The most important medical species are: *Gentiana lutea*, *Gentiana punctata*, etc.

The Shutmani area represents chamois (*Rupicapra rupicapra*) habitats. Good habitat conditions have contributed to the sustainable development of chamois.

From the bird species, there are the golden eagle (*Aquila crysaetos*) and sometimes the griffon vulture (*Gyps fulvus*) that adorn the sky of this area during the summer season. To identify other birds, more detailed area research is needed.



Image 3. Spring gentian (*Gentiana Verna L.*)



Image 4. *Geum montuam*

### 6.1.3. Bredhiku

Strict Reserve “Bredhiku” is located on silicate rocks, at an altitude of 1100 - 1450 meters and has a surface area of 123.16 hectares. In this area are identified the types of vegetation, such as: Bulgarian fir (*Abies borisi regis*) and silver fir (*Abies alba*).

Within this area there are also the following plant species: *Aruncus dioicus*, *Campanula foliosa*, *Chrysanthemum leucanthemum*, *Melampyrum bihariense* etc.



Image 5. Goat's beard (*Aruncus dioicus*)



Image 6. Creeping bellflower (*Campanula foliosa*)



This area is the habitat of roe deer (*Capreolus capreolus*) and brown bear (*Ursus arctos*), who has his winter nest in this area. Other types of species are: wolf (*Canis lupus*), vulpes (*Canis vulpes*), wild pig (*Sus scrofa*), beech marten (*Martes foina*), red squirrel (*Scirius vulgaris*) etc. Eurasian lynx (*Lynx lynx*) trails were also verified, where lynx uses this area for searching for food from its habitat in Koritnik is also verified where it is endangered by illegal hunters.

The most important bird species identified in this area are: peregrine falcon (*Falco peregrinus*), common buzzard (*Buteo buteo*), northern goshawk (*Accipiter gentilis*), rock partridge (*Alectoris graeca*), common cuckoo (*Cuculus canorus*), scops owl (*Otus scops*), green woodpecker (*Picus viridis*), *Dryobates leucotos*, etc.

#### 6.1.4. Pashallarët

Strict Reserve “Pashallarët” is located on serpentine rocks, at an altitude of 1280 – 2092 metres and has a surface area of 400 hectares. From the woody and shrub species found in this area, the following are distinguished: Heldreich’s pine (*Pinus heldreichii*), Macedonian pine (*Pinus peuce*), mugo pine (*Pinus mugo*), *Taxus bacata*, bilberry (*Vaccinium myrtillus*), *Juniperus nana*, *Rosa pendulina*, etc. Within this reserve, there are steno-endemic type plants such as *Burnmullera dieckii* and *Cerastium neoscardicum*, which are of international importance. Other endemic type plants are: *Adenostyles glabra*, *Anthylis vitelina*, *Lazerpitium sp.*, *Lilium albanicum*, *Campanula moesiaca*, *Campanula albanica*, *Campanula foliosa*, *Campanula glomerata*, *Knautia dinarica*, etc.

The fauna of this area consists of many species, while the most important ones are: *Lynx lynx*, *Ursus arctos*, *Canis lupus*, *Capreolus capreolus*, *Canis vulpes*, *Sus scrofa*, *Felis sylvestris*, *Martes martes*, *Meles meles*, *Apodemus silvaticus*, etc. Recently, the presence of chamois (*Rupicapra rupicapra*) that have migrated from their habitat in Oshlak is noted.

The most important types of birds in the area are: *Aquila chrysaetos*, *Falco biarmicus*, *Accipiter gentilis*, *Accipiter nisus*, *Bubo bubo*, *Strix aluco*, *Otus scops*, *Alectoris graeca*, *Tetrastes bonasia*, *Loxia curvirosta*, *Pyrrhocorax pyrrhocorax*, *Lullula arborea*, *Parus atricapillus*, etc.

In the past this area has been the habitat of heather cock (*Tetrao urogallus*), while during the research in the area, this rare and endangered species was not found (ascertained).



Image 7. Great yellow gentian (*Gentiana lutea*)



Image 8. Albanian Lily (*Lilium albanicum*)

### 6.1.5. Gryka

Strict Reserve “Gryka” is located on serpentine rocks, at an altitude of 1050 – 1531 metres and has a surface area of 103.98 hectares. Within the forest vegetation in this area there is *Fageto-Taxetum baccata*. While regarding plant species we can mention: endemic and relict type, Natalie's ramonda (*Ramonda nathaliae*), as well as Heartleaf oxeye (*Telekia speciosa*), bladder campion (*Silene vulgaris*), maidenhair spleenwort (*Asplenium trichomanes*) etj.



Image 9. Heartleaf oxeye (*Telekia speciosa*)



Image 10. Bladder campion (*Silene vulgaris*)

The area represents a habitat and migration area for many wildlife species: *Ursus arctos*, *Capreolus capreolus*, *Felis sylvestris*, *Canis vulpes*, *Sus scrofa*, *Meles meles*, *Martes foina*, *Testudo graeca*. The most important birds in the area are: *Buteo buteo*, *Falco biarmicus*, *Accipiter gentilis*, *Bubo bubo*, *Strix aluco*, *Lanius collurio*, *Lullula arborea*, *Dryobates minor*, *Picus viridis*, *Alectoris graeca*, *Cuculus canorus*, *Turdus merula*, etc.

### 6.1.6. Lumbardhi

Strict Reserve “Lumëbardhi” is located on silicate rocks, at an altitude of 1570 - 2609 metres and has a surface area of 304 hectares. Within this reserve, the following plant communities are included: *Fagetum subalpinum* and *Vaccinio-Juniperetum nanae*. Whereas from plant species, there are: *Dinathus scardicus*, *Crocus scardicus*, *Draba korabensis*, *Potentilla montonegrina*, *Selaginella selaginoides*, *Pedicularis oederi*, *Silene waldsteinii*, *Salix herbacea*, *Lilium albanicum*, *Ranunculus incomparabilis*, *Pinguicula balcanica*, *Allysum scardicum*, *Anemone narcissiflora*, *Draba doerfleri* etc.



Image 12. *Achillea multifida*



Image 11. *Dinathus scardicus*

The highest rocky parts of the area represent the habitat of chamois and golden eagle (*Aquila crysaetos*), while the forests and pastures in the lower parts of the area are used by the brown bear and roe deer.

### 6.1.7. Luboten

The strict reserve "Luboten" is located in limestone rocks, at an altitude of 1600 - 2514 meters and has a surface area of 202.16 ha. In this area is found the vegetation: *Carex laevis-Helianthemum*. Regarding the plant species, there can be found: *Achillea ageratifolia* var *aizooni*, *Centaurea kosanini*, *Euphorbia glabriflora*, *Draba scardica*, *Genista hassertiana*, *Thlaspi bellidifolium*, *Salvia scardica*, *Stachys scardica*, *Thymus albanus*, *Thymus lycae*, *Dianthus microlepis*, *Dianthus scardicus*, *Silene roemerii*, *Ranunculus millefoliatus*, *Silene sendtneri*, *Asperula dorfleri*, *Fumana bonapartei*, etc.



This area is the habitat of wild goats, and during the summer are noticed also predatory birds: The golden eagle (*Aquila chrysaetos*), the peregrine falcon (*Falco peregrinus*), the common buzzard (*Buteo buteo*), which use this area for food search.



Image 13. *Sempervivum hirtum*



Image 14. *Gentianella bulgarica*

#### 6.1.8. The Mountain of Kozhnjer and the Peak of Rops

The strict reserve "The Mountain of Kozhnjer and the Peak of Rops" is located on limestone and serpentine rocks, at an altitude of 1708 - 2501 meters and has a surface area of 1,110.57 ha. The most important plant communities of the area are: the community of *Picetum excelsae*, the community of *Piceo-Pinetum peucis* and the community of *Pinetum peucis*. The most important types of herbaceous communities, rich in endemic plants in this area are *Saxifraga stellaris*, *Valeriana tripteris*, *Malva moschata*, *Cirsium candelabrum*, *Tanacetum vulgare*, *Salix eleagnos*, *Lilium martagon*, *Centaurea ipecensis*, *Verbascum baldacii*, etc.



Image 15. *Lynx* at the strict reserve "The Mountain of Kozhnjer- the Peak of Rops (KINP-2017)

The highest rock parts of the mountains of Kozhnjeri represent a wild goat (chamois) (*Rupicapra rupicapra*) and lynx habitat, while forests represent a habitat of Brown bear (*Ursus arctos*), European Roe deer (*Capreolus capreolus*), Wild Boar (*Sus scrofa*) etc.

#### 6.1.9. Koritnik

The strict reserve "Kornik" is located on limestone rocks and has a surface area of 1,110.57 ha. In this area is found the plant community *Pinetum heldreichii*. While the most important types of herbaceous communities are: *Achillea chrysocoma* Friv., *Achillea holosericea*, *Alysum montanum*, *Armeria alpina*, *Anthylis vitelina*, *Asperula doerfleri* Wettst., *Bunium alpinum*, *Carex laevis*, *Campanula versicolor*, *Centaurea napulifera*, *Crocus veluchensis* Herb., *Euphrasia salisburgensis*, *Festuca panciciana*, *Daphne cneorum*, *Dianthus scardicus*, *Draba lasiocarpa*, *Draba corabensis* Kumm. et. Deg., etc.

Koritniku is the habitat of many species of fauna where the most important are: *Lynx lynx*, *Felis silvestris*, *Rupicapra rupicapra*, *Ursus arctos*, *Canis lupus*, *Capreolus capreolus*, *Meles meles*, *Canis vulpes*, *Sus scrofa*, *Glis glis*, *Mustela nivalis*, *Sciurus vulgaris*, *Sorex alpinus*, etc.



Image 16. The forestry community of *Pinetum heldreichii*

#### 6.1.10. Kobilica

The strict reserve “Kobilica” is located in limestone rocks, at an altitude of 1800 – 2527 meters and has a surface area of 199 ha. In this area is found the herbal stenoendemic type of international importance such as: *Hieracium kobilicanum*, while other important endemic species are:

*Silene schmucheri*, *Rumex nivalis*, *Dianthus superbus*, *Viola grisebachiana*, *Erigeron uniflorus*, *Saussurea alpina*; *Lilium albanicum* and *Salix herbacea*, etc.



Image 17. Habitat of rare species of calciphyte (calcicole) and chamaephyte plants

#### 6.1.11. Dupnica

The strict reserve “Dupnica” is located on silicate rocks, at an altitude of 1250 to 2585 meters and has a surface area of 494 ha. In this area are found plant communities such as: beech (*Fagetum subalpinum*) and *Juniperetum nanae*. Most important endemic plants are: *Silene schmucheri*, *Salix herbacea*, *Dianthus superbus* etc.



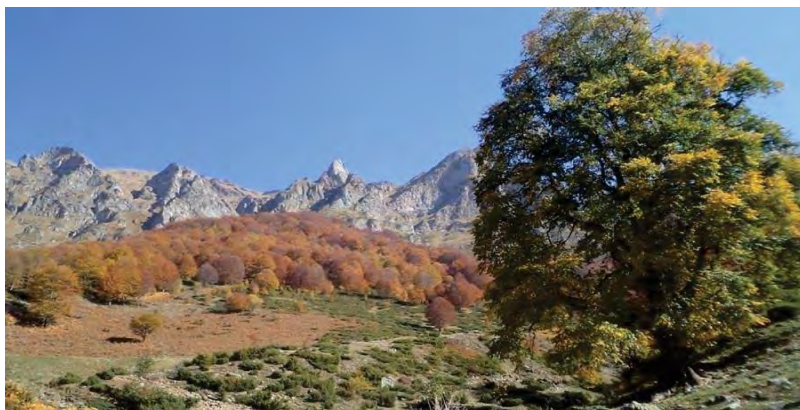


Image 18. A view of the strict reserve "Dupnica"

Dupnica represents the wild goat habitat. This area possesses favorable conditions for the development of fauna in NP "Sharri". In the lower parts of the area are found nests of the brown bear and wolf. During the summer season, this area is visited by predatory birds such as the: the eagle of the mountains (*Aquila crysaetos*), the common buzzard (*Buteo buteo*), the peregrine falcon (*Falco peregrinus*) etc.

#### 6.1.12. Bistra

Strict Reserve "Bistra" is located on silicate rocks, at an altitude of 1350 – 2651 metres and has a surface area of 642.12 ha. There are found plant communities such as: *Seslerio-Pinetum heldreichii*, *Ajugo-Pinetum peucis*, *Abieti-Pinetum peucis heldreichii*, *Fago-Pinetum silvestris*, *Abieto-Fageto-Pinetum peuceae*, *Vaccinio-Junipero-Pinetum peuceae* etc. are present in this area. There is also the sub-association (*Vaccinetum uliginosi*) at the highest altitude.



Image19. A view of the Strict reserve "Bistra"

From the endangered fauna types, we distinguish the following: *Felis silvestris*, *Rupicapra rupicapra*, *Ursus arctos*, *Canis lupus*, *Capreolus capreolus*, *Canis vulpes*, *Spermophilus citellus*, *Meles meles*, *Glis glis*, *Spalax monticola*, *Mustela erminea*, *Mustela nivalis*, *Arvicola terrestris* etc.

In the Bistra area, there are habitats of rare and endangered species of birds: *Tetrao urogalus*, *Aquila chrysaetos*, *Aquila heliaca*, *Buteo buteo*, *Falco peregrinus*, *Accipiter gentilis*, *Bubo bubo*, *Strix aluco*, *Loxia curvirosta*, *Tetrastes bonasia*, *Lullula arborea*, *Dryobates minor*, *Monitifringilla nivalis* etc.

#### 6.1.13. Prilepi Mountains

The Strict reserve "Prilepi Mountains" is located on the limestone rocks, with an altitude of 1815 m and with a surface area of 106.04 hectares. The following plant communities are present in this area: Heldreich's maple (*Acer heldreichii*), Balkan Pine (*Pinus peuce*), Scots pine (*Pinus silvestris*), Norway spruce (*Picea abies*), European silver fir (*Abies alba*), Sycamore maple (*Acer pseudoplatanus*), Norway maple (*Acer platanoides*), Beech (*Fagus moesiaca*), Silver birch (*Betula pendula*), Aspen (*Populus tremula*), Goat willow (*Salix caprea*) etc.

The most important types of fauna are the following: Brown Bear (*Ursus arctos*), Beech Marten (*Martes foina*), European badger (*Meles meles*) etc. The following can be distinguished from the species of ornitofauna: Rock partridge (*Alectoris graeca*), Stock dove (*Columba oenas*), Common raven (*Corvus corax*), Common Cuckoo (*Cuculus canorus*), White-backed Woodpecker (*Dryobates leucotos*), Woodlark (*Lullula arborea*) etc.

#### 6.1.14 Gubavci

The Strict Reserve “Gubavci” is located in the western part of Peja, creating a very impressive view near the Koprivniku. In 2016 the reserve area has been expanded from 38 hectares to 76.84 ha. The plant community present in this area is that of *Forsythia europaea*. Within the types of herbaceous plants, the following can be mentioned: *Centaurea kosaninii*, *Fumana bonapartei* etc. Another type mentioned in literature is the Stenoendemic *Rubus ipecensis*<sup>5</sup>.

#### 6.1.15 Rusenica

The “Rusenica” Strict Reserve is located on the limestone rocks, with an altitude of 780-1810 m, with a surface area of 270 hectares. The following plant communities can be found in this area: fir-beech forests (*Abieto-Fagetum*), Beech (*Fagetum montanum*), *Orno-Ostryio carpinetum*, *Bornmullero*- Bosnian pine, *Daphne oleoides* and Prickly juniper (*Daphno-Juniperetum oxicedri*), etc.

Within the types of herbaceous plants, the following species are distinguished: *Bornmullera dieckii*, *Potentilla argentea*, *Pilygala doerfleri*, *Ramonda serbica*, *Achillea holosericea*, *Hieraceum weldsteini*, *Galium rupestre*, *Scrophularia bosniaca*, *Minuartia verna*, *Achillea ageratifolia*, *Erysimum silvestre*, *Aetionema saxatile*, *Eryngium palmatum*, *Sylibum marianum*, *Camapnula secundiflora* etc.

The area of Rusenica is rich in wildlife. Apart from the lynx which is the most important type, other species found in this area include: *Rupicapra rupicapra*, *Ursus arctos*, *Capreolus capreolus*, *Sus scrofa*, *Felis sylvestris*, *Meles meles*, *Lepus europeus*, *Erinaceus europaeus*, *Vipera amodydes*, *Lacerta viridis*, etc. Rusenica is a habitat to multiple species of bats (*Chiroptera*), which should be further studied.

The most important species of birds in the area of Rusenica are: *Milvus milvus*, *Falco peregrinus*, *Accipiter gentilis*, *Bubo bubo*, *Lullula arborea*, *Dryobates leucotos*, *Cuculus canorus*, *Turdus merula*, *Parus atricapillus*, *Pyrrhocorax pyrrhocorax*, *Alectoris graeca*, etc.

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<sup>5</sup> Report – Zoning of the National Park "Bjeshkët e Nemuna", Prishtina, 2014





Image 20. Rusenica – *Lynx* habitat (*Lynx lynx*)

#### 6.1.16. Oshlak

The Strict Reserve “Oshlak” is located on the limscale rocks, at an altitude of 1150 - 2212 metres, with a surface area of 550.47 hectares. The following plant communities are present in this area: Bosnian pine (*Seslerio-Pinetum heldreichii*), *Pinetum mugho*, *Betulo-Pinetum mugho*, *Picetum excelsae*, *Carpinetum orientalis*, Beech (*Fagetum montanum*).

Within the types of herbaceous plants, the following can be distinguished: *Helianthemum canum*, *Dianthus scardicus*, *Dianthus integer*, *Dianthus superbus*, *Dianthus cruentus*, *Gencianella bulgarica*, *Thymus albanicus*, *Lilium albanicum*, *Alkanas scardica*, *Potentilla montenegrina*, etc.



Image 21. Oshlaku-Habitat of the Bosnian pine (*Pinus Heldreichii*) & (*Rupicapra rupicapra*)

Oshlaku is a habitat of multiple species of wildlife. The most frequent species is the chamois (*Rupicapra rupicapra*), which can be found in the highest peaks of Oshaku, dominated by mountain pastures and limestone rocks. Other species of wildlife include: *Ursus arctos*, *Canis lupus*, *Capreolus capreolus*, *Canis vulpes*, *Sus scrofa*, *Felis sylvestris*, *Martes foina*, *Glis glis*, *Spalax monticola*, *Talpa europea*, *Mustela nivalis*, *Sorex aranens*, *Vipera ammodydes*, *Lacerta viridis*, etc. Lynx (*Lynx lynx*) footprints have been noticed in Oshlak, which uses this area as a search for prey and migration from its habitats in Rusenica, Prevala and Ujërat e Humbur, however its concentration in this area cannot be excluded, since this area (the northern part of Oshlaku) is covered with dense wood and the human presence and impact is restricted.

#### 6.1.17. Maja e Arnenit (Arneni Peak)

The Strict Reserve “Maja e Arnenit” is located on the limestone rocks, at an altitude of 1100 – 1946 meters, with a surface area of 145.48 hectares. The following plant communities can be found in this area: Bosnian pine (*Seslerio-Pinetum heldreichii*), the dominating herbaceous flora is (*Sesleria autumnalis*), Bosnian pine (*Luzulo-Pinetum heldreichii*), the dominating herbaceous flora is *Luzula maxima*, Beech (*Fagetum montanum*), Bosnian pine and beech (*Fago-Pinetum heldreichii*), Beech and European silver fir (*Abieto-Fagetum*), Norway spruce (*Picetum excelsae*). Within the species of herbaceous plants, the following can be distinguished: *Verbascum nikolai*, *Verbascum scardicolum*, *Gentianella bulgarica* var. *Albanica*, *Dianthus cartusianarum*, *Dianthus integer*, *Lazerpitium siler* subsp. *garganicum*, *Campanula albanica*, *Thymus albanus*, *Stachys scardica*, *Viola grisebachii*, *Ephelobium anagallidifolium*, *Lilium albanicum*, *Onobrychis scardica*, *Scabioza dubia*, *Potentilla speciosa*, etc.

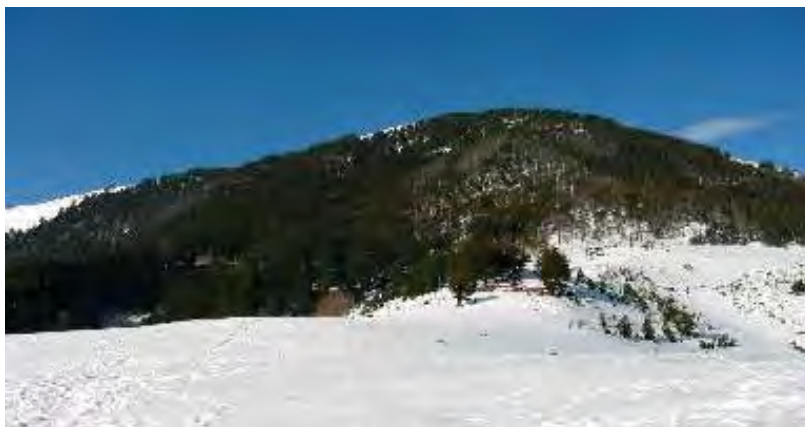


Image 22. Forest communities of Bosnian pine (*Pinus heldreichii*) & Beech (*Fagus montanum*)

The following species of animals can be found in this area: brown bear (*Ursus arctos*), roe deer (*Capreolus capreolus*), red fox (*Canis vulpes*), wild boar (*Sus scrofa*), wildcat (*Felis sylvestris*), pine marten (*Martes martes*), beech Marten (*Martes foina*), etc.

Among the birds, the following can be mentioned: golden eagle (*Aquila chrysaetos*), buzzard (*Buteo buteo*), lanner falcon (*Falco biarmicus*), hazel grouse (*Tetrastes bonasia*), rock partridge (*Alectoris graeca*), red-billed chough (*Pyrrhocorax pyrrhocorax*), wallcreeper (*Tichodroma muraria*), etc.

#### 6.1.18. Pisha e Madhe

The Strict Reserve “Pisha e madhe” is characterized by old forests, which represent the prettiest and the most interesting complex of Bosnian pine (*Pinus heldreichii*) in the Balkans. A part of this forest, 35 hectares, was declared a strict reserve in 1960, while with the 2016 Decision, it was expanded to 44 hectares.

The following plant communities can be found in this area: Bosnian pine (*Seslerio-Pinetum heldreichii*), Bosnian pine and Norway spruce (*Piceto-Pinetum heldreichii*), Beech, Norway Spruce and Bosnian pine (*Fageto-Piceto-Pinetum heldreichii*), Bosnian pine and silver birch (*Betulo-Pinetum heldreichii*), *Pinetum mughi*, Norway spruce (*Picetum excelsae subalpium*), European silver fir and Beech (*Abieto-Fagetum*), Beech, European silver fir and Norway spruce (*Abieto-Fagetum-Picetosum*), Bosnian pine (*Seslerio-Pinetum heldreichii*) etc.

The area is rich in numerous species of cosmopolitan flora, i.e. widely spread in the national park. Within the species of herbaceous plants, the stenoendemic plant species *Sedum flexiosum* can be distinguished, but the area is rich in various medicinal herbs, such as:

White asphodel (*Asphodelus albus*), stemless carline thistle (*Carlina acaulis*), cross gentian (*Gentiana cruciata*), European centaury (*Centaurium erytrea*), oregano (*Origanum vulgare*), tormentil (*Potentilla tormentilla*), etc.<sup>6</sup>

Pisha e Madhe represents a habitat to numerous of wildlife species, while the most important are: brown bear (*Ursus arctos*), roe deer (*Capreolus capreolus*), wildcat (*Felis sylvestris*), beech marten (*Martes foina*), lanner falcon (*Falco biarmicus*), buzzard (*Buteo buteo*) etc. The biggest problem in this area is illegal hunting.



Image 23. Pisha e Madhe - Buzzard (*Buteo buteo*)

#### 6.1.19. Kamilja

The Strict Reserve “Kamilja” was declared a reserve in 1988 and it has a surface area of 228 hectares. Kamilja limestone hill is characterized by special natural value of paleontological period. This area should be included within the monitoring plan in order to ascertain the state of natural values and biodiversity within it.

<sup>6</sup> Special natural value zones in the National Park “SHARRI”



### 6.1.20. The Current State of Nature Reserves

The general state of the reserves is not on a satisfactory level, because different activities, which are prohibited in legal terms, are taking place in those areas. The negative impacts come as a result of various activities being carried out within and near the reserve territory. Based on the situation on the ground, most of these impacts are caused by the actions of the human factor, such as: road construction, hydro-power plants (in the vicinity), huts, livestock grazing, illegal exploitation of medicinal herbs, arsoning in forests, illegal hunting, improper tourism, etc. While the impacts of natural factors are: rockslide, withering of trees within reserves due to parasites, climatic influences etc.

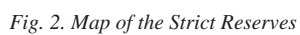
During the field visits, degradations of the reserves from the aforementioned activities have been observed, which have resulted in consequences within and around them. In certain cases, there has been damage to herbaceous vegetation as a result of road construction in the reserves, or the forest vegetation has been damaged and its branches have remained within the reserve. The presence of rivers in many strict reserves has become a problem since the most frequent intrusions are in the exploitation of these streams, such as in the Strict Reserve “Bredhiku”. In this area, an activity was carried out, causing negative impacts on the Restelica River and the natural reserve values. The biggest damages have been incurred in the forest vegetation, as some of the trees within the reserve have been cut off, causing a landslide as well as pollution to the river. Illegal construction of recreational and leisure facilities is a continuous occurrence and is having a negative impact on biodiversity and reserve values. These areas are also used as pastures and as such in many places they are covered with animal waste, which is a product of livestock farms that develop their activity within the reservoir. Illegal exploitation of medicinal and aromatic herb species is also very evident phenomenon in the reserves, greatly affecting the reduction of biodiversity (individuals) of these areas, for which it was also declared that they really need to be preserved. Then, the combustion of the forest vegetation in the reserves has affected the change of their natural appearance.

Therefore, these actions are adversely affecting the natural and biodiversity values pertaining to the Strict Reserves, based on which they are declared as protected areas of the first category. As a result of these intrusions, the state of the reserves has begun to change in some parts, accompanied by negative consequences on species, ecosystems, as well as the natural appearance of their landscapes.



*Image 24. Intrusions in the Strict Reserves*





#### 6.1.21. Recommendations

- *To continue the study of natural values and biodiversity in all Strict Reserves which, based on the decision, are defined as first level protection zone;*
- *To establish Working Groups for the Re-evaluation of Strict Reserves;*
- *To undertake measures for the prevention of the illegal exploitation of the medicinal herb yellow gentian (*Gentiana lutea* L.), in the Strict Reserves and all other areas where it grows;*  
*To stop the sheep grazing activity within the Strict Reserves;*
- *The MESP Inspectorate in cooperation with the Director of National Parks should increase the number of inspections for intrusions in the Strict Reserves;*
- *To carry out scientific research on flora, fauna and habitats in the territory of all the Strict Reserves;*  
*To review the possibility of precise border definition of all the Strict Reserves;*
- *To place information tables in all the Strict Reserves.*

## 6.2. NATIONAL PARK “SHARRI”

### 6.2.1. The state of natural resources in the National Park “Sharri”

The condition of forests in NP “Sharri” is conditioned by the negative impacts of biotic (human, insects, diseases) and abiotic factors (fire, natural disasters: wind, snow, avalanches, etc.).

### 6.2.2. Forest Ecosystem

The forests represent the most complex, the most important, but also the most endangered ecosystems in the NP “Sharri”. The most vulnerable situation is in Bosnian pine (*Pinetum heldreichii*) forests in the area of Koritniku and Pisha e Madhe due to the fires (2000, 2007, 2012 and 2015) and the development of insect pests (sub-barks). Around 1000 ha of forests in the mountain Koritnik and around 100 ha of the forests with Bosnian pine in the area of Pisha e Madhe have been destroyed due to the massive fires and the intensive development of the insect pests (sub-barks). The withered wood mass has begun to rot, while many of the withered trees have been knocked down by the winds.

Beech forests (*Fagetum montanum*, *Fagetum subalpinum*) are endangered from natural disasters (wind, snow etc.) and illegal logging. Damages from the natural disasters, in particular, have been frequent in 2015, where in the regions of Prevala and Brezovica about 1000 m<sup>3</sup> of beech have been damaged (broken and fallen) from icy rain and powerful mountain winds, which in 2016 and 2017, have been involved in the sanitary cleaning. Forest damages due to the illegal logging have been more frequent in the Brod and Firaja regions of the municipality of Shtërpeca as well as in the region of Jasika e Lubotenit in the Municipality of Kaçanik. The main factors that have had an influence in the frequent illegal logging are the following:

- The difficult socio-economic conditions of the rural population in the border area of the NP “Sharri”;
- Lack of institutional management of the territory of the NP "Sharri", respectively failure to expand the MESP managing authority to the municipalities of Shtërpeca, Kaçanik and Dragash (in these municipalities DANP "Sharri" does not have any nature guards and relevant officers for protection and managing of natural resources employed).
- Procrastination and failure to carry out indictments in the relevant courts (this affects the stimulation of forest thieves and the large financial losses of the state budget as a result of non-performance of compensation for damages caused to the NP “Sharri”).

Other pure and mixed coniferous and leafy forests in NP "Sharri" have good health and developmental stability. Forest damages from natural disasters and other factors (illnesses and pests) appear sporadically and do not have a particular ecological and economic impact on these forests.

Natural renewal is scarce in beech and Bosnian pine forests, while it is more frequent in European silver fir and Macedonian pine forests. This has affected the expansion of the surfaces of these forests, in particular, those of Macedonian pine, in the areas of Pashallara, Procka e Durrës and Ujërat e Humbur.



*Image 25. Forest damage due to fires in the Bosnian pine forests in Koritnik*

### **6.2.3. Herbaceous Ecosystems**

The state of herbaceous vegetation, which are particularly widespread in the municipality of Dragash, is relatively good. A part of herbaceous vegetation in the high mountainous areas is being used as pastures by the seasonal farmers (May-September). The highest concentration of livestock during the summer is in the Restelica and Brod regions (municipality of Dragash) because there can be found the largest and the most qualitative areas of pastures in the NP "Sharri" and Kosova.

Most of the endemic plants are found in the herbaceous ecosystems of the high mountains of the NP "Sharri". Based on the research carried out, a database for endemic plants with about 335 species and about 500 species of medicinal herbs was established. These data indicate the extraordinary biodiversity of the NP "Sharri", which is among the six main biodiversity centres in Europe.



Over the last few years there has been an increase in the interest of the local population and related businesses in collecting medicinal herbs and small fruits in the entire territory of NP “Sharri”. Yellow gentian (*Gentiana lutea*), a rare medicinal herb which is on the verge of extinction, is not exempt from collection either. The legal and planning base for the management of medicinal herbs at NP “Sharri” is being completed, while major contribution in this regard has been made by the German organization GIZ, which has funded a special project for sustainable use of medicinal herbs at state level.



Image 26. Pastures high in the mountains in the NP. “Sharri”, Restelica

#### 6.2.4. First Protection Zone – Strict natural areas

According to the Spatial plan of the NP “Sharri” (2014), in this Park there are 15 first protection zones, with a surface area of 9374.18 ha or 17.60% from the total territory of the NP “Sharri”. These zones are mainly located in the highest parts of the NP, where the most important natural values are concentrated. In 2016, the Government of the Republic of Kosovo, with a Decision, proclaimed these strict natural areas. The condition of these areas in general is good, while the fires and the intrusions of the human factor represent the greatest risk. The most difficult situation is in Koritnik, where the Bosnian pine forests during the last five years have incurred significant damages from fires. The strict natural areas with forest ecosystems are endangered from insect pests (sub-barks) and diseases (phytopathogens). In the first areas where herbaceous vegetation prevails, it is reported illegal use of pasture. In order to avoid this illegal phenomenon, it is necessary to mark the first areas of protection on the ground with visible signs and organization of awareness workshops with livestock farmers. Most of the strict nature areas are used by visitors, in particular by the mountaineers, for hiking. In the future mountain activities in NP “Sharri” should be under full supervision.



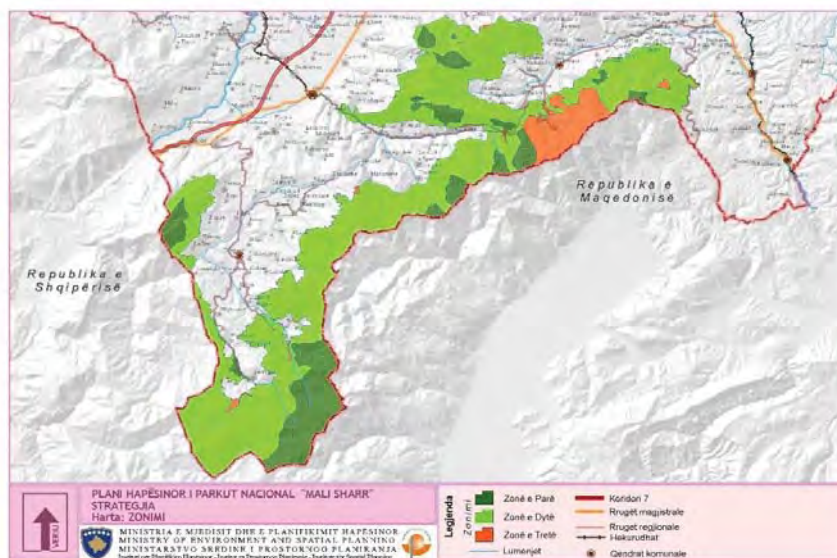


Fig 3. Zoning map of the National Park "Sharri" (source: Spatial Plan of the N P "Sharri", 2014)

### 6.2.5. Water Resources

The state of water resources is relatively good. Many of the water resources in the past have been exploited by local villages (communities) to meet the drinking water needs. There was no water pollution, but in some tourist areas, especially in the wide area of Prevala, wastes of different types have been spotted along the rivers, streams and water springs. This issue can be regulated with the institutional waste management on the territory of the National Park and citizen awareness raising for environmental care. NP "Sharri" rivers represent the habitat of the stream trout, the number of which is decreasing each year. Therefore, the repopulation with this important type of fish should be planned in the future. Illegal fishing appears from time to time, particularly in the Manastirica and Brod rivers.

In the autumn of 2017, a negative and very dangerous phenomenon to aquatic ecosystems at the NP "Sharri" has appeared. Namely, the attempt to destroy the rivers (Durla stream, Kallugjer and Blateshtica river), which are the most important in the Brezovica area for the purpose of building hydropower plants.

The problem is even more pronounced when considering the fact that environmental consents were issued for these devastating actions to the natural resource values of the NP "Sharri".



Image 27. Special zone "Prrocka e Durlës"

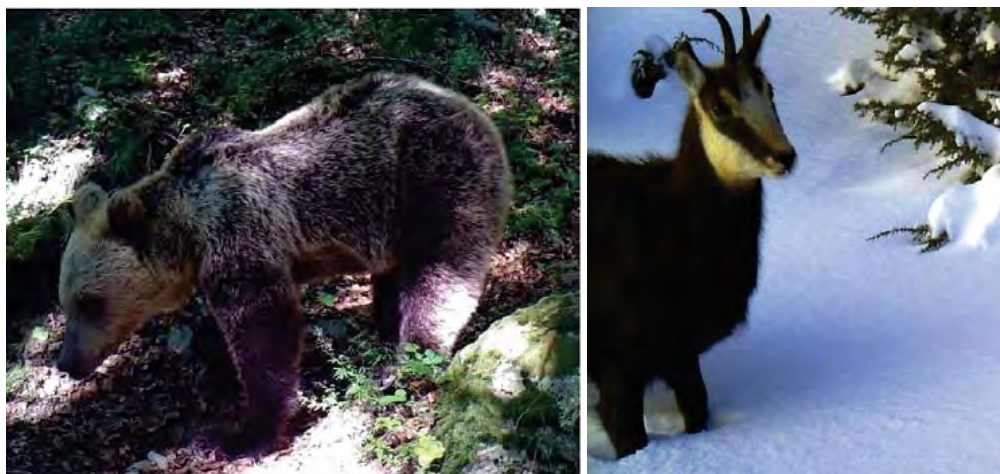


Image 28. Intrusions in Prrocka e Durlës (hydropower plant)

#### 6.2.6. Fauna

The state of fauna is relatively good, but the constant danger to certain types of animals (roe deer and chamois) is illegal hunting, which occurs occasionally (especially during the weekends) in some areas of the NP "Sharri", such as Shutmani, Oshlaku, Bistra, Koxha Ballkani, Rusenica and Lake Jazhinca. With on-going engagement on the ground, most attempts for illegal hunting are prevented. The animals hunted by illegal hunting are taken to the restaurants in the area of Zhupa and beyond, therefore in order to stop the sale of the prohibited meat, the relevant municipal and central inspectorate should be more seriously involved.

Based on the research conducted, especially upon installation of camera traps (monitoring), in the mountainous areas such as of Oshlak, Rusenicë, Pashallar, Vrtop and Brezovicë, it was proven the presence of a variety of fauna, in particular of mammals (brown bear, fox, roe, chamois, wild boar, white marten, pine marten, rabbit, squirrel, badger, hazelnut dormouse etc.) and birds (golden eagle, buzzard, lanner falcon, grey falcon, great owl, forest owlet, hazel grouse, quail, rock partridge, etc.). Based on the traces found on the ground, it was also verified the presence of Balkan lynx (*Lynx Lynx balcanicus*) in the area of Rusenica, Vrtop and Oshlak. These areas have even in the past been the habitat of this rare and endangered animal. The brown bear and wolf are best developing in the entire territory of the NP "Sharri", while at risk are, in particular, the chamois and roes because they are an attractive target for illegal hunting.



*Image 29. Brown Bear and Chamois in NP “Sharri”*

#### **6.2.7. Sanitary measures for the forest protection, conservation and maintenance**

For the purpose of avoiding the spread of infections and improvement of the state of forests, limited wood cutting and sanitary cleaning of forests damaged by fires, natural disasters (wind and snow), harmful insects and plant diseases have been undertaken. Sanitary cleaning applies on the basis of legislation (regulations for services and internal order, etc.) and respective management plans.

Damaged and infected wood mass involved in annual sanitary cleaning (around 4.000 m<sup>3</sup>)<sup>7</sup> represents the minimum of quantity that is prioritized to be cleaned from public and private forests in order to protect and maintain forest ecosystems. This wood mass achieved by way of sanitary cleaning is a small percentage (7%) compared to the annual wood mass of 63,000 m<sup>3</sup> and the production capacity of the forests of the NP “Sharri”.<sup>8</sup>

Wood mass from sanitary cleaning is dedicated to meeting the needs of the local community for fire wood. This has contributed to alleviating the high demand for fire wood in the rural areas of NP “Sharri”, preventing illegal wood cutting and establishing friendly relations of DANP “Sharri” with the local community representing the interest group of special importance to NP “Sharri”. The benefits of sanitary cleaning are comprehensive in the ecological, social and economic aspect.

With the application of sanitary measures, the following objectives have been achieved:

<sup>7</sup> DANP “Sharri” work report for 2017

<sup>8</sup> Management Plan of NP “Sharri” (2015)



- Avoiding the development of entomological and phytopathological pests,
- Improving the health status of forests,
- Creation of optimal conditions for renewal and development of forests,
- Improvement of polyvalent (economic, ecological and social) functions of forests,
- Provision of the local population with burning wood (firewood) within the planning capacities,
- Prevention of illegal woodcutting,
- Ensuring funds for the MESP budget

### 6.2.8. Tourist zones and constructions at NP “Sharri”

In the NP “Sharri”, there are 9 tourist areas in a surface of 3769.81 ha (7.1%) which belong to the third protection zone based on the Spatial Plan of the NP “Sharri”<sup>9</sup>: Guri i Dellocit - 22 ha (Municipality Suharekë); Gradaci - 9 ha (Municipality Suharekë); Prevalla - 31 ha (Municipality Prizren); Ujërat e Gropuar (house of mountaineers over Skorobisht) - 3 ha (Municipality Prizren); Guri i Zi (Zaplluxhe) - 35 ha (Municipality Prizren/ Dragash); Restelica - 109 ha (Municipality Dragash); Brodi - 44 ha (Municipality Dragash); Brezovica - 3426 ha (Municipality Shtërpcë); Nënahishte - 91 ha (Municipality Kaçanik).

For these areas, it is planned the drafting of detailed Regulatory Plans which should regulate tourist constructions and development of commercial activities in accordance with the protection of the natural values of NP “Sharri”. The most popular tourist areas are Prevalla and Brezovica where tourism is taking place in a chaotic way, without proper management by MESP. The biggest problem in the tourist areas is the maintenance of cleanliness, i.e. waste management that is widespread in natural areas, as well as the low awareness of visitors who throw trash in natural areas without any control.

Among the biggest issues in tourist areas (third natural areas) are the illegal constructions that have been constantly emerging since the end of the war in 1999. The particular problem is the non-definition of competences for issuing consents and building permits, which has affected the various local and central institutions to issue this documentation by entirely bypassing the NP “Sharri” managing authority. In Prevalla, environmental and construction documentation is issued by the Department of Housing and Construction of MESP while in Brezovica, it is issued by the Municipality of Shtërpcë without environmental criteria and consultations with DANP “Sharri”. *The issuance of construction permits should be suspended until the drafting of the Regulatory Plans for the third areas foreseen by the Spatial Plan and Management Plan of the NP “Sharri”.*

<sup>9</sup> Decision of Kosovo Assembly No. 04-V-772, February 2014.



*Image 30. Ski resort "Brezovica" (Source: Indeksonline.net)*

### 6.2.9. Challenges and problems in NP "Sharri"

NP "Sharri" is facing many challenges and problems, such as:

- Incomplete organizational structure (lack of human resources in municipalities: Dragash, Shtërpcë and Kaçanik, relevant professional sectors, local offices in municipalities);
- Insufficient budget and investment for sustainable management of NP "Sharri";
- Lack of external and internal border marking (first, second and third protection area) of the NP;
- Illegal constructions and attempts to develop tourism in contradiction with the principles natural values protection;
- Attempts to build hydro plants in the rivers of NP "Sharri" by endangering massive destruction of the very natural source values that have lead to this territory being declared as National Park;
- Illegal woodcutting in Luboten mountains (areas of villages Doganaj, Dubravë, Vataj, Lamaj, Sllatin, Brod, Firajë);



- Failure to define the ownership of most of the parcels that are socially owned by former agricultural cooperatives and forestry economies. It is necessary that these socially owned properties be transferred to publicly owned property of NP “Sharri”;
- Prolongation and non-execution of the lawsuits for illegal acts in the respective Courts;
- Insecurity of DANP “Sharri” facilities in Prizren and Brezovica in the absence of the gatekeepers;
- Permanent risk for natural resources as a result of natural disasters (wind and snow), plant diseases and pests;

Despite many challenges and problems faced by DANP “Sharri”, most of the natural values of the Park are protected and preserved.

#### 6.2.10. Recommendations

In order to ensure the proper protection of natural resources and sustainable management of NP “Sharri”, it is necessary to undertake numerous measures, such as:

- *Take additional measures from all institutions responsible for forest protection from illegal wood cutting, fires, pests and diseases;*
- *To increase the activities of the institutions responsible for monitoring the situation and protecting the flora and fauna (endemic and medicinal plants) and ecosystems in the park territory and in the strict reserves that lie in the park;*
- *To increase the activities of responsible institutions for the monitoring of tourist sites, monitoring of private property as well as monitoring and inspection of the use of natural resources;*
- *To increase activities and actions related to public awareness and information on the protection of the park and promotion of the natural values of the NP Sharri, as well as, build the information centres at NP Sharri;*
- *To increase the cooperation with the local and international institutions and coordinate joint activities;*
- *To continue participation in national, cross-border and regional projects for sustainable management of the ‘Sharri’ National Park;*
- *To continue building the professional capacities of NP “Sharri” staff and increase the number of professional staff in the park, etc.;*
- *To stop all activities that have a destructive impact on the natural heritage values in the territory of NP “Sharri”;*

- *All activities carried out within the territory of NP “Sharri” shall be in accordance with the Law on Nature Protection and the NP “Sharri”, the Regulation on the Internal Order of National Parks, the Spatial Plan and the management plan of NP “Sharri”;*
- *To stop the construction of hydro plants in NP “Sharri”;*
- *All activities and works carried out within the territory of NP “Sharri” shall be continuously monitored by the MESP inspectorate and NPD “Sharri”;*
- *The issuance of construction permits should be suspended until the drafting of the Regulatory Plans for the third areas as foreseen by the Spatial and Management Plan of the NP “Sharri”.*
- *Functionalization of entry points in tourist areas Brezovica and Prevala;*
- *Drafting of the Administrative Instruction on the rules, procedures, competencies and conditions of constructions in national parks;*
- *Drafting Detailed Regulatory Plans for the third areas in the territory of NP “Sharri” which should regulate the tourist constructions and development of economic activities in accordance with the protection of the natural values of NP “Sharri”;*
- *Define competences for granting construction consents and permits, etc.*

### 6.3. NATIONAL PARK “BJESHKËT E NEMUNA”

“Bjeshkët e Nemuna” in regard to geological, geomorphologic, fauna and floristic composition represents the most important and interesting massif not only of Kosovo but the whole Balkan Peninsula.

Bjeshkët e Nemuna constitutes the western suburb of Kosovo, which descends almost vertically and ends in the east and northeast at the end of Dukagjini valley and the valley of Iber and in the west is surrounded by mountains (border) with Albania and Montenegro.

Bjeshkët e Nemuna are among the most characteristic mountain massifs in the Balkans in terms of flora and vegetation diversity. In this regard, Bjeshket e Nemuna represent the most flourishing massive mountain in the Balkans, with the presence of over 1,000 species investigated so far, although this number is not definitive because more researches are needed. In addition, in this number are not included the researches on musk, lichens and mushrooms.



Image 31. NP “Bjeshkët e Nemuna” landscape

According to the current data, in the Bjeshket e Nemuna are present 33 endemic species and six sub-endemic and quite a few relict species which absolutely should be taken under strict protection considering their economic and science values.

In terms of endemic species should be noted that in Bjeshket e Nemuna only in alpine and subalpine area are present 128 Balkan endemic species. Among endemic species of Kosovo in Bjeshket e Nemuna are also the *Sempervivum kosaninii* (Burgull of Koshanini), *Cephalaria pastricensis* (Cefalaria of Pashtrik), *Astragalus fialae* (Arrithja of Fial),

*Aconitum pentheri* (Akonitum of Rusolia), *Rubus ipecensis* (Blackberry of Peja), *Saxifraga scardica* (Iriqëza of Sharr), *Wulfenia bleicii* (Vulfenia of Bleçiq); *Centaurea nervosa*, *Thlaspi cuneifolium*, *Thymus rohlena* etc.

From relic types widespread in Bjeshket e Nemuna, characteristic are: *Carpinus orientalis* (Black hornbeam) spread within the forests of oak and beech. In Rugova canyon are found in the northern exposition, while in Mali i Thate, Bjeshket e Sinajit, and Lebeniq in southern exposition. Near the Lloqani Bistrica together with it is presented the *Carpinus Betulus* (White hornbeam) which is also tertiary relic. Beside native endemic in Bjeshket e Nemuna are present many Balkan endemic species among which the *Crepis albanica* (Albanian Shmanga), *Draba korabensis* (Draba of Korab), *Cerastium dinaricum* (Dinaric Cerast), *Sempervivum macedonicum* (Macedonian Burgul), *Euphorbia montenegrina* (Montenegro milkweed) etc.

The massif of Bjeshket e Nemuna is characterized by a very rich, heterogeneous, endemic and interesting fauna. Based on research made so far, the fauna of the “Bjeshket e Nemuna” consists of: 8 fish species, 13 species terraqueous, 10 reptile species, 178 bird species, 37 mammal's species, 129 species of butterflies from the Lepidoptera type.

The most representative species of the fauna of Kosovo living within the territory of Bjeshket e Nemuna are: Balkan lynx (*Lynx lynx balcanicus*), Brown Bear (*Ursus arctos*), European Roe (*Capreolus capreolus*), Wild Goat (*Rupicapra rupicapra*), Imperial Eagle (*Aquila heliaca*), Mountain Eagle (*Aquila chrysaetos*), Lesser Kestrel (*Falco naummani*), Capercaillie (*Tetrao urogallus*) etc, which have national and international protection status.

The Kosovo Institute for Nature Protection is continuously monitoring the fauna in the National Park “Bjeshket e Nemuna”. More comprehensive results in regard to Kosovo fauna, including the “Bjeshket e Nemuna” massif, are expected upon the completion of the project “Kosovo Red Book of Fauna”, which is in progress and is expected to be completed by the end of 2018.

### 6.3.1. State of the National Park “Bjeshket e Nemuna”

Amongst the major problems identified during this period in the territory of the National Park “Bjeshket e Nemuna” are the following: logging, illegal constructions, opening of roads, quarry activity within the park, fires, etc.

- Illegal loggings are on-going almost in all municipalities where the territory of the NP “Bjeshket e Nemuna” lies, in particular in the municipality of Decani and Peja. Uncontrolled logging of forests have irreparable consequences, that besides losing the wood mass, also directly reflects on the disorder of ecosystems, disturbing of animal world, damaging the landscape, emerging of erosion etc.



Table 3: Logging of forests at the National Park "Bjeshket e Nemuna" 2015-2017<sup>10</sup>

	2015	2016	2017
<b>Requests</b>	417	311	505
<b>Logging from private forests</b>	1968 m <sup>3</sup>	2260 m <sup>3</sup>	3387 m <sup>3</sup>
<b>Logging from public forests</b>	2972 m <sup>3</sup>	3307 m <sup>3</sup>	3092 m <sup>3</sup>
<b>Technical wood</b>	7983 m <sup>3</sup>	1344 m <sup>3</sup>	6959 m <sup>3</sup>
<b>Damages</b>			
<b>Files</b>	114	108	113
<b>Justified by files</b>	529 m <sup>3</sup>	1051 m <sup>3</sup>	788 m <sup>3</sup>
<b>Justified by confiscated</b>	399 m <sup>3</sup>	236 m <sup>3</sup>	200 m <sup>3</sup>
<b>Unjustified</b>	338 m <sup>3</sup>	858 m <sup>3</sup>	No evidence

Source: Directorate of NP "Bjeshket e Nemuna"



Image 32. Logging of forests at the NP "Bjeshkët e Nemuna"

- Illegal constructions are widespread in all areas of the park, but they are much more expressed in the potential tourist areas such as Rugova Gorge, Boga, Leqinat, Gropa e Erenikut, Lugu i Bute,

<sup>10</sup> The data are taken from the 2018 Report of the Directorate of the National Park "Bjeshkët e Nemuna" on fires, constructions and illegal and legal logging of forests, prepared for the needs of Nature Report.



Source of Drini i Bardhe, etc. To date, over 3000 illegal constructions have been identified within the park, influencing the degradation of landscape and habitats of flora and fauna<sup>11</sup>.



*Image 33. Illegal constructions at the National Park “Bjeshket e Nemuna”*

- Within the territory of the park operate two quarries, which represent degradation of natural values. The first quarry is located 500 m inside the park and the second one 150 m. Likewise, two other quarries operate in the buffer zone of 100 meters from the park border. The quarrying activity in the park is in contradiction with the Law on Nature Protection (Nr. 03/L-233), the Law on National Park “Bjeshkët e Nemuna” (Nr. 04/L-086) and the Regulation No. 21/2013 on Internal Order of the National Parks National. The presence of quarries in the park has affected the disturbance and damage of flora and fauna.

<sup>11</sup> Report from recording the factual situation, photographing, recording the constructed facilities and verification of construction permits in the territory of the National Park "Bjeshkët e Nemuna" (2014), KEPA, Prot. No. 45/83-2014, Prishtina.



*Image 34. Quarrying activity within the territory of the NP “Bjeshkët e Nemuna”*

- Fragmentations of habitats by road infrastructure are frequent occurrences during this period. In addition to road axes within settlements, the most influential axes are: Maja e Zezë - Peklenë - Shtupeq i Vogël - Varri i Sykyt, Junik - Livadh i gjatë - Gropat e Erenikut, Lugu i Butë - Stanet e Mehajve dhe Haxhijave, the road to Lloqani Gorge, the road Rugova Gorge - Milishevc, etc. Construction and expansion of roads is a concern in NP “Bjeshkët e Nemuna”. A large number of open roads start with bill of quantities, without detailed plans and projects, without environmental consent and without proper environmental impact studies. Fragmentation of different habitats, resulting in obstacles in roads and other infrastructure, may hinder the migration of many animal species, cause changes in the species structure and a persistent decline in biodiversity.
- The opening and expansion of road axes have been accompanied by other negative phenomena such as erosion (sliding). Cutting the side sections of roads and cutting the base of mountains caused the sliding of rocky masses, which has caused considerable damage.



Image 35. Landslide from the opening of roads in NP "Bjeshkët e Nemuna"

- The construction of hydropower plants within protected areas, in general, and National Parks, in particular, is accompanied by direct impacts on the overall nature values, aquatic and terrestrial flora and fauna, landscape, specific habitats and especially on the fauna, where the most endangered are aquatic species such as fish, other aquatic vertebrates, etc.

Water flow is a determining element of the physical environment in the rivers, which is the main determinant of the biotic composition: influencing the alternation of habitats of aquatic plants and those nearby the river bed, habitats of invertebrates, habitats of fish and other aquatic vertebrates etc.

Deviation of water from the natural flow for the needs of hydropower plants affects the change of air humidity and microclimate, which will therefore result in a chain reaction for many animal species such as fish, water insects, molluscs, butterflies, frogs, tritons, waterfowl, but also for plants found in river beds. This directly affects some important habitats for flora, fauna, natural landscape and other related phenomena, such as erosion, or massive slopes of rocky parts of mountains along the river valley.

Alteration and deviation of water in pipes and tunnels from hydropower plants will reduce air humidity and will raise temperatures in ponds. Therefore the coniferous forests are at the risk of disappearing (*Picea abies*) since they are sensitive to the lack of air humidity. The negative impact in these types of cases is direct, regardless that it is located slightly above the water exploitation site. Likewise, air humidity reduced by water deviation will also affect the mountain pine (*Pinus mugo*) vegetation, etc.

An example of the destruction of these natural values is the functioning of the Hydropower Plant in the National Park "Bjeshkët e Nemuna", where a part of the Deçan Gorge, namely the riverbed, has been degraded and it can be said that all the fauna related to the flow of Lumbardh of



Deçan has been destroyed. Along the valley, which has river streams suitable for construction of hydropower plants, are many rare and endangered plant and animal species, such as: *Pinus peuce*, *Pinus heldreichii*, *Abies alba*, *Picea excelsa*, *Cerastium alpinum*, *Saxifraga stellaris*, *Saxifraga aizoides*, *Nartecium scardicum*, *Cirsium candelabrum*, *Tanacetum vulgare*, *Angelica pancicii*, *Achillea grandifolia*, *Salix eleagnos* etc. Amongst the animal species present in these areas are found in the Annexes of EU Birds and Habitats Directives. It is worth mentioning: Eurasian otter (*Lutra lutra*), chamois (*Rupicapra rupicapra*), brown bear (*Ursus arctos*), European roe deer (*Capreolus capreolus*), wildcat (*Felis sylvestris*), European badger (*Meles meles*), Balkan lynx (*Lynx lynx balcanicus*), western capercaillie (*Tetrao uragullus*), rock partridge (*Alectoris graeca*), golden eagle (*Aquila chrysaetos*), white-throated dipper (*Cinclus cinclus*), brown trout (*Salmo trutta* m. Fario), salmo marmoratus (*Salmo marmoratus*) etc. It is worth noting that the Eurasian lynx (*Lynx lynx*), was observed again after many years in the territory of the National Park “Bjeshkët e Nemuna”.

From the construction of hydropower plants in the Deçan Gorge, significant interventions have been observed along the road axis and the river bed where the company is continuing with the implementation of the project.

Interventions with damages to natural values have been caused by:

- extension of the road axis, where the cutting of the side sections of the road in many places has resulted in slipping of masses that have caused considerable (unnecessary) damage;
- opening the canal for placing pipes, interventions were carried out on the river banks and bed;
- exploitation, without any criteria, of gravel Zalli i Rupës, where significant areas were degraded;
- as a consequence of the use of water from the hydropower plant, there has been a reduction in the amount of water in Deçan river and the river biodiversity has been destroyed.



Image 36. Construction of the hydropower plant in Deçan Gorge, NP “Bjeshkët e Nemuna”

During the monitoring of the area, it was noticed a bad situation on the road axis along the Lumëbardh of Deçan Gorge as a result of erosion on a significant part of the road. Interventions along this road axis have caused some obstacles to free circulation in this part of the road.

The poor condition of Lumbardh River is also due to the low water flow. This condition is a result of the activity of hydropower plants along the Lumbardh river flow. The activity of this hydropower plant has also caused degradation in the river bed and banks.

Hydropower plants within the National Parks are also in contradiction to the International Directives and Conventions such as: The Berne Convention, the Convention on Biological Diversity, the Natural Habitats Directive, the Water Framework Directive (2000/60/EC), the Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC), the Directive on the conservation of wild birds (2009/147/EC) etc.

*(European Parliament resolution, 15 February 2017, Report No. 2016/2312 - INI, strongly criticizes the Government of Albania and urges the immediate halt of the construction of Hydropower Plants in the Vjosa River and the announcement of the Vjosa River as a National Park).* Since Kosovo will soon be a signatory of international directives and conventions, these conventions should be respected. Kosovo institutions should engage in the approximation of the legislation on nature protection with the European Union Directives, therefore all the intellectual potential should focus on completing and approving a list of species and habitats of biodiversity in Kosovo that are of interest to the EU.



### 6.3.2. Drafting the Spatial Plan for the National Park “Bjeshkët e Nemuna”

The Institute for Spatial Planning (KEPA) has compiled a draft document on the Spatial Plan of the National Park “Bjeshkët e Nemuna”. During this process, a series of meetings with participants of various fields, professions and structures were organized. Significant cooperation has been made in meetings with the Inter-Ministerial Working Group as well as with members of important sectors of the Government of Kosovo.

A special part of this work was the meetings with the authorities of the participating municipalities and the community living within the Park. Everyone's contribution has been very valuable. A lot of information has been gathered and important suggestions and remarks have been made, with the help of which we have managed to complete this very important document for our National Park.

Currently, the Spatial Plan for NP “Bjeshkët e Nemuna”, with all accompanying documents, including the Strategic Environmental Assessment, is in the process of approval by the Government of Kosovo. Its approval will enable the solution of many ambiguities that currently are being faced by the Directorate of NP “Bjeshkët e Nemuna”, municipalities and investors. Approval of this document will affect the economic and tourist development of this area and will stop illegal construction in the park.

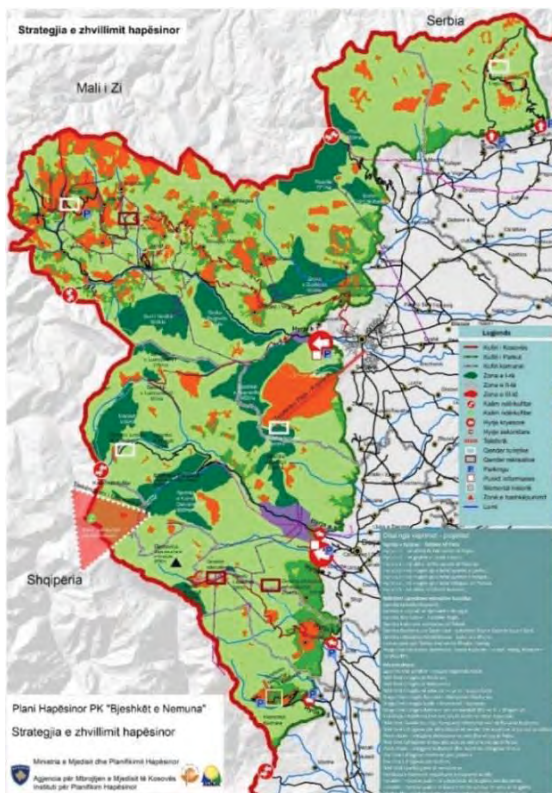


Fig 4. Zoning map of NP “Bjeshkët e Nemuna”

### 6.3.3. Challenges and problems in the management of NP “Bjeshkët e Nemuna”

- Lack of Spatial Plan and Management Plan;
- Lack of professional staff;
- Permanent risk to natural resources from the negative impacts of biotic (humans, pests and phytopathogens) and abiotic (fires, natural disasters: wind, snow etc.) factors;
- Non-marked NP's external and internal border (first, second and third zone);
- Transformation of socially-owned properties of former socially-owned agricultural (cooperatives) and forestry (forestry economies) enterprises owned by NP “Bjeshkët e Nemuna”;
- Attempts to develop tourism contrary to the principles of protection of natural values;
- Illegal and improper construction in NP “Bjeshkët e Nemuna” etc.

Despite the many challenges and problems faced by DANP “Bjeshkët e Nemuna”, the considerable part of the park's natural values are protected and preserved.

### 6.3.4. Recommendations

In order to ensure the proper protection of natural resources and sustainable management of the NP “Bjeshkët e Nemuna”, different measures need to be taken, such as:

- *Adopt the Spatial Plan for the National Park “Bjeshkët e Nemuna”*
- *Develop the Management Plan for the NP “Bjeshkët e Nemuna”;*
- *All institutions responsible for forest protection shall take additional measures for protection of forests from illegal logging, fires, pests and diseases;*
- *Increase the activities of the institutions responsible for monitoring the condition and protecting the flora and fauna (endemic and medicinal plants) and ecosystems in the park territory and in the strict reserves located in the park;*
- *Increase the activities of the institutions responsible for monitoring tourist sites, monitoring privately-owned properties and monitoring and inspecting the use of natural resources;*
- *Increase the activities and actions related to public information and awareness on park protection and promotion of natural values of the NP “Bjeshkët e Nemuna”, as well as establish information centres in the NP “Bjeshkët e Nemuna”;*
- *Increase cooperation with local and international institutions and coordinate joint activities;*

- *Continue participation in national, cross-border and regional projects for sustainable management of the National Park “Bjeshkët e Nemuna”;*
- *Continue to build professional capacities of the staff of NP “Bjeshkët e Nemuna” and increase the number of professional staff in the park etc.;*
- *Stop all activities that have a devastating impact on the values of natural heritage in the territory of NP “Bjeshkët e Nemuna”;*
- *All activities that are carried out within the territory of the NP “Bjeshkët e Nemuna” shall be in harmony with the Law on Nature Protection and the Law on NP “Bjeshkët e Nemuna”, Regulation on Internal Order of the National Parks*
- *Stop the construction of hydropower plants in the NP “Bjeshkët e Nemuna”;*
- *All activities and works carried out within the territory of NP “Bjeshkët e Nemuna” shall be monitored continuously by the MESP Inspectorate and NPD “Bjeshkët e Nemuna”;*
- *Draft the Administrative Instruction on the rules, procedures, competencies and conditions of construction in national parks;*
- *Draft detailed Regulatory Plans for the third areas in the territory of the NP “Bjeshkët e Nemuna”, which should regulate the tourist constructions and development of economic activities in accordance with the protection of the natural values of the NP “Bjeshkët e Nemuna”;*
- *Define the competencies for granting consents and building permits;*
- *Stop quarries and sawmill operations in the National Park “Bjeshkët e Nemuna”.*

## 6.4. SPECIAL AREAS – SPA and SAC

### 6.4.1. The Wetland of Henc - Radeve, *special protected bird area*

The Wetland of Henc - Radeve is located near the International Airport “Adem Jashari” in between the villages, Henc, Vrellë and Radevë with a total area of 109 ha 52 are 35 m<sup>2</sup>. The Wetland of Henc - Radeve, considering that is the only ecosystem of such specie in Kosovo, although artificially formed, is characterized by special natural values such as: ornithological, hydrogeological, botanical, landscape, etc. Due to these values, the Decision for its promulgation as a Special Protected Area of Birds was issued in 2014.



*Image 37. The Wetland of Henc - Radeve*

In terms of flora, according to the findings made by KINP, this area is characterized by a large presence of plant species. The Wetland of Henc - Radeves is a very rich area particularly in terms of zoo-diversity, where so far it has been found that there live a large number of species of wild fauna with about 80 species of wild birds, a number that is thought to be much larger considering that so far no systematic research has been carried out at the desired level.

The natural habitats of the Wetland of Henc - Radeves with the surrounding area offer shelter to many species of birds, many of which are rare species with unfavourable conservation status here and in Europe.



Since 2014, in the area are prohibited all economic activities such as: fishing, hunting, etc. The whole area of the Wetland of Henc - Radeves is a publicly-owned property and is managed by the Privatization Agency of Kosovo (PAK).



Image 38. Great reed warbler  
(*Acrocephalus arundinaceus*)



Image 39. Eurasian bittern  
(*Ixobrychus minutus*)

#### 6.4.2. Status

Since the area does not have a managing body, consequences are becoming ever more pronounced. The most prominent problem remains the drying of basins and other surrounding areas due to the stoppage of water flow in them, which is expressed by the lack of fish that are the main food for the species of birds present in the area and thus their number compared to previous years has drastically decreased.

Another concerning issue is the phenomenon of common reed burning around the basins, which serve as a shelter for many species of aquatic birds and also as a place where most of such species build their nests.

Illegal and uncontrolled hunting by irresponsible persons of the species of birds present has a negative impact, which, although it has a decreasing trend, if it continues, it will certainly jeopardize the presence of a large number of species, particularly the migratory ones.

It is worth noting that the International Airport “Adem Jashari” is located at the border of this area. According to airport officials, the large number of birds and the nearness of the wetland to the airport pose a concern for airport safety, therefore it should be worked together in the future in order to increase the overall safety at the airport.

### 6.4.3. Recommendations

- *The authorities of the International Airport "Adem Jashari" should monitor the number of birds and take all necessary measures to create safe conditions in and around the airport area;*
- *Establish an administration and management body for this area;*
- *Draft the Wetland Management Plan;*
- *Draft a project to study the possibilities of functionalizing this area;*
- *Continue the research for the inventory of species and habitats;*
- *Property managed by Privatization Agency of Kosovo (PAK) should be transferred to MESP responsibility.*

## 6.5. NATURE PARK

### 6.5.1. Pashtriku Mountain and Vermica Lake

The Pashtriku Mountain, in addition to those of Sharri and Bjeshkët e Nemuna, is an important centre of biodiversity, not only in Kosovo but also in the region. Based on the research so far, it is concluded that this area is very rich in terms of flora and fauna and has diverse geomorphological forms, where a large number of caves and abysses are found which have not yet been explored.



Image 40. *Centaurea*



Image 41. *Centaurea atropurpurea*

The Vermica Lake is created in the downstream of the White Drin at the river exit in the territory of Albania and is characterized by specific biological, bio-geographical, geological, and hydrological and landscape values.

In this area, the river has created a pyrogenic gulf which represents an important monument of geomorphologic character. Also as a trans-boundary area it represents a very important potential for tourism development in this part.



*Imagine 42. Pashtrik Mountain and White Drin Canyon*

On 13.11.2015, the Minister of the Ministry of Environment and Spatial Planning issued the Decision No. 54/2015 for putting under protection a part of Pashtrik Mountain and Vermica Lake as a potential area to be declared as a Protected Nature Value under the Nature Park category.

By Decision No. 789/AMMK/2016 of 13.01.2016, a Working Group was established for the preparation of the Professional Reasoning for Pashtrik Mountain and Vërmica Lake to be placed under the category Nature Park/Protected Cross-border Area, Kosovo-Albania.

#### **6.5.2. Recommendations**

- *Make a decision for permanent protection;*
- *Continuation of further floristic and fauna research;*
- *Protection of endangered plant and animal species;*
- *Prohibition of the construction of illegal facilities;*
- *Prevention of uncontrolled collection of plant species, especially the medical ones*
- *Measures for the complete cleansing of the Pashtriku Mountain from mines;*
- *Promotion of natural, cultural, tourist values and traditional products of the cross-border area;*
- *Take measures to prevent waste disposal in the White Drin canyon;*
- *Clean up the waste in the area;*
- *Implement cross-border projects between Kosovo and Albania.*

## 6.6. NATURE MONUMENTS

Within Protected Areas, Nature monuments according to number occupy first place with 157 of them, and third place regarding the area with 6059.79 hectares. Out of these, 2 monuments are of special importance (Mirusha Waterfall and Gadime Cave), 111 of botanical character, 20 hydrological, 9 geomorphologic, 15 speleological. Nature Monuments in which there have been impacts over the last three years are: Gadime Cave, Mirusha Waterfalls, Nerodime River Bifurcation, Rugova Canyon, Drini I Bardh Spring with the Cave in Radavc, etc.

### 6.6.1. The Nature Monument of Special Importance "Gadime Cave"

The Nature Monument of Special Importance "Gadime Cave" is located in the village of Gadime e Ulet of Lipjan. It is located on the hill of "Merturi", whereas the entrance is located in the lower part of the Klysurja outfall (stream), at an altitude of 580 meters.

Following its discovery, the cave was taken under legal protection in 1969, with a total area of 38.6 ha. Due to its high values, crystals, interesting cave phenomena and the convenient position, the cave gets prepared and opened for visitors in 1976.

On 13.03.2009, the Government of the Republic of Kosovo issued the Decision No. 04/57, according to which, the "Gadime Cave" in Gadime te Ulet of the municipality of Lipjan is put under protection as a Nature Monument of Special Importance, with a surface area of 39 hectares.

The Gadime Cave represents a unique karst phenomenon not only in Kosovo but also beyond. It is developed on a palaeozoic, marbled limestone lattice with small spatial dimensions embedded in the permo-triassic ridge. The fact that the canals, galleries and gaps of this cave were created in Paleozoic marble makes this cave rare, in a global scale as well.

The presence of aragonites makes this cave special. The crystals of these ornaments in the cave appear in the gallery of Aragonites which are characterized by different forms and directions, which make the cave particularly interesting and attractive.

In the hydrological aspect, the Gadime cave is rich in groundwater. In the same horizon are all types of cave waters: condensed, dripping, flowing and steady waters, turning Gadime cave into a special object in the hydrological aspect.





Image 43. NMSI "Gadime Cave"

## State

The Ministry of Environment and Spatial Planning has not yet managed to establish the Directorate for the management and administration of the nature monument of special importance "Gadime Cave" including the supervisor, cicerone, security, etc., so management and administration is carried out by the staff with a temporary contract until the establishment of the Directorate. As of May 2014, when KEPA opened the cave for visitors, until the end of 2017, according to the records of the administration, the cave was visited by more than 100 thousand visitors from the country and the region.

Table 4. Number of visitors at the Nature Monument of Special Importance "Gadime Cave" 2014-2017

Year	Number of visitors		
	Total number of visitors	charged with entrance fees	Number of visitors exempt from payment
2014	17.844	14.847	2997
2015	31.355	28.240	3115
2016	28.000	25.630	2370
2017	28.800	27.434	1366
Total	105999	96151	9848

Source: NMSI "Shpella e Gadimes"

Despite investments made in the 2015-2017 period, the Nature Monument of Significant Importance "Gadime Cave" faces problems such as:

- Unprofessional cave management, with temporary contract staff;
- Concerns about safety in the cave represent different slides that come from cave chimneys, especially in humid periods when there is clay movement;
- The risk of collapsing and falling rocks in the corridors frequented by visitors;
- Though there have been interventions and improvements, lighting remains a problem in the cave;
- From field monitoring and notice from cave staff, it was concluded that the main electricity network cable was not changed and it poses a risk to visitors in some cases;
- It is also worth noting that cave lighting is not professionally installed, as a large number of lights are directed towards the visitor track;
- Lighting in the cave does not turn off automatically after the visitors leave the gallery, but the cave is illuminated during the entire time when the visitors are present in the cave, which is also a problem for the cave;
- The appearance of musks and mushrooms due to microclimatic changes, conditioned by the hermetic entrance-exit closure as well as the long-term and inadequate lighting;
- Inscriptions and graffiti in the cave corridors undermine the image and originality of the cave, etc.

***Recommendations:***

- *Establishment of the body for management and administration of NMSI "Gadime Cave";*
- *Take urgent measures for the safety of visitors from sliding of clay and other materials with the laying of protective nets;*
- *Take urgent measures to improve the electrical network in the cave in order to increase visitors' safety;*
- *Prepare a management plan for the Nature Monument of Special Importance "Gadime Cave";*
- *All activities carried out within the protected area - Nature Monument of Significant Importance "Gadime Cave" should be in accordance with the Law on Nature Protection (No. 03/L-233) and the Regulation (MESp, No. 23/2014);*
- *The Inspectorate of MESp should take measures against illegal construction and the object that has been owned by the cave should be returned to the managing body;*

- Explore corridors and other galleries in Gadime cave;
- Permanent monitoring of geo-climatic parameters;
- Promote Gadime cave as a geo-touristic site in Kosovo and the region;
- Provide financial resources for the Nature Monument of Special Importance "Gadime Cave".

### 6.6.2. Nature Monument of Special Importance "Mirusha Waterfalls"

The nature monument "Mirusha Waterfalls" is one of the most beautiful and interesting areas of Kosovo's nature, which lies in the central part of Kosovo, in the territory of the municipalities of Klina, Malisheva and Rahovec.

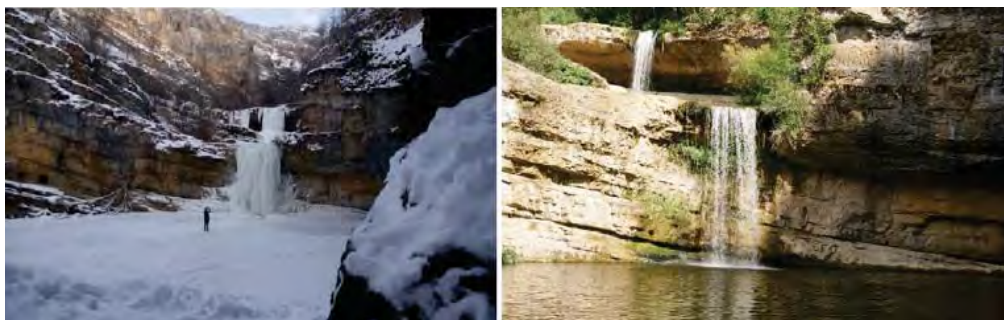
Mirusha Waterfall was declared Nature Regional Park in 1982/83 from the Municipality of Klina and Rahovec, currently inherited by the Municipality of Malisheva with a surface of 555.80.70 ha. While the Government of the Republic of Kosovo in 2012 issued the decision for promulgation of Mirusha Waterfalls as Nature Monument of Special Importance with a total surface of 598.4 ha. The downstream of Mirusha Rivers passes through a gorge which is known as Canyon of Mirusha River. In this part of the canyon are located 16 exciting lakes with waterfalls which create a morpho-hydrologic phenomenon that make up the most attractive part of the canyon.

In addition to the waterfalls and lakes, the caves of different forms and sizes make up another characteristic form in the composition of the relief (the Cave of Dush, the Cave of Great and Small Church, the Cave at the tenth lake).

The location of the Mirusha Waterfalls is quite rich in plant species, where we can spot 330 species of vascular plants and 44 species of higher fungi (macromycetes).

The species of endemic plants that have been found in this area are as follows: Petrik of Greuter (*Aristolochia merxmuelieri*), Degen (*Aster albanicus*), Rouy (*Centaurea albertii*), Hayek (*Centaurea kosaninii*), European forsythia (*Forsythia europaea*), Fumana bonapartei, Buchegger (*Genista hassertiana*), Dorfler (*Halacsya sendtneri*), Knautia (*Knautia macedonica*), *Linum elegans*, *Polygala doerfleri*, *Potentilla visianii*, *Sanguisorba albanica*, *Stipa mayeri*, *Moltkia doerfleri*. *Aristolochia merxmuelieri* and *Stipa mayeri* are steno-endemic species.

Regarding fauna, this area is very rich in specific species of animals, which are related to specific biotopes and belong to endemic species. These types of animals have been observed in the park: Wolf (*Canis lupus*), Wild boar (*Sus scrofa*), European badger (*Meles meles*), Wildcat (*Felis silvestris*), European pine marten (*Martes martes*), Muskrat (*Ondatra zibethicus*), Yellow-necked mouse (*Apodemus flavicollis*), Nose-horned viper (*Vipera ammodytes*), etc.



*Image 44. Mirusha River Waterfalls*

### *State*

Although the Assembly of Kosovo has approved the Spatial Plan for the protected area "Mirusha Waterfalls" (2014), the purpose of which was to affect the prevention of unplanned developments that harm the area, the negative phenomena continue even during 2015-2017. MESP has not yet established the managing body for the Nature Monument of Special Importance "Mirusha Waterfalls", as foreseen by the Law on Nature Protection.

The following problems have been found during this period at NMSI "Mirusha Waterfalls":

- Lack of legislation for regulating the permanent management of the area;
- Lack of management body;
- Lack of sustainable financial source for the oversight body and investments;
- Illegal constructions in the protected area;
- Lack of information signs.





Image 45. Illegal Constructions in NMSI "Mirusha Waterfalls"

### **Recommendations**

- *Establish the managing body for NMSI "Mirusha Waterfalls";*
- *Align all activities conducted within the protected area NMSI "Mirusha Waterfalls" with the Law on Nature Protection and Spatial Plan for the Monument of Nature of Special Importance "Mirusha Waterfalls";*
- *Demolish all illegal constructions in this area;*
- *Construct tourist information centre in NMSI "Mirusha Waterfalls";*
- *Place information boards.*

### **6.6.3. Nerodime River Bifurcation**

Nerodime river bifurcation represents Europe's only instance of a river flowing into two seas. The river springs in the Jezerc Mountains; near the city of Ferizaj, it splits irreversibly into two branches, which flow into two different seas. Left branch flows into Sitnica River and continues its route to Iber River, Morava and through Danube flows into the Black Sea, while the right branch through Lepenc River and through Vardar River flows into the Aegean Sea.

This natural curiosity is quite attractive for many researchers (geographer, geologist, hydrologist, biologist, historians, etc.) and it has a great educational, scientific, recreative and touristic importance.

Based on high scientific, educational, touristic, etc., values, the Nerodime River Bifurcation has been declared as protected area – Special Nature Reserve in 1979 by the Municipal Assembly of Ferizaj, with a surface area of 12. 78, 71 ha<sup>16</sup>.

In view of alignment with the applicable legislation, in 2015, the Minister of the Ministry of Environment and Spatial Planning issued the Decision No. 55/2015, dated 13.11.2015, for putting under precautionary protection of the area of Nerodime River Bifurcation, as a potential area to be declared as Protected Value of Nature in the category of the Nature Monument of Special Importance (prot. no. 5743/15), with a surface area of 15 hectares.

Municipal Assembly of Ferizaj repealed the decision on protection of 1979 (Decision No. 633/1), whereas in 2016, KINP drafted the professional reasoning for protection of the area of the Nerodime River Bifurcation, which has not been adopted by the Municipal Assembly of Ferizaj yet.



*Image 46. Nerodime River Bifurcation*

## State

Based on the continuous field monitoring, KINP concludes as follows:

- There are numerous interventions in the Nerodime River Bifurcation, both in periphery and the phenomenon of bifurcation;
- Intervention and investments in Nerodime River Bifurcation with various projects did not result in the solution of the problem of bifurcation functionalization;

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<sup>16</sup> Decision No. 633-1, dated 24 January 1979, OGK No. 43/75

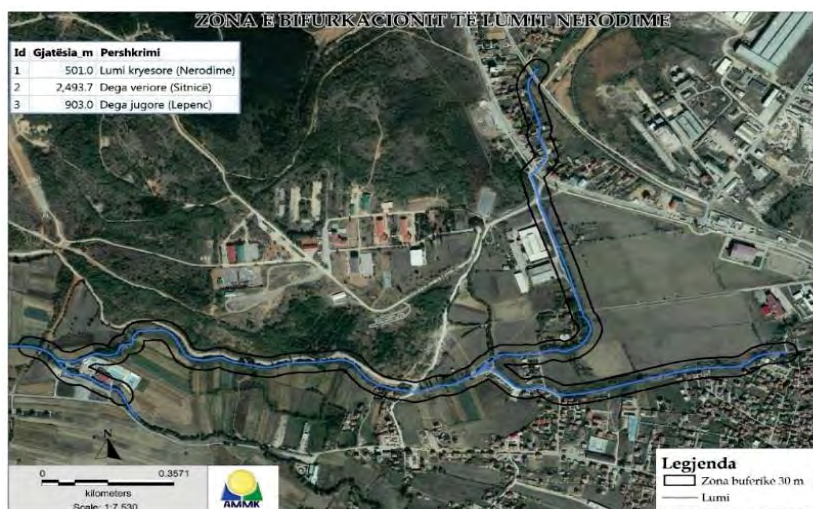


Fig.5. Area proposed for protection (Nerodime River Bifurcation)

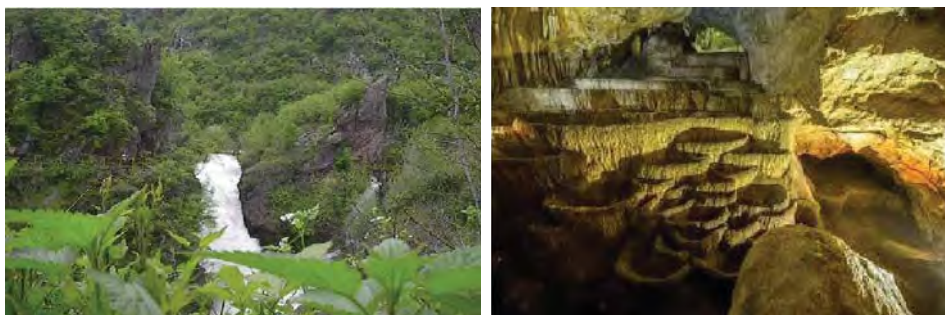
### Recommendations

- MESP, in cooperation with the Municipality of Ferizaj, to align, as soon as possible, positions on the category of protection and define competencies according to the Law on Nature Conservation;
- MESP, in cooperation with the Municipality of Ferizaj and various donors, to prepare a project for functionalization of bifurcation;
- Maintain the flow of Nerodime River in view of continuous functionalization of bifurcation (as in periods with rapid development of vegetation and increase of irrigation necessities, there may be obstacles and reduction in water quantity along the flow);
- All interventions in the area should be professional and in line with the Law on Nature Protection;
- Continuously monitor and inspect areas in view of following the state and urgently terminate all illegal constructions in the protected area of the Bifurcation;
- Prepare a regulatory plan for the area whereby enabling better regulation and management of the area.



#### 6.6.4. Drin i Bardhë Spring with Radavci Cave

Drin i Bardhe Spring and Radavci Cave have been put under protection in 1983, as natural monuments with total area of 89.94 ha. Radavci Cave is a typical spring cave. Its formation is associated with erosion and groundwater chemical work of Drin i Bardhe. So far, 2100 m of underground channels have been researched; however, researches are ongoing. Also known as “Sleeping Beauty,” it has been opened for visitors in 2015. Only entrance gallery, central gallery and tubs gallery are open for visitors. Radavci Cave is a cultural heritage monument – Archaeological Locality, where signs of ancient population since Neolithic times have been found. Upon the declaration of “Bjeshkët e Nemuna” as National Park in 2013, the majority of the area has been included within the park.



*Image 47. Drini Bardhë and Radavci Cave*

#### State

Based on the continuous monitoring of the field state in the Nature Monument “Drin i Bardhë Spring and Radavci Cave,” it has been concluded that there have been interventions from the anthropogenic factor. Interventions have been mainly conducted in the Drini i Bardhë Spring, in the surrounding part of the Waterfall, which consist on the construction of visitors paths, stairs, installation of kiosks, interventions in the regulation of the network for the needs of hydropower plant, which has a direct impact on the drastic reduction of the drinking water and use of water for the needs of the hydropower plant and supply of population with drinking water and use of water by the hydropower plant, which has a direct impact on the drastic decrease of the water quantity in the waterfall. Upon the opening of the cave for visitors (in 2015) and increase of the number of visitors, the pressure and influence in this area has increased significantly. Municipality of Peja has given the Radavci cave under the management of the Speleological Association “Aragoniti,” but the responsibilities and legal competency for cave management have not been defined precisely.



## Recommendations

- *Carry out all activities inside the Radavci Cave and near the Drini i Bardhë Spring under concrete projects and with the consent of MESP;*
- *Ban all activities that are in contravention of the protection purpose;*
- *Establish the body for administering the Nature Monument “Drini i Bardhë Spring and Radavci Cave” or put under administration of Directorate for Administration of National Park “Bjeshkët e Nemuna”;*
- *Align the Decision on declaring the “Drini i Bardhë Spring and Radavci Cave” with the Law on Nature Conservation;*
- *Construct a Tourist Information Centre;*
- *Include Drini i Bardhë Spring and Radavci Cave within tourist guides of Kosovo;*
- *Define responsibilities in the management of Radavci Cave between the Municipality of Peja and Speleological Association “Aragoniti”.*

### 6.6.5. Museum of Crystals

The Mine of “Trepça” in Stanterg is well-known and probably one of a kind in the world which is characterized by the stunning beauty of crystals and minerals of various kinds.

Given this fact, in 1964, the Museum of Mineral Crystals was established, including over 1300 exhibits from different types of crystals, transforming the museum into a major target of national importance for Kosovo both in terms of value and tourism. Besides the crystals in the Museum, the old working tools used by miners at the beginning works in the mine are exhibited as well.

In 1970, the Kosovo Office for Nature Protection has put under protection 512 crystals exhibited at the museum, thus further increasing the importance of the museum. Since the establishment, the museum was located in a building which, because of its oldness, did not meet the conditions for exposure and preservation of crystals.

In 2012, with funds allocated by the Government of the Republic of Kosovo, respectively, the Ministry of Economic Development, Ministry of Environment and Spatial Planning and the company, a new building of the museum of crystals has been built. Besides the crystals from the mine “Trepça”, in the museum are exhibited over 100 types of crystals from various world countries as: Germany, Italy, France, Spain and Brazil, which the museum received in exchange for the crystals of “Trepça” Mine.



*Image 48. Museum Building*



*Image 49. Crystals in the Museum*

## State

Upon the construction of the new facility, the overall state in the Museum of Crystals has improved significantly. Ministry of Economic Development established the managing body of the museum, thus impacting the improvement of conditions and more efficient management of museum, turning it into a tourist attraction.

## Recommendations

- *Include the Museum of Crystals in the touristic guides of Kosovo;*
- *Align the Decision on protection of 512 crystals with the new Law on Nature;*
- *Put all crystals in museums (extracted in Trepça) under protection;*

### 6.6.6. Rugova Canyon and “Gryka e Madhe” Cave

Rugova Canyon as Nature Protected Monument is among the areas of special geomorphologic, geological, hydrological values and biodiversity and touristic and recreative values. It was created by vertical fluvial erosion, mainly in Triassic limestone before and after glacial period. In 1985, Rugova Canyon was declared a nature monument with hydro-geomorphologic significance, with an area of 4,302 ha. After declaration of “Bjeshkët e Nemuna” as National Park, this area now is within the park. Besides values in terms of flora and fauna (biodiversity), the Rugova Canyon offers stunning landscapes, geo-diversity and hydrological features.

Rugova Canyon is known for its water springs, waterfalls and caves, of which two waterfalls (located near tunnel and in the sixth kilometre) and “Gryka e Madhe” Cave are the most popular and the most attractive.



*Image 50. Rugova Canyon*



**“Gryka e Madhe” Cave** is located in the 8<sup>th</sup> kilometre of the Rugova Canyon, in the left side, around 60 m above the Lumbardh River, with a height of 637 m. Researches in this cave commenced in 1993, when it was discovered. However, the cave was known for local residents a long time ago. So far, various groups of speleologists have researched around 13 km of underground gallery. There are also other caves, as Karamakaz Cave and Kallabe Cave (where archaeological remains of ancient people have been discovered), etc. During 2015-2017, the researches continued in the “Gryka e Madhe” Cave to discover new corridors and galleries, as well as the cave profile has been constructed.

Upon the declaration of “Bjeshkët e Nemuna” a National Park in 2013, the nature monument “Rugova Canyon” was included within the park.



*Image 51. Research of new corridors and galleries in the “Gryka e Madhe” Cave*

## State

From the ongoing monitoring of the field situation in the Nature Monument “Rugova Canyon”, it may be concluded that several interventions have taken place in this monument by the anthropogenic factor, in particular in the middle part (near tunnel) and upper part by constructing some business premises, and Via Ferrata has been constructed in the entrance of the canyon. Also, a large number of hotel constructions are located along the Rugova Canyon.

## Recommendations

- *Carry out all activities in the Nature Monument “Rugova Canyon” under concrete projects, with the consent of MESP;*



- *Align all activities carried out within the protected area NM “Rugova Canyon” with the Law on Nature Protection and Law on NP Bjeshkët e Nemuna;*
- *Directorate of NP “Bjeshkët e Nemuna” should monitor it;*
- *Stop the construction of illegal objects;*
- *Continue researching corridors and galleries in the “Gryka e Madhe” Cave;*
- *Remove waste, etc.*

#### 6.6.7. Interventions in Nature Monuments

During the period 2015-2017, under the impact of atmospheric conditions and anthropogenic factors, some nature monuments have suffered significant damages (*table 5*)

The Nature Monument “Temeqina Cave” in the Municipality of Malisheva has suffered significant damages. This monument has been damaged due to uncontrolled use of rocks in the area of cave by local residents. The fact that the Municipality of Malisheva has taken no step to prevent the destruction of this cave remains a concern.

The respective municipalities have been proposed measures to repeal the decisions by which these monuments are removed from the list of protected areas.



Image 52. Oak tree (*Quercus cerris* L) in Drenovc



Image 53. Destruction of the area located above the Temeqina Cave Image 54. Damage of the poplar trunk in Gerdoc

Based on the Law on Nature Protection, municipalities are obliged to:

- submit the reports on the state of and protection of nature to the Ministry every two (2) years and also at other times at the request of such a body (Article 149, point 4),
- provide conditions for protection and conservation of protected areas within their competence (Article 143 point 2.3),
- monitor the state of nature conservation and submit reports on the conservation status to the Ministry and the Institute.

During the period 2015-2017, the Kosovo Institute for Nature Protection has carried out monitoring visits to nature monuments, namely the locations where information signs have been placed for the purpose of verifying their state. Damaged information boards have been noted in some places.



Image 55. Damaged information boards

Table 5. Protected areas that have lost their natural values

Nature monument	Location	Municipality	Year of protection
Red linden tree ( <i>Tilia</i> sp)	Istog i Poshtëm	Istog	2009
Silver linden tree ( <i>Tilia</i> sp)	Kaliqan	Istog	2009
Common oak tree ( <i>Quercus robur</i>	Gurrakoca	Istog	2009
Oak tree ( <i>Quercus cerris</i> L)	Caravrana	Malisheva	2014
Oak tree ( <i>Quercus cerris</i> L)	Drenovc	Malisheva	2014
Cave in Temeqina	Temeqina	Malisheva	2014
Aspen in Bajqina	Bajqina	Podujeva	1959
Aspen tree	Gërdoc	Podujeva	2015

Source: KINP

## Recommendations

- *The respective municipalities where the nature monuments are located should carry out continuous monitoring and report on their state to the MESP/KINP;*
- *Phytosanitary measures should be undertaken to protect the bio-monuments having the status of the protected area.*

## 6.7. PROTECTED LANDSCAPES

### 6.7.1. Protected landscape “Gërmia”

The mountain massif of Gërmia represents a very important natural asset not only for Prishtina and its surroundings but also for Kosovo as a whole. It lies in the northeast of Kosovo's capital (Prishtina) and covers an area of 62 km<sup>2</sup>.

In 1987, the Municipal Assembly of Prishtina declared an area of 1,126 hectares in the Regional Park category and according to IUCN (International Union for Conservation of Nature) Gërmia belonged to the V category of protection as a Protected Landscape.

According to the Law No. 03/L-233 on Nature Protection, OGRK No. 85 / 9 November 2010, the category of Natural Regional Park no longer exists and therefore the Regional Nature Park "Gërmia" was foreseen to be re-categorized into a new category according to the law in force.

In 2016, the Municipal Assembly of Prishtina makes a decision to declare Gërmia as a Protected Landscape, with an area of 1,949 ha.

Gërmia is a mountain massif rich in plant and animal species and has generally maintained its own natural values. However, in the recent years, as a result of the human factor, some plant and animal species have disappeared forever, some are near extinction, while visible forest surfaces have been degraded or are at permanent risk of being degraded<sup>13</sup>.

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<sup>13</sup> Report on the study of the values of Gërmia, University of Prishtina, 2014

## Flora and vegetation

Due to its physical-geographic position, its geological and pedological features, its climatic conditions etc., the mountain massif of Gërmia is quite rich in both floristic and vegetative terms. From the research conducted so far, in the Gërmia massif have been evidenced the following: 610 species of vascular flora grouped into 82 families without including ruderal taxa, 88 species of mushrooms, 14 species of moss, 51 species of lichens. In certain areas can be found the forests of coniferous (cultivated) species of black pine, white pine and 1 ha of acacia.



Image 56. Beech forest community (*Fagetum moesiicum montanum*)

## Species of rare plants that are at risk of disappearing

Based on the research, it has been established that 23 plant species are at risk of disappearing, including: two-flowered everlasting pea (*Lathyrus grandiflorus*), the flat pea (*Lathyrus sylvestris*), *Coeloglossum viride*, *Ptilostemon strictus*, the Macedonian oak (*Quercus trojana*), Dwarf Spurge (*Euphorbia exigua*), *Pedicularis comosa*, Valerian (*Valeriana officinalis*), the Turkish hazel (*Corylus colurna*), *Ranunculus illyricus*, *Linum gallicum*, *Haplophyllum suaveolus* etc.



Amongst the highly endangered species in Gërmia are the following: the flat pea (*Lathyrus sylvestris*), *Coeloglossum viride* only in one locality, whereas the two-flowered everlasting pea (*Lathyrus grandiflorus*) is found in one locality with only a few several individual species, while in another locality it has already disappeared. A highly endangered species is also the Valerian (*Valeriana officinalis*) which in Gërmia was found only in one locality with several individual species in the beech community near the stream under the Butovc hill.



Image 57. The two-flowered everlasting pea



Image 58. *Coeloglossum viride*



Image 59. *Ptilostemon*

## Fauna

The fauna of Kosovo in general and that of Gërmia in particular is little studied. Gërmia's different biotopes and different heights provide good living conditions for various animal species. According to research conducted to date, the fauna of Gërmia, which belongs to the fauna of Central Europe, consists of: 5 species of amphibians, 7 species of reptiles, 32 species of birds, 19 species of mammals. Also, in this mountain massif, studies have been conducted on a large number of insect orders of Orthoptera, Homoptera, Coleoptera, Diptera, Himenoptera and Lepidoptera, which represent the largest group of organisms.



Image 60. Slowworm (*Anguis fragilis*)



Image 61. Nightingale (*Luscinia megarhynchos*)

## State

It should be noted that the today's state of flora, fauna and ecosystems in the Gërmia massif is the result of three important factors: its development in the past, the current impact of ecological conditions, and the major changes as a result of the actions taken by the human factor.

It is worrying that today, in the forest communities in Gërmia, especially in oak forest communities, we have the phenomenon of many trees drying out as a result of the action of certain insects that are known as forest pests. There is, therefore, an urgent need for sanitation cleaning and disinfection of this mountain massif, in particular, of the protected area.

Also, in violation of KINP's preliminary opinion, there were interventions aimed at the construction of private facilities, road expansion projects as well as other activities in cutting and damaging the timber. Illegal hunting is present throughout the year, thus violating the rule which foresees that hunting is strictly forbidden in this area.

Although Gërmia now enjoys the status of a Protected Landscape (a change of category from the Regional Park) it still does not have a Managing and Regulatory Plan, while also lacking the necessary signs around and within the park.

During 2016-2017, the Municipality of Prishtina won a project from WWF Adria, which aims, among other things, the undertaking of the necessary research of biodiversity values, the drafting of a Regulatory Plan, etc.

## Recommendations

- *Draft the Managing and Regulatory Plan for the protected landscape "Gërmia";*
- *Apply sanitary measures for the rehabilitation of forests damaged by biotic and abiotic factors;*
- *Continue research in order to inventory species and habitats;*
- *Continue inspection carried out by the MESP Inspectorate and the Municipality;*
- *Manage the whole territory of the Protected Landscape;*
- *Prohibit illegal constructions inside the protected landscape "Gërmia";*
- *Mark the protected area;*
- *Place information boards etc.*

### 6.7.2. Protected Landscape “Shkugza”

Shkugza is located in the southern part of the city of Gjakova, lying between two hills separated by the small river of Shlepica, at an altitude of 410-460 m. This area is rich in biodiversity, tourism, recreational and educational values. With the proposal of MESP, in 2011, the Municipality of Gjakova declared Shkugza as "Protected Landscape" with an area of 70 hectares.



Image 62. Protected Landscape “Shkugza”

### Flora and vegetation

In 1960, Shkugza was forested with black pine (*Pinus nigra*). A rough estimation of plant diversity results in about 280 species. Among others, the following species can be found: *Festuca ovina* agg. (sheep's fescue), *Agrostis capillaris*, *Poa pratensis*, *Bromus sterilis* (barren brome), *Achillea millefolium* (yarrow), *Trifolium* sp. (the white clover), *Euphorbia cyparissias* (the cypress spurge), *Plantago lanceolata* (narrowleaf plantain), *Teucrium chamaedrys* (wall germander), *Thymus spec*, *Stachys spec*, *Hieracium pilosella* (mouse-ear hawkweed), *Hypochoeris radicata* and other. Climbing plants like *Humulus lupulus* (common hop or hops) and *Clematis vitalba* (Old Man's Beard) make it difficult to access the forest.

The dominant trees, depending on the places where they are located, are *Pinus nigra* (black pine), *Carpinus orientalis* (black hornbeam), *Acer campestre* (field maple), *Ulmus speculum*., *Fraxinus ornus* (the manna ash), *Corylus avellana* (the common hazel), *Crataegus monogyna* (common hawthorn), *Cornus mas* (cornelian cherry), *Quercus cerris* (the Turkey oak), *Quercus pubescens* (the downy oak) and *Quercus frainetto* (the Hungarian oak). The black pines are not part of the initial vegetation and are not reproduced naturally in this area.

## Fauna

The Forest korije (zabeli) is the type with most diversity vegetation in “Parku i Shkugzës” and is an important habitat for different species of butterflies (Lepidoptera), endangered chafer (*Lucanus cervus*), Wall lizard (*Lacerta muralis*), Turtle (*Testudo hermanni*) etc. The biodiversity of the river Shlepica is limited because of pollution. There are registered the species like: *Triturus vulgaris*, *Bombina variegata*, *Rana esculenta* agg., *Natrix natrix* etc. In large quantities is found the aquatic species *Micropterna lateralis* (by Trichoptera order), endangered in some European countries and registered for the first time in Kosovo and the dragonfly populations. Of the bird species most present are: *Picus viridis* (green woodpecker), *Lyscinia megarhynchos* (nightingale) and some other types.



Image 63. *Micropterna lateralis*



Image 64. *Triturus vulgaris*

## State

Amongst the problems noted in the area of the protected landscape of Shkugza remain restaurant constructions without prior approval by the competent authorities as well as the construction of the accompanying facilities such as playgrounds and parking lots which are located even between the black pine trees.

Another problem is waste management as well as the risk of fires that are evident in some parts of the Park. Waste is often burned and at the same time poses a permanent risk of spreading fire in other parts of the forest.

Illegal logging, the discharge of sewage, uncontrolled picnic activities, inadequate waste management (restaurant owners, the public who visit the area, local farm residents living in the surrounding area) are some of the other problems concerning the area, although such problems are expected to be solved in the future with the approval of the Regulatory Plan for this area.



**Recommendations**

- *Prepare a Regulatory Plan for the area in order to avoid illegal construction;*
- *Ensure better waste management (strictly prohibit the waste burning);*
- *Stop illegal logging and conduct the sanitary cleaning of the area;*
- *Once the area has been transformed by residents into a recreational centre, equip it with the appropriate infrastructure;*
- *Mark the protected landscape;*
- *All the activities in the protected area should have an educational, tourist and recreational character.*

## 7. THE AREAS PROPOSED TO BE PROTECTED

In the period 2015-2017, the KINP prepared professional rationale to protect the nature values, as follows: 18 strict nature reserves, 12 reserves of nature in Kaçanik, 10 in Shtime, 7 in Podujeva, 7 in Vushtrri, 10 in Rahovec, 12 in Ferizaj and for Nature Park Pashtriku Mountain and Vërmica Lake.

During 2017, with the initiative of the Kosovo Institute for Nature Protection, professional rationales for granting legal protection to other 10 new nature monuments/areas were prepared, including: 9 monuments and 1 Protected Landscape in the Municipality of Gjakova.

Table 6. Monuments/areas of natural heritage in the Municipality of Gjakova

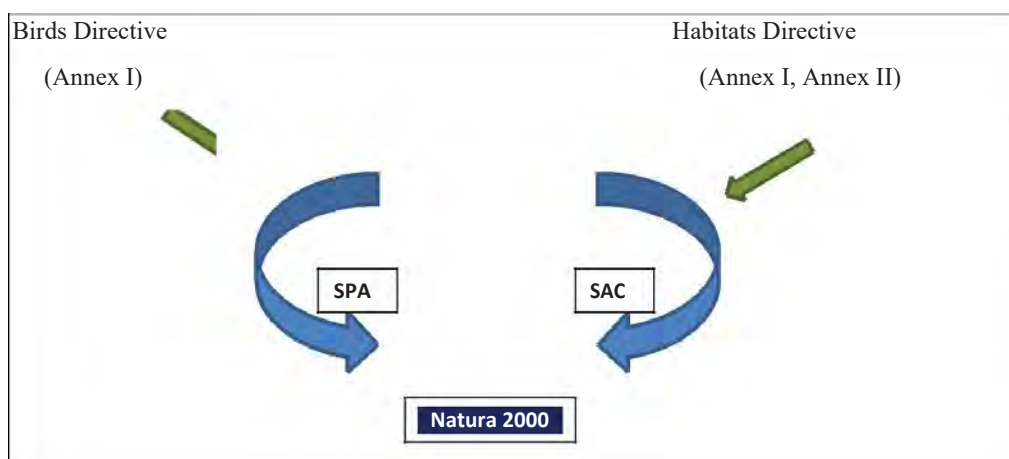
Name	Place/location	The proposed category of protection
<b>1</b> Sessile oak ( <i>Quercus petraea</i> )	Bec	Category III (Nature monument of botanic character)
<b>2</b> The downy oak ( <i>Quercus pubescens</i> )	Herec	Category III (Nature monument of botanic character)
<b>3</b> Complex of trunks	Shqiponja (Jabllanica)	Category VI (Protected landscape of botanic character)
<b>4</b> Complex of trunks	Zhabel	Category III (Nature monument of botanic character)
<b>5</b> The downy oak ( <i>Quercus pubescens</i> )	Rrypaj	Category III (Nature monument of botanic character)
<b>6</b> Complex of trunks	Molliq	Category III (Nature monument of botanic character)
<b>7</b> Water source	Molliq	Category III (Nature monument of hydrological character)
<b>8</b> Complex of caves	Kusar	Category III (Nature monument of hydrological character)
<b>9</b> Water source	Kusar	Category III (Nature monument of hydrological character)
<b>10</b> The Turkey oak ( <i>Quercus cerris</i> )	Vogova	Category III (Nature monument of botanic character)

Source: KINP

## 8. OTHER PROTECTED AREAS

### 8.1. Natura 2000 areas

In order to encourage better management of Europe's natural heritage, the policies for conservation of nature in the given territory should be implemented. Europe has made the adaptation of legislation design to protect habitats and the most endangered species, and this legislation is the Birds Directive 2009/147/EC of 30 November 2009 on the conservation of wild birds (codified version of Directive 79/406/EEC), and the Habitats Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. The basis of these directives is the NATURA 2000 protected areas network. One of its very important aspects is to be in full compliance with the objectives of the Convention on Biological Diversity and of the Bern Convention.



*Fig 6. Natura 2000, basis of the Birds Directive and the Habitats Directive*

Preparation of Kosovo for the selection of NATURE 2000 areas with indicators for the necessary data, responsibilities, timeframes and necessary means represents a good basis for fulfilling the obligations of the Republic of Kosovo towards European Union integration. The overall goal is to contribute to sustainable environmental development by bringing Kosovo closer to European environmental standards. This is achieved by strengthening the administrative structures and aligning with the environmental requirements of the European Union, particularly with the Directives.

In March 2016, the National Programme for Implementation of the Stabilization and Association Agreement states that the transposition of the European Union's directives on the field of nature protection into national legislation has almost been achieved and the other provisions will be

transposed gradually. The document also includes some preparatory activities for the creation of the Natura 2000 network, which are short and medium-term priorities, such as the one for the definition of clear boundaries between the Bio-geographical regions, the creation of field maps, inventory of species, etc. In 2008, a preliminary report was prepared for the "Natura 2000" areas within the framework of the "Sustainable Forest Management Project." The selection of these areas was made based on scientific criteria such as the size and density of the population of species, as well as the surface of the habitat in which they are located.

Therefore, a lot of work will be done until the overall achievement of the goals and objectives related to this issue.

In order to begin the implementation of the ecological network "Natura 2000" in Kosovo, MESP established in 2016 an inter-institutional coordination group for the coordination and development of activities related to "Natura 2000".

### Recommendations

- *Ensure the inventory of flora and fauna;*
- *Identify all important areas for Natura 2000;*
- *Create maps with data on flora and fauna habitats;*
- *Ensure funds for implementing the Natura 2000.*

### 8.2. Hunting areas of special importance

Activities of the Kosovo Forest Agency, namely the Directorate for management of wildlife, hunting and eco-tourism in the HASI are developed based on the Strategy of Management of Wildlife and Hunting in Kosovo (2012-2022). This document is a foundation for preserving the ecosystem's entirety and ecological balance, adequate protection of wildlife, ensuring the welfare and conditions for their economic exploitation.

Even during the period 2015-2017, the focus on sustainable management of wildlife and hunting has been at HASI Blinaja and Dubočaku, with special emphasis on:

- Conservation of habitat,
- Achieving the optimal number for all game animals,
- Maintaining the optimal population structure by gender and age,
- Good health conditions of game animals,
- Protection and conservation of rare and endangered species,
- Achieving planned objectives in hunting areas management in line with the management program and the ten-year long-term plan.



### 8.2.1. Hunting Area of Special Importance “BLINAJA”

Blinaja lies in three municipalities, Lipjan, Drenas and Shtime and occupies an area of 2795ha. This closed-type hunting area consists of 40 hectares of meadows, 32 artificial lakes, 88 high observation posts, 12 pig traps, while the feeding area for large animals consists of 150 feed stores, 26 concrete flooring for pigs, 2 for reproduction, 32 areas for water, 15 for salt, 1 training area for hunting dogs etc. In total there are 2100/ha of state forests and 600/ha of privately owned forests. The other 95/ha is agricultural area (meadows) and 5/ha water surface.

In order to increase the efficiency and functionality, considerable investments have been made in the last three years aiming at renovation and revitalization of infrastructure such as: renovation of forest roads, renovation of the external fencing, renovation of the Hunting Facility and the Training Facility, provision of feed for wild animals during the winter season, setting up troughs for food and salt etc.

This habitat is in good condition thanks to the commitment and continuous engagement of the staff in protecting, cultivating and caring for wildlife.

The main species of wild fauna in Blinaja are: Wild boar (*Sus scrofa*) – currently estimated to be around 500, Red deer (*Cervus elaphus*) – around 150, Fallow deer (*Dama dama*) – around 100, Roe deer (*Capreolus capreolus*) – around 170.

In addition to these species in Blinajë there are Badger (*Meles meles*), Beech marten (*Martes sp.*), European beech marten (*Martes sp.*), Rabbit (*Lepus europeus*), Raven (*Corvus corax*), Magpie (*Pica pica*), Common buzzard (*Buteo buteo*), Garganey (*Anas querquedula*), Wildcat (*Felis sylvestris*), Squirrel (*Sciurus vulgaris*), etc. According to the Forest Management Plan 2014-2023, in the HASI in Blinajë the volume of the present wood mass is 332325 m<sup>3</sup>, with an annual increase of 2.93%, i.e. 9737 m<sup>3</sup>/year.

The HASI in Blinajë is under KFA management and there are no illegal actions despite the occasional attempts for illegal hunting that are prevented by the Forestry and Hunting Protection Staff often supported by the Kosovo Police.



Image 65. Fauna in the hunting area “Blinaja” (KFA)

### 8.2.2. Hunting Area of Special Importance “Dubočaku”

This hunting area lies in three municipalities, Skenderaj, Zubin Potok and Mitrovica and occupies an area of 6805.05ha, of which 2470 ha are public property and the rest is privately owned. This is an open-type hunting area. According to the Forest Management Plan 2011-2021, Dubočak has a wood mas volume of 46954.40 m<sup>3</sup>, with an annual increase of 2.2% i.e. 1693.00 m<sup>3</sup>. It lies at an altitude of 320 to 1050m. Hydrologic conditions are favourable because it is rich with many streams and water springs that are widespread throughout the hunting area and do not drain throughout the year, i.e. there is no water related problem for wild fauna.

No inventory of the number of wild animals present in this area has been conducted, but based on the recordings made with fixed camera and based on the footprints we know that there are different types of wild animals that live in the area, such as Brown Bear (*Ursus aretos*), Wolf (*Canis lupus*), Wild boar (*Sus scrofa*), Roe deer (*Capreolus capreolus*), Red deer (*Cervus elaphus*), Rabbit (*Lepus europeus*), Squirrel (*Sciurus vulgaris*) etc.

During the last two years, infrastructure investments have been made, such as: renovation of the facility and offices, provision of additional food for winter season (grain, corn, and rock salt), setting up troughs for food and salt etc.

In this hunting area there is a presence of attempts for illegal activities for illegal logging and hunting with a declining trend over the past two years thanks to the engagement of the HASI staff in Dubočak, while another problem is also the limited access to the areas stretching in the municipality of Zubin Potok.

Another difficulty posed in this hunting area is the unfavourable infrastructure conditions as the facility is currently without electricity and does not have a supply network, and the roads leading to the facility currently are almost inaccessible.

### Recommendations

- *Prevention of illegal logging and hunting activities in HASI in Duboçak;*
- *Adoption of a Regulation for management and service tariffs in the HASI in Blinaja and Duboçak;*
- *Continuous repair and maintenance of forest roads;*
- *Construction of auxiliary food storage facilities for wild animals;*
- *Construction of a facility for sanitary treatment of wild animals after potential diseases appear;*
- *Provision of adequate machinery for maintenance of forest roads, opening of drainage channels including for water outflow from lakes;*
- *New construction of the external fence of HASI in Blinaja since the old one has suffered serious damage during the last war and has been worn off to a high degree;*
- *Developing eco-tourism on a more advanced scale by being equipped with mountain recreational means (mountain bicycles, horse riding equipment, horse carts, horse sledges for winter season etc.) at HASI in Blinaja;*
- *Continue the study on values of biodiversity.*

### 8.2.3. BEAR SANCTUARY – Prishtina

The animal welfare foundation FOUR PAWS International is an international organization engaged in the struggle to ensure a more human approach of people in relation to animals in general (domestic and wildlife). Since 2012 this organization has established the BEARS SANCTUARY Prishtina in partnership with the Ministry of Environment and Spatial Planning (MESP) and the Municipality of Prishtina. At the BEARS SANCTUARY Prishtina now live 19 bears rescued at different periods from their life in cages in different restaurants in Kosovo (16) and in Albania (3).

During the period 2015 - 2017, the main activities undertaken by VIER PFOTEN organization in the course of implementation of their programmes are:

- *Looking after bears in the Bear Sanctuary Prishtina*

Throughout the period 2015 – 2017, the VIER PFOTEN foundation has taken care of providing the best possible conditions for bears sheltered in the Bear Sanctuary Prishtina, especially through activities such as: provision of the adequate amount of food for bears, health care, staff training, animal safety etc.

- *Environmental education activities (non-formal) with children and young people*

Throughout this period, the Organization continued to implement the educational-awareness raising programme for children, young people and adults, including activities such as cooperation with kindergartens and primary schools, using various methods such as making short films for specific issues, development and distribution of brochures in schools on the importance of animal protection, organizing site visits for children and teachers, etc.

- *Organization and promotion of voluntary work through awareness raising activities*

The VIER PFOTEN Kosova Foundation since 2015 has been accredited by ERASMUS + programme to host and organize volunteer work through organizing summer camps for voluntary work where participants conduct various activities, such as regulation of walking trails for visitors, cleaning activities, environmental education debates, sport and cultural activities etc.

The VIER PFOTEN Kosova Foundation has created a group of local volunteers (about 30), who support the foundation in all its activities such as; waste collection activities, awareness raising campaigns, organization of events etc.

- *New investments*

In the period 2015 - 2017, The VIER PFOTEN Kosova Foundation, with the financial support by FOUR PAWS International Foundation from Austria has continued the investments with regards to: creation of new spaces for bears, functionalization of the Veterinary Clinic, rooms for storage and preparation of food, pits for bear faeces, establishment of the centre for environmental education “Treasures of nature“, etc.



- *Cooperation with partner institutions and organizations*

During the period 2015 – 2017 FOUR PAWS Foundation has invested approximately 1 (one) million euros in projects. With the completion of the Centre for environmental education the investments in the last two years reach the amount of EUR 1.5 million. Since the opening of Bear Sanctuary Prishtina in 2013 until now the total investment by FOUR PAWS reaches the amount of EUR 2.5 million. It is worth noting that during the period 2015-2017 the park has been visited by 76.500 visitors from the country and the region.



*Image 66. Looking after bears*

## 9. BIODIVERSITY

Biodiversity represents the biological diversity of flora and fauna on our planet and is a source of ecosystem goods and services that are needed for human life. This term includes the diversity of genes and all kinds of microorganisms, mushrooms, plants and animals, as well as the whole variety of ecosystems in which living beings are the active bearers of life. Diversity of species includes the whole number of organic species on earth, while the diversity of ecosystems means the whole diversity of habitats and biocenosis, as well as the ecological processes with which the ecosystems function.

### 9.1. The state of biodiversity

Given the importance of biodiversity, it is clear that preserving and undertaking preventive measures is a very important task and it directly affects its protection. In some cases, we have a loss of biodiversity values that result from the action of a human factor due to carelessness, lack of interest or lack of knowledge. As a result of this, in our country various habitats have been destroyed and plant and animal species so far unknown to science have disappeared.

#### 9.1.2. Flora

Compared to the surface area of Kosovo in Balkan Peninsula of about 2.3%, our fitodiversity represents about 25% of the Balkan flora and about 18% of the European flora. The flora of our country consists of algae, lichens, mushrooms, ferns, gymnosperm and angiosperm, which are the basis of life and form the green cover of the earth that has a direct impact on the life of animal organisms and humans. Although there have been studies on flora by various local and international authors, a complete inventory has not yet been developed and the exact number of plant taxa is not known. Based on the studies carried out so far about 2000 species of vascular flora have been registered, but according to the records of various authors it is assumed that in our country there are about 2.800-3.000 species of vascular flora<sup>14</sup>. Their diversity is characterized by the presence of rare endemic and stenoendemic species, which are divided into two groups: local endemic or stenoendemic and endemics of Balkans.

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<sup>14</sup> The Red Book of Vascular Flora of the Republic of Kosovo - Prishtina, 2013

Besides the group of endemic plants in Balkans, another important group of plants are relict plants. From the total number of approximately 2000 species of vascular plants identified in the Sharri Mountain, 86 are declared as important in the international aspect, 26 are included in the Red List of Europe, and according to IUCN criteria, 32 are included in the Red List of Threatened Plants.

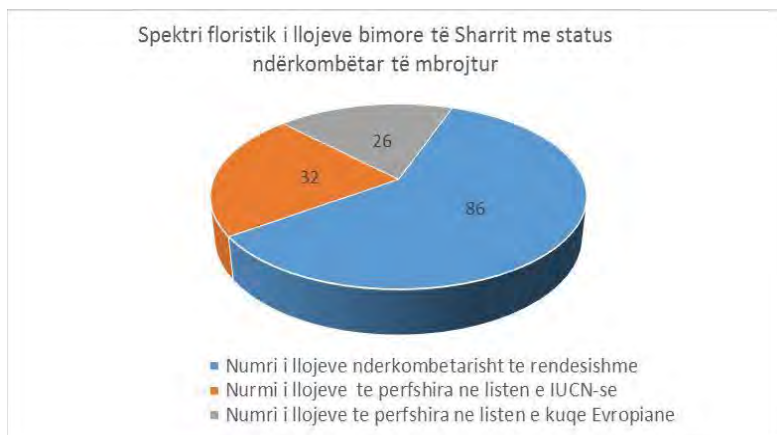


Fig. 7. Species of plants with international status in the NP "Sharr"

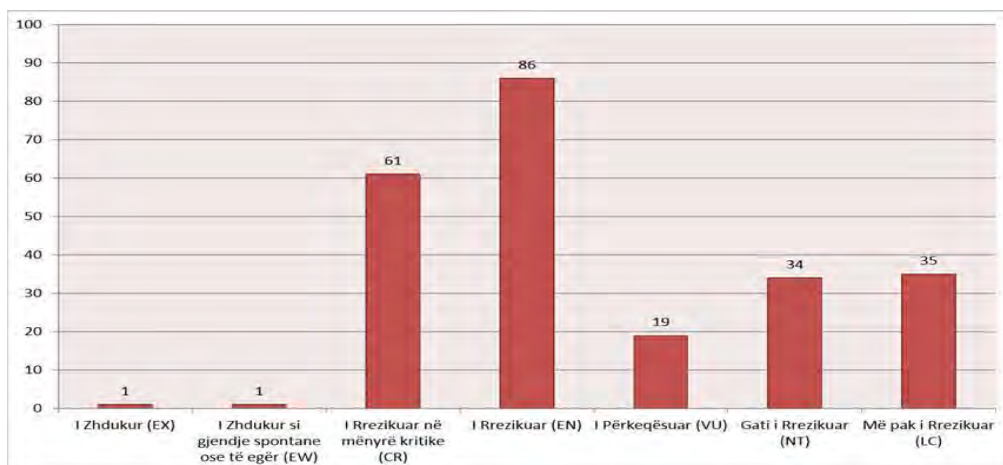
There are 797 species of vascular plants identified in the "Bjeshkët e Nemuna", where 128 are considered of an endemic character (Millaku, F. 1999). Kosovo's flora is also represented by species that have a narrow areal that are considered rare and endangered plant species. These negative consequences are as a result of illegal use and misuse of plant species, which at the same time causes their reduction.



Image 67. Misuse of medical plants

The Red Book of Vascular Flora of the Republic of Kosovo is a document on the flora present but that can go extinct. The preservation of floristic diversity and undertaking prevention measures is a very important task which influences directly in the global environment protection. Destruction of flora and fauna occurs as a consequence of the action of anthropogenic factor related to the negligence, lack of interest and lack of knowledge. Consequently, nowadays in the world, and in Kosovo, various habitats have been destroyed, where also plant and animal species that are unknown for the science have gone extinct.

*Fig 8. Endangered species of plants*



*Source: The Red Book of Vascular Flora of the Republic of Kosovo*

### 9.1.3. Vegetation

The vegetation of our country is classified into: 139 associations or firocenosis, 63 alliances, 35 ranks and 20 classes, which represent characteristic ecosystems, which are also habitat for many animal species. The vegetation of lowland meadows is classified into: 4 associations belonging to one alliance, one rank and one class. While the vegetation of the subalpine and alpine hillsides is classified into: 65 associations, 33 alliances, 22 ranks and 13 classes. The most developed forests are within the National Parks: "Sharr" and "Bjeshkët e Nemuna".

Their vegetation consists of three vegetative levels: low level, medium level and high mountainous. In the Protected Landscape "Gërmia" there are four forest communities, as described below:



These forest communities represent very important ecosystems, which as such should be preserved because by preserving these resources we create conditions for preservation of plant and animal species. However, in some cases, interventions have been made in forest vegetation as a result of various activities in the environment, such as road construction, illegal logging, burning, quarrying etc. Therefore, these phenomena have had negative impact on natural values and ecosystems in general.



*Image 68. Damages of forest vegetation in the protected areas*

#### 9.1.4. State of fauna

Regarding fauna, Kosovo is characterized by a wide variety although research in this regard has not yet been completed.

The condition of fauna is generally good as a result of expansion of protected areas, mainly in the two National parks which make up about 10% of the total protected areas of the nature. It is estimated that there are over 250 species of vertebrates in Kosovo, of which over 220 species of birds, about 20 species of reptiles, about 10 species of amphibians, as well as 30 species of fish, 176 species of butterflies and a yet undefined number of insects and water macroinvertebrates fauna. The exact number of species of fauna will be determined on the occasion of its inventory which is planned to take place during the implementation of the project for drafting of the Red Book for fauna (the project started in 2017 and will continue during 2018), and also within other projects.

The biggest damage that is done to fauna in Kosovo is mainly due to illegal hunting that occurs from time to time even within the protected areas.

Among the most threatened animals from illegal hunting are the roe deer and the wild goats, while there is a positive development among brown bears, foxes, wolfs, etc. Endangered also are the types of birds of prey and especially the national symbol - the eagle of the mountains (*Aquila chrysaetos*). Due to the disturbance by man and due to the lack of a management body, especially during the colonization period, many species of birds that were once present, especially in the Hecenci Wetland, are now rarely seen.



Image 69. Eagle of mountains (*Aquila chrysaetos*)



Image 70. Lizard of the walls (*Podarcis muralis*)



Image 71. *Aglais urticae*



Image 72. *Calopteryx splendens*

### 9.1.5. Monitoring endangered species of mammals in National Parks

Within the regular activities for monitoring and inventorying of biodiversity in protected zones, the Kosovo Institute for Nature Protection – KINP –, since 2015 has started implementing activities related to monitoring of the wild fauna through putting camera traps in protected zones, especially in the National Park “Bjeshkët e Nemuna”.

This method of monitoring and studying wild fauna is a non-intensive method as it generates information about the presence of different species without disturbing them.



Image 73. Monitoring of the fauna with camera traps

During this joint activity with the National Parks officials and in some cases in cooperation with representatives of the NGO Environmentally Responsible Action Group - ERA with headquarters in Peja, we have placed the camera traps mainly in the areas where it is believed that there is movement of the largest number of wildlife.





Image 74. Placing of camera traps

During this period, data has been gathered on the presence of mammal species, such as: Brown bear (*Ursus arctos*), Roe deer (*Capreolus capreolus*), Wild boar (*Sus scrofa*), Fox (*Vulpes vulpes*), Wildcat (*Felis sylvestris*), Badger (*Meles meles*), Hare (*Lepus europaeus*) as well as some other common species. After quite a long period of monitoring the state of fauna through this method, for the first time on December 18, 2016, it was found that the rare and endangered species of Balkan Lynx (*Lynx lynx ssp. Balcanicus*) was photographed.

This species was previously captured by the camera trap set up by ERA NGO in the Rugova region but this is the first time that it has been captured by the cameras set up by the KINP team in this part of the National Park. Since each lynx has a different fur, in the photos of the camera trap it is proved that the individual of Deçan and Rugova have different furs. This helps us conclude that the two individuals are not the same.

In addition, in March 2017, the cameras placed in this zone have again captured movement of the Lynx, but because of the poor quality of the images captured by the camera trap, as it was in the first case, it is not possible to identify the sex of the individual or if the image is of the same individual or if there are more than one individuals.

The 'Kuzhinierit' Area now is considered to be a shelter of many wild animals, including the Balkan Lynx, as a rare and critically endangered species both in the country and beyond.

The presence of a considerable number of animal species which serve as food for this rare and autochthon species of our fauna, i.e. its prey such as the rabbit, roe deer, squirrel, wild boar etc., indicates the favourable conditions for its existence in this area of the Park.





Image 75. Picture of the Balkan Lynx captured by camera traps



Image 76. Recordings of camera traps

The Kosovo Institute for Nature Protection in cooperation with NGO ERA, has proposed to declare as a Strict Reserve, the area of about 550 hectares, where the presence of Balkan Lynx has been noticed in the period 2016 and 2017, within the territory of the National park “Bjeshkët e Nemuna”.



Image 77. The area proposed for Lynx reservoir

## Recommendations

- *Finalization of the Red Book of Fauna;*
- *Initiation of activities for monitoring the endangered species of fauna;*
- *Development of action plans and programmes for some of the endangered species of flora and fauna;*
- *Continuous monitoring of habitats of endangered species of flora and fauna;*
- *Complete inventory of species and habitats in the territory of the Republic of Kosovo;*
- *To prohibit illegal hunting in protected areas.*

## 10. KOSOVO FORESTS

The forest area in Kosovo is about 481 000 ha (44.7% of the total surface area) and compared to 2002-2012, the forest area has increased by 5% (20 200 ha). It should be noted that the forest area is defined as an area with tree canopy cover of more than 10% and an area of more than 0.5 ha. Trees should be able to reach a minimum height of 5 meters in situ, which is the FAO's international definition.

The surface of 180,800 ha (38%) of Kosovo's forests is privately owned, and 295,200 ha (62%) are public forests. Coppice forests cover 84% of the total forest area, which is the result of intensive use of the forest for the production of firewood. The forests are mainly naturally regenerated to mention beech (*Fagus* spp.), mixed beech and conifers, coniferous forests etc.

Kosovo forests are dominated by broad-leaf forests covering 93% (449,400 ha), while coniferous forests cover 5% (23,800 ha) of the forest area. In total, 50% of the forest area is considered even-aged forest.

The standing volume of the trees with a diameter at breast height  $> 7$  cm remains at 40.5 million  $\text{m}^3$ , roughly the same as ten years ago. Among the trees, *Fagus* species contribute 46% of the volume, while *Quercus* species represent 23%. The average standing volume in Kosovo is  $84 \text{ m}^3/\text{ha}$ . In Europe in general, the average standing volume is  $105 \text{ m}^3/\text{ha}$ , which is lower than the world average of  $130 \text{ m}^3/\text{ha}$ . Some Central European countries have high productivity forests with a standing volume of up to  $250 \text{ m}^3/\text{ha}$ . In all regions of Europe, the standing volume has continuously increased over the last 20 years.

The annual growth of trees with bark with a diameter (DLG)  $\geq 7$  cm is estimated at 1.55 million  $\text{m}^3$ , 1.32 million  $\text{m}^3$  of broad leaf and 0.23 million  $\text{m}^3$  of coniferous trees.

The maximum long-term annual logging in the first productivity point is in the rank of 1.45 million m<sup>3</sup>. This is a gross figure and needs to be reduced due to logging losses, natural losses and environmental considerations. The net maximum of long-term logging for Kosovo is at the level of 1.2 million m<sup>3</sup>. This estimation needs to be further reduced due to the insufficient wood supply areas, including National Parks.

Kosovo forests are rich in wood species, 132,000 ha (27.5%) of the forest area is composed of four or more species. Almost the whole forest area (99%) shows some kind of human influence.

An important part of Kosovo forests (around 24%) are within the national parks "Sharri" and "Bjeshkët e Nemuna".<sup>15</sup> The "Sharri" NP is dominated by broadleaf forests (mainly beech: *Fagetum montanum* and *F. subalpinum*) while the NP "Bjeshkët e Nemuna" is dominated by coniferous forests of silver fir, Norway spruce, Balkan pine and Bosnian pine (Heldreich's pine). The forests of the national parks are characterized by rich biodiversity and the presence of many rare endemorelict species, as a result for these mountainous forest areas to obtain special status of the protected area as national parks.

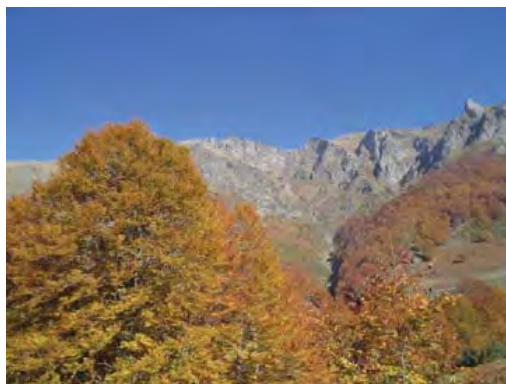


Image 78. Beech tree forests dominate in Sharri

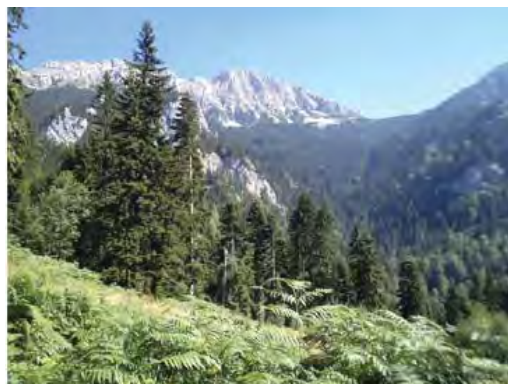


Image 79. Coniferous forests in the Bjeshkët e Nemuna

### 10.1. The state of forest ecosystems in Kosovo

Forests represent the most important ecosystems but at the same time are most vulnerable to biotic factors (humans, diseases and pests) and abiotic factors (fires, natural disasters: wind, snow etc.). In particular, coniferous forests are vulnerable (pines, fir and spruce) to forest fires and underbark pests (*Ips sp.*, *Blastophagus sp.*, etc.) that are usually present after fires due to the damaged and weakened immune system of trees. Fires represent the most destructive element for forests, while pests (underbark) further widen the damage and deterioration of the forests.

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<sup>15</sup>MAFRD – Department of Advisory and Technical Services: forests and ecotourism (p.2), Prishtina



In the burned forest areas, usually, pioneer plant species are developed such as wild willow (*Salix caprea*), wild aspen (*Populus tremula*) and birch trees (*Betula pendula*), while from the herbaceous species fireweed (*Epilobium angustifolium*) is widely spread. According to the Forestry Agency report during the period 2015-2017 in Kosovo, a total of 460 cases of fire have been recorded, involving both privately and publicly owned forests in a surface of 3928 ha. Based on the research, about 99% of forest fires are caused by the human factor, only one per cent can be caused by abiotic factors. In our country usually, fires are caused during the drought period in the summer months (June, July, August).

Table 8. Forest fires 2015-2017

No.	Years	No. Cases	Surface in ha		Total sur. ha
			Public	Private	
1	2015	134	800	444	1 244
2	2016	88	435	194	629
3	2017	238	1 031	1 024	2 055
Σ		460	2 266	1 662	3 928

Source: MAFRD

Broadleaf forests, especially beech and oak as the most widespread in the territory of Kosovo, are threatened by illegal logging of forests caused by the rural population who use the wood for heating purposes and by irresponsible people who use it for material benefits. This negative phenomenon has caused considerable degradation of forests throughout the territory of Kosovo, including national parks. The phenomenon of illegal logging of forests is influenced by many factors, among which are:

- The high demand for firewood as the main source for heating
- The difficult socio-economic situation (unemployment and poverty) of the rural population
- Lack of a national strategy and investments for protection of forest from illegal logging
- Failure in executing illegal logging files by the law enforcement bodies
- Lack of alternative ecological sources for heating
- Lack of control of timber assortment markets throughout the territory of Kosovo

The relevant institutions of the Republic of Kosovo for forest management (KFI and Municipal Forestry Units) and for national parks management (directorates of NP “Sharri” and NP “Bjeshkët e Nemuna”), during the period 2015-2017 have submitted 17.237 criminal reports to the authorities of justice (forestry - 16.737 reports<sup>16</sup>, national parks - 500 reports) for illegal logging of forests for a volume of 48,243.35 m<sup>3</sup> (forestry - 45,032.82 m<sup>3</sup>, national parks 3,210.53 m<sup>3</sup>).





Image 80. Consequences of illegal logging in the Firaja area



Image 81. Damages caused by natural disaster in Sharr

Illegal forest logging represents the main problem in forest resource management in Kosovo because they cause significant ecological damage and large economic (financial) losses. Since this is a problem at national (state) level, it requires the engagement of all relevant central and local institutions of the Republic of Kosovo. If no urgent and adequate measures are taken to prevent the illegal logging of forests, in the future major remediation means will be required and success will not be guaranteed.

In all of Kosovo forests, there is a presence of damages of different intensity from natural disasters (wind, snow, etc.), plant diseases (phytopathogens) and pests. Wind and snow damage is caused especially during the winter season, while the other two factors (diseases and insects) are active during vegetation development in the spring, summer and autumn seasons.

Plant diseases, mainly caused by fungus, have a sporadic character in most wood species. The most severe consequences in the past have been caused by the chestnut blight (*Cryphonectria parasitica*) and the so-called Dutch elm disease (*Ophiostoma ulmi*). Other plant diseases include:

- beech bark disease (*Necctria ditissima*),
- the cause of beech decay (*Fomes fomentarius*),

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<sup>16</sup> KFA: Report on the state of forests 2015 - 2017.

- fir bark disease (*Melampsorella caryophyllacearum*),
- causes of decay (*Armillaria mellea* and *Heterobasidion anosun*) in the fir and spruce trees,
- hornbeam bark diseases (*Taphrina carpini*) etc.

Among the many species of insects, bark beetles (*Scolytinae*) are singled out as the biggest forest pests, who massively appear after fires in coniferous forests. Based on the range and intensity of the forest damages it is also important to mention the pine caterpillar (*Thaumetopoea pityocampa*), oak moth (*Lymantria dispar*) etc. Most other types of insects have secondary character and mostly appear in old trees with weakened immunity.

A specific semi-parasite appearing in fir trees is the mistletoe (*Viscum album*) known as a plant with special medical values. This plant species takes the water from the tree where it is placed while producing food through photosynthesis.



Image 83. pine caterpillar pest



Image 84. mistletoe (*Viscum album*) in a fir tree

It should be noted that clean and even-aged forests are more vulnerable to the negative impacts of biotic and abiotic factors. Mixed broadleaf and broadleaf-coniferous forests have a more sustainable development. The natural renewal of forests is relatively good, which is also confirmed by the expansion of forest area for about 5% (20 200 ha) over the last 10 years (2002-2012)<sup>17</sup>.

Over the last two decades, the deterioration of natural resources (flora, fauna and ecosystems) have also been affected by global climate change, which is characterized by reduced annual rainfall, extremely high temperatures and droughts during summer and autumn.

Due to global warming, increased forest damage should be taken into account, in particular by fires, insects and natural disasters.

Relevant institutions, aiming at protecting and maintaining forests and supplying the market (population) with firewood and other timber assortments, have applied forest logging with a sanitary and cultivation character.

<sup>17</sup>MESP (2013): National Inventory of Kosovo Forests (2012).

KFA and Forestry Municipal Units during 2015-2017, have cut wood mass in a volume of 528,907.25 m<sup>3</sup>.<sup>18</sup> Limited cleaning and sanitation cutting of trees damaged by the fire, natural disasters, diseases and pests has also been applied in the national parks "Sharri" and "Bjeshkët e Nemuna". During the period 2015-2017, the volume of sanitary cleaning and cutting in NP "Sharri" was 9,803.02 m<sup>3</sup><sup>19</sup>, while in NP "Bjeshkët e Nemuna" it was 32,496.31 m<sup>3</sup>.<sup>20</sup>

In order to increase the forest area, the Forestry Agency annually performs forestation of about 250-350ha of bare forest land. The implementation of this measure is aimed at increasing the production of bare land, and returning them into the function of production. Two international organizations have contributed in this process of afforestations- FAO and GIZ. The Forestry Agency has planned the maintenance of afforestation in the bare lands in an are of about 737 ha, but has managed to realize 468 ha<sup>21</sup>.

## 10.2. Management of forest ecosystems and challenges

The issue of forest management is related to the status of the forest area, therefore there are two management approaches: forest management of protected areas (national parks) and forest management outside national parks (which have no protected status).

The management of forest ecosystems in protected areas, i.e. in national parks is based on the Law on Nature Protection (no 03/L-233), Law on NP "Bjeshkët e Nemuna" (no 04/L-086) and NP "Sharri" (no 04/L-087) and on other sub-legal acts (Administrative Instructions, Regulations, Decisions etc.) that are prepared by MESP and regulate the management of all natural resources of national parks. In managing the protected areas and species of flora and fauna international legislation is also applied (conventions and directives) covering the area of natural environment, while priority is given to Ecological network "Natura 2000", EU Directive on habitats, EU Directive on birds, etc.

Plans for managing national parks that are developed by MESP and respective departments are: spatial plans of national parks, long-term management plans, annual management plans and operative plans.

MESP is responsible for policies and management of protected areas, i.e. national parks, where the most important forests of Kosovo in terms of biodiversity and quality are concentrated. The direct management of national parks is carried out by respective directorates: Directorate for Administration of National Park (DANP) "Sharri" office in Prizren and Directorate for Administration of National Park "Bjeshkët e Nemuna" office in Peja, which operate within the Kosovo Environmental Protection Agency. These directorates manage all natural resources throughout the territory of national parks that include several municipalities.

<sup>18</sup>KFA: Report on the situation of forests in the period 2015 - 2017.

<sup>19</sup>DANP "Sharri": Annual working reports for 2015. 2016 and 2017.

<sup>20</sup>DANP "Bjeshkët e Nemuna": Report on fires, constructions and legal and illegal forest logging 2015-2017

<sup>21</sup>KFA: Report on the situation of forests in the period 2015 - 2017.

Management of public and privately owned forests and forest lands that are outside national parks is regulated with the Law on Forests in Kosovo (2003/3) and other sub-legal acts that are prepared by the Ministry of Agriculture, Forestry and Rural Development (MAFRD). Besides national legislation, management of forest ecosystems is closely linked with environmental legislation deriving from the international convention of Rio de Janeiro (1992) on the management, protection and sustainable development of forests.

The main planning basis for managing forests that are outside national parks, which is developed by MAFRD, consists of: Policy and Strategy paper on Forestry Sector Development 2010-2020; Long-term management plans for economic units, Annual management plans and Operative plans. Based on the Forestry Development Strategy 2010-2020, it is aimed that every year 30.000 ha of forest area is covered by long-term management plans. Kosovo Forestry Agency for the period 2015-2017 has successfully completed the development of 19 management plans for forest management units, which cover a surface of about 73,410.40 ha.

MAFRD is the responsible institution for development and implementation of policies on Kosovo forests. An integral part of MAFRD is the Department of Forestry, which is responsible for the development of policies and legal infrastructure. Kosovo Forestry Agency was established under the umbrella of MAFRD and it manages public and privately owned forest lands, and it is responsible for implementing laws in the area of forestry, issuing permits for collection of non-wood forest products, monitoring forest logging and development of forest resources. The Forestry Agency consists of six directorates in 6 cities in Kosovo (Prishtina, Peja, Mitrovica, Prizren, Gjilan and Ferizaj). In Peja the Forestry Institute has been established which conducts research on this field. Since 2010, based on the Law on Local Self-government (No 03/L-040), the Agency has delegated competences to municipalities regarding protection of forests and issuance of permits for logging of public and privately owned forests.

The main source for financing forest management, including national parks, is the state budget, while other sources include own source revenues generated from services and the use (sale) of natural products and donations.

Forest management faces numerous challenges and problems, including:

- Lack of investment in forest management, in particular for national parks. Directorates of national parks do not have a budget of their own but are financed under the KEPA budget which is very limited;
- Lack of workers (professional staff and guardians) at DANP "Sharri". This directorate, according to the NP "Sharri" Management Plan (2015), lacks 66% of human resources (there is a lack of workers in the municipalities of Dragash, Shtërpçë and Kaçanik). Forestry Institutions (Forestry Department, KFA and Municipal Forest Units) and DANP "Bjeshkët e Nemuna" have to a large extent completed their human management capacities.



- Incomplete legislation that implies the existence of legal gaps and the non-definition (mixing) of management powers over protected forest areas (national parks). In addition to legal deficiencies, a major problem is the non-implementation of existing legal provisions.
- Lack of a national strategy and of political support for the protection of forests from illegal logging as well as from fires, diseases and pests. This has caused major negative ecological and socio-economic consequences in all parts of Kosovo, including the forest areas of national parks.
- Hunting and uncontrolled use of non-wood forest resources (herbs, forest fruits, minerals, tourist capacities, etc.). This has caused damages in these resources as well as significant financial losses.
- Insufficient co-ordination and cooperation among different interest groups.

### 10.3. Conclusions and recommendations

Forests represent the most complex and most important ecosystem in the natural environment. The importance of forests is expressed through several functions, such as: economic (biomass production), social (impact on health and well-being of the people) and ecological (impact on the environment). The forest of Kosovo, considering that they cover half the territory (around 45%) of the country and are the main factor for ecological balance, represent a national resource.<sup>22</sup>

The state Kosovo forest is unstable due to the negative impacts of biotic and abiotic factors. The most prominent forest damage is caused by the anthropogenic factor (human) through illegal logging and fires. Other factors (diseases, pests and natural disasters) cause forest damages of varying intensity of mainly sporadic character, whereas high level damages are the result of some bark insects that are usually found in large numbers following the fires in coniferous forests. During the period 2002-2012, Kosovo's forest area has increased by 5% (it now occupies about 45% of the total area) but continuous damages and degradations of forests have adversely affected the quality and quantity of wood mass. In addition to economic losses, the social and ecological functions of forests have also been weakened.

Forest management is hampered by the many challenges and problems faced by relevant forestry institutions and national parks. Challenges are of a different nature: political (lack of managerial authority in the north), legal (combination of managerial competences), economic (lack of financial means), organizational (lack of employees), etc.

For the purpose of addressing the management of forests, the challenges and problems that have caused the difficult situation of forests and forest management institutions and of national parks.

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<sup>22</sup> Law no. 2003/3 on Forests of Kosovo, Article 1, paragraph 1.2.

In order to avoid challenges and problems and to ensure sustainable forest management, comprehensive measures need to be taken while the following were distinguished:

- Extending the forest management authority in northern Kosovo by KFA;
- Completion of legislation on forest management within and outside protected areas (national parks), which implies adaptation with EU legislation and definition of all management aspects and competencies of responsibilities between forestry institutions and national parks;
- Completion of the organizational structure, namely the fulfillment of the human capacities in the management institutions;
- Provide sufficient budget for sustainable forest management, with particular emphasis on national parks where lack of funding is more pronounced;
- Drafting a strategy for the protection of forests from illegal logging. This strategy should be comprehensive which, in addition to direct measures of protection, should include educational projects for ecological awareness of communities and socio-economic projects for improving the situation of rural population;
- Establishment of institutional management on hunting and exploitation of non-wood forest resources (medicinal plants, forest fruit, minerals, eco-tourism). It is necessary to draft a strategy and adequate management plans for these forest resources which would enable their rational and sustainable use and provide alternative financial resources for forestry institutions and national parks. The German organization GIZ has provided a special contribution to ensuring a planning base for the use of non-wood forest resources;
- Increase cooperation with all stakeholders, in particular with security institutions, financial institutions and NGOs. Forestry and natural resources management generally functions as a chain system that links many (management, financial, security, justice, inspection, monitoring and education) institutions. If one chain link (institution) fails, the entire functioning of the system is called into question. Therefore, the cooperation and coordination of all governmental and non-governmental institutions for ensuring sustainable forest management in Kosovo is of special importance;
- Provision of alternative sources (gas, solar energy, etc.) for heating that fulfil ecological and economic conditions to reduce the high demands for firewood and the pressure for excessive forest cutting;
- Establish effective legal inspection and control over the market of wood products throughout Kosovo, where currently a total anarchy prevails;
- Prohibition of the usurpation of forests and forest lands in public ownership and undertaking of measures for the restitution of usurped properties.

## 11. ECOTOURISM

### 11.1. Ecotourism in Protected Areas

Ecotourism in Kosovo is a new phenomenon, but in many countries this kind of tourism is a pillar of sustainable economic development. Kosovo is known for rare values of natural heritage. Geographical location, terrain, climate, water resources, landscapes, canyons, rich flora and fauna are ideal prerequisites and present a high potential for ecotourism development. Kosovo has good potential to develop cave ecotourism, mountain ecotourism, recreational-sport ecotourism, summer ecotourism, rural ecotourism and educational ecotourism.

**Caves ecotourism** - The general public is aware of the natural attractions of the Gadime Cave, which is also one of the largest tourist attractions in the country. In recent years, Radavc cave has also been opened, which is the second caved open for Kosovo visitors. However, there are several other caves in Kosovo, and improvement of their infrastructure would provide very good conditions for the development of cave tourism, such as: the Gryka e Madhe cave, Panorc cave, Dush cave, Zatriq caves, etc.

**Mountain ecotourism and walking in nature** - In remote mountainous areas of Kosovo there are many mountain trails that provide realistic opportunities for outdoor walking, mountain biking trips, as well as expeditions and campings. Besides Sharri and Bjeshket e Nemuna mountains, this type of tourism can be developed in Shala e Bajgores mountains, Berisha mountains, and Jezerc mountains, etc.

**Summer and one-day tourism** - appropriate climate, numerous water resources, scenic landscapes also present a prerequisite for the development of summer tourism and camping; Batllava lake, Mirusha canyon, Rugova valley, Batllava lake, Mirusha canyon, Gryka e Rugoves, Nerodime river bifurcation, Museum of crystals in Stan Terg, the spring of Drini i Bardhe, Radavc cave and Brezne lake are only some of the areas that during the summer season are considered as permanent destinations for many tourists and nature lovers who want to spend a day in nature.

**Rural ecotourism** - In many rural areas of Kosovo, especially in the mountainous areas, many customs, traditions, games, songs, clothing and traditional foods are still preserved. These exceptional cultural assets are a good opportunity for rural tourism development and promotion of these values. Mountain villages that lie in the Sharri Mountains and especially the villages of Dragash municipality and of the region of Novoberdo are known for such values.



*Image 85. Winter mountain tourism (photo by Hiking njeri)*

**Recreational and sport ecotourism** - In the Sharr Mountains, in the Bjeshket e Nemuna Mountains and in other mountainous areas of Kosovo, there are many suitable terrains for skiing activities. The capacity of skiing terrains of these centres can receive thousands of visitors during the winter season. While, over the summer, in the Sharr and Bjeshket e Nemuna Mountains there are many peaks which are very attractive for the development of climbing and mountaineering. Kosovo, besides the two special hunting reserves (Blinaja and Duboçak), has also many other recreational areas that are with mammals and wild birds, that provide ideal conditions for the development of hunting ecotourism. Such areas include Bjeshket e Nemuna, Sharr Mountains, Berisha Mountains, Jezerc Mountains, etc. In the meantime, some rivers and streams provide excellent conditions for the development of sport fishing. Drini i Bardhe, Drenica, Lumebardhi, Mirusha, Llapi, Ibri and Lepenci, besides the picturesque landscapes, are also important fishing areas. In these rivers can be hunted mountain trout, pickerel, carp, nase, etc.

**Educational and scientific ecotourism** - Untouched mountain ecosystems, the presence of rare plants and animals, unexplored caves, canyons, multiple streams of water and underground resources of Kosovo provide a potential for the development of educational and research activities with pupils, students and scientists from Kosovo, but also for foreign research expeditions.

**Ecotourism destinations in Kosovo** - Without a doubt, the most interesting and attractive destinations for ecotourism in Kosovo are nature protected areas. Currently, the number of Nature Protected Areas is 184 and includes an area of 126119.29 ha (11.55% of the Kosovo territory). The most important ecotourism destinations in Kosovo are: Sharr Mountains, Bjeshkët e Nemuna, Mirusha Waterfalls, Blinaja, Gadime Cave, the spring of Drini i Bardhe, Radavc Cave, Gryka e Madhe Cave, Batllava lake, etc.





*Image 86. Recreational and sport ecotourism (hiking njeri)*

### 11.2. State

Despite these exceptional values and ideal opportunities for the development of ecotourism, the lack of infrastructure, lack of mountain trails, lack of tourist guides, lack of investment, lack of concrete plans and projects have hindered the development of ecotourism capacities.

A particular problem is the approach that Kosovo governmental institutions and society have towards exploiting this potential. Uncontrolled use of natural resources, damage to ecosystems, illegal hunting, expanding settlements in protected areas pose a constant threat to these values and a barrier to the development of ecotourism.

### 11.3. Recommendations

- *The development of the ecotourism sector in Kosovo depends heavily on further investment and on improvement of infrastructure, which should be aligned with the ecotourism concept;*
- *The more professional promotion of eco-tourism areas, increased investment, drafting of projects and programs, and the preparation of a national strategy for ecotourism development would help make Kosovo an attractive ecotourism destination;*
- *Special attention should be paid to community awareness on the importance of preserving natural heritage values and to informing them about the potential benefits that might derive from this type of tourism;*
- *Implementing best proven experiences and practices in countries that have developed this type of tourism provides an opportunity that can be carried out in Kosovo as well.*

## 12. NATIONAL PROJECTS AND PROJECTS FINANCED BY DONORS

### 12.1. Marking of nature monuments

Institute for Nature Protection of Kosovo, in 2016, has implemented the project for marking the protected areas - nature monuments, in the 17 municipalities in which these objects are located. During the implementation of this project funded by the Government of the Republic of Kosovo (MESP) a total of 124 nature monuments, three (3) nature monuments of special importance, and one (1) protected landscape were marked.



*Image 87. Marking of nature monuments*

### 12.2. The Red Book of Fauna

Within the framework of the Kosovo Environmental Programme (KEP) funded by the Swedish Government - SIDA, the project (second component) Inventory of biodiversity through the Red Book of Fauna is being implemented.

During 2016-2017, a large number of activities have been carried out within the drafting of the Red Book of Fauna project, such as: preparation of the working methodology for the drafting of the Red Book of Fauna (according to IUCN criteria), drafting of the work plan, preparation of the terms of reference for the experts, preparation of the contents of the red book of fauna, engagement of 5 local experts (international experts to be engaged in the future), organizing and conducting the first workshop (2017) with experts (the purpose of the workshop was their familiarization with the methodology of work), preparation of a list for the purchase of equipment necessary for developing the Red Book of Fauna.

The implementation of this project is of great importance for MESP, MAFRD, UP, NGO-s, etc. since fauna inventory is conducted for the first time in Kosovo, and based on the data of the Red Book of Fauna, policies and strategies for protection and conservation of fauna in Kosovo will be drafted. The completion of this project and the publication of the Red Book of Fauna is foreseen to be completed by the end of 2018.

### 12.3. Increasing management of natural cross-border areas

Component 3 of the Kosovo Environmental Program (KEP) aims to support Directorates of National Parks (NP) at building an appropriate structure for park management and strengthening technical and professional capacities to promote sustainable development of the NPs. This component is one of the eight technical components of the Kosovo Environmental Program (KEP) proposed by the Ministry of Environment and Spatial Planning (MESP), funded by Sida and managed by the Swedish Embassy in Kosovo. Within this project, four regulatory plans for the third areas will be prepared: two in the National Park "Bjeshket e Nemuna" (Bogë and Gropa e Erenikut) and two in the National Park "Sharri" (Prevalle and Zaplluzhe). A management plan for the National Park "Bjeshkët e Nemuna", and the information centre in the two national parks will also be developed.

### 12.4. Inventory of types of plants, animals, types of natural habitats and their mapping

Priority habitat data according to Annex I of the EU Habitats Directive and the correlation with the corresponding categories according to the EUNIS classification produced under this project serve as the baseline database of the MESP habitats, where future data are to be added.

Based on the designation, assignment and based on the MESP expectations for project products, after reviewing and evaluating the materials, documents and reports submitted by the company, the following studies and activities were conducted:

- Types of natural habitats of interest to the community for the conservation of which is required the designing of special conservation areas.
- List of plant and animal species identified by literature including systematic data, presence in relevant documents such as Annexes of the EU Habitats Directive and other relevant documents, and the status under IUCN.
- List of plant and animal species with relevant data from the EUNIS database, including data on the presence in relevant documents, code according to NATURA 2000, dispersion in Kosovo, preferred habitat, etc.
- Relevant codes that connect plant and animal species with their presentation on maps, geodatabases, MDB and DB database. Maps: plants, habitats, vertebrates, birds and invertebrates.
- Guide on the use of classification of habitat types according to EUNIS. The Interpretation Manual for Habitats - (according to Annex I of the EU Habitat Directive) and training for MESP staff for "Classification of Natural Habitat Types".

## 12.5. The Open Regional Fund for South Eastern Europe - Biodiversity (ORF-BD)

This project, which commenced in 2016, is funded by the Federal Ministry for Economic Cooperation and Development (BMZ) and is implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

**Project Objective:** Increasing regional cooperation in South East Europe to contribute to the implementation of the EU 2020 Biodiversity Strategy.

South-East Europe (SEE) is extraordinarily rich in terms of biodiversity, ranging from coastal areas, river areas, and forests to high mountain massifs. A special feature is the variety of endemic flora and fauna in the Western Balkans.

In spite of the importance of species and the ecosystem diversity both at the regional level, as well as at the national and local level, it is not sufficiently covered; therefore, an adequate way of integrated protection as foreseen in the development plans is lacking.

Accession to the European Union (EU) is a common goal for all countries in the region of South East Europe, so the implementation of European environmental legislation, as complex and cross-sectoral, makes cooperation between countries a major challenge. The project is designed to support and promote regional co-operation of biodiversity-related organizations - in particular environmental ministries and environmental agencies that deal with, or affect biodiversity and ecosystems, including forestry and agriculture, municipal administrations, academic institutions and research institutes, as well as non-governmental environmental organizations.

This is done through the implementation of regional sub-projects involving organizations from at least three countries involved in this project. ORF BD closely cooperates with existing regional initiatives and networks and supports the forming of partnerships to achieve the targeted effects and to increase sustainability.



The main areas of engagement of the GIZ project are:

- Biodiversity Task Force (BDTF),
- Regional Network for Biodiversity Information Management and Reporting (BIMR),
- Regional Network of Biodiversity-related Civil Society Organisations (BioNET),



- Ecosystem Services Assessment and Valuation (ESAV) in future course of action in SEE, and
- Transboundary Ecosystem Management at local level (TEM).

Current project achievements are:

- Establishment of the Regional Biodiversity Task Force within the Regional Co-operation Council (RCC);
- National assessments of the Regional Network for Biodiversity Information Management and Reporting (BIMR) in all SEE countries;
- Establishment of the Regional Network of Biodiversity-related Civil Society Organisations (BioNET),
- Networking of biodiversity experts in the region including support of emerging nature conservation network. (BalkaNatureNet);
- Training on the concept of ecosystem services and assessment to increase human resource capacities have been conducted by governmental and non-governmental organizations;
- Parliamentary Groups and Committees in the region have been informed on raising awareness and knowledge on biodiversity and ecosystem services;
- Launching support for the implementation of the Joint Biodiversity Vision in the Sharr Mountain Cross-border area at local, national and regional level, etc.;

The first phase of this project is expected to be completed in May 2018, to continue afterwards with the second phase, the proposed objective of which is the strengthening of regional co-operation to implement the international and EU obligations to preserve biodiversity;

#### **12.6. Project BORN - BORDERless Nature (Biodiversity Protection and Development of “Bjeshket e Nemuna” and “Prokletije” National Parks”)**

This project, carried out during 2016-2017, was implemented by the Italian organization "Trentino Con il Kosovo" and the Municipality of Plava in cooperation with the Kosova Environmental Protection Agency and the Center for Regional Development in Rozaje. The project was funded by the European Union Office in Kosovo, within the IPA Cross Border Cooperation Programme Montenegro – Kosovo.

The overall objective of the project was to protect and improve biodiversity in project areas and in particular at the National Parks "Bjeshket e Nemuna" (Kosovo) and "Prokletije" (Montenegro), promoting sustainable socio-economic development through cross-border cooperation between institutions. The direct beneficiaries of this project were the National Parks of Bjeshket e Nemuna and Prokletije, and the municipalities of: Peja, Istog, Petnjice, Plava,

Local administrations, schools, universities, civil society organizations, farmers, tour operators, restaurants, hotels and local leaders.

The main activities envisaged within the BorN project were:

- Establishment of the steering committee and creation of stakeholder maps;
- Biodiversity mapping;
- Establishment of a Transboundary Ecological Network;
- Raising awareness on the value of natural resources in the education system;
- Concrete development projects on renewable energy, forestry, natural resources and dairy;
- Increase of nature touristic offers.

The following are the results of this project:

- Establishing of a partner map in the active cross-border area with a view to protecting the environment, biodiversity and promoting tourism;
- Identifying cross-border biodiversity in Kosovo and Montenegro and mapping it into the Web GIS platform;
- Establishing of the Cross-Border Ecological Network;
- Preparing of Educational Packages (on Environmental Education in schools);
- Preparing of a brochure regarding proper forest management in Kosovo and Montenegro;
- Carrying out cross-border research on medicinal plants;
- Carrying out study visits in Italy for the creation of an educational package on environment and forest management;
- Creating tourist offers in Rugova:
  - Preparing and rehabilitating pathways such as: Shtegu i Çobanëve (108 km), Mountain Cycling pathway with two sub-paths “Rekë e Allagës” (4.26 km) and “Shtupeqi i Madh” (5.39 km), Rock climbing pathway “Vip Balcony” with 15 climbing areas.

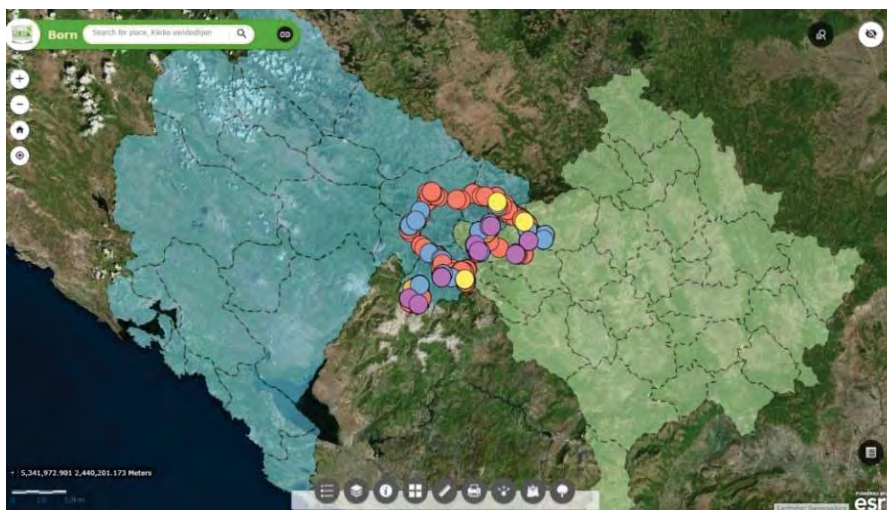


Fig. 9. Web-GIS map implemented within the framework of the Cross-Border Ecological Network Project

## 12.6. Cooperation with the European Association “Green Belt”

The European Green Belt Initiative has been initiated since 2003, and on 24 September 2014, in Slavonice of the Czech Republic, the European Green Belt Association was established, while its official registration was made in February 2015.

So far, twenty-seven governmental and non-governmental organizations have joined the Green Belt with fourteen European countries, and its Board has been established in which seven organizations are part of, and it has been decided that EuroNature from Germany be the chair. In this association, besides the 16 member states of the European Union, there are also some non-member states, such as: Kosovo, Albania, Montenegro, Serbia, Macedonia, Turkey, Russia and Norway.



Fig.10. The map of Green Belt

Kosovo is part of this initiative even earlier and after the registration of the Association - since 2015 is represented through the Institute for Nature Protection of Kosovo, as its regular member. While the areas that are part of the European Green Belt are: National Park “Bjeshkët e Nemuna”, “Sharri”, and Nature Park “Pashtriku”.

EuroNature from Germany organizes regular meetings with representatives from its member countries. At the same time, it is engaged in developing the definition of the possibility of spatial expansion of the Green Belt, within the framework of the project "The European Green Belt as part of Green Infrastructure". This project was supported by the German Federal Agency for Nature Conservation, with funds from the German Federal Ministry for the Environment, Nature Conservation, Construction and Nuclear Security.

## **12.7. Cooperation with the University of Konstanz**

Since 2015, when the Cooperation Agreement between the Departments of Biology of the University of Prishtina and the University of Konstanz in Germany and the Kosovo Environmental Protection Agency (KEPA) has been signed with the purpose of collecting scientific materials and collecting them in Kosovo Environmental Education & Research Center in Junik, so far a few activities have been carried out.

At the initiative of the Kosova Environmental Education & Research Center - KEERC, the cooperation between the University of Konstanz in Germany, together with the Max Planck Institute for Ornithology, and the University of Prishtina - Department of Biology and Institute for Nature Protection of Kosovo has started. Within this cooperation, several activities were carried out with the purpose of researching and inventorying fauna, not only within protected areas but also outside of those areas.

These activities were related mainly to the holding of three Summer Schools (2015-2017) as well as courses for banding of wild birds. During these activities, MESP has been provided with data on the presence of many fauna species, some of them still unconfirmed for Kosovo.

KEPA, during this period has tried to support these activities mainly through providing data such as maps, lists of existing fauna species, common field activities etc.

### **12.8.1. Summer School 2015-2017**

In 2015, the realization of the Summer School started, namely a two-week joint activity between the above-mentioned institutions, which continued during 2016 and 2017 also. Within this on-going activity, with the participation of the Kosovar and German students of the respective universities, a considerable amount of material for zoological collection has been



prepared/conserved and a fauna database has been established, where so far over 1000 findings of different vertebrate species (especially reptiles, amphibians and fish) and invertebrates (especially Lepidoptera, Saltatoria, Coleoptera, Hymenoptera, Gastropoda, Crustacea, Arachnida, etc.) have been identified.



*Image 88. Field work*

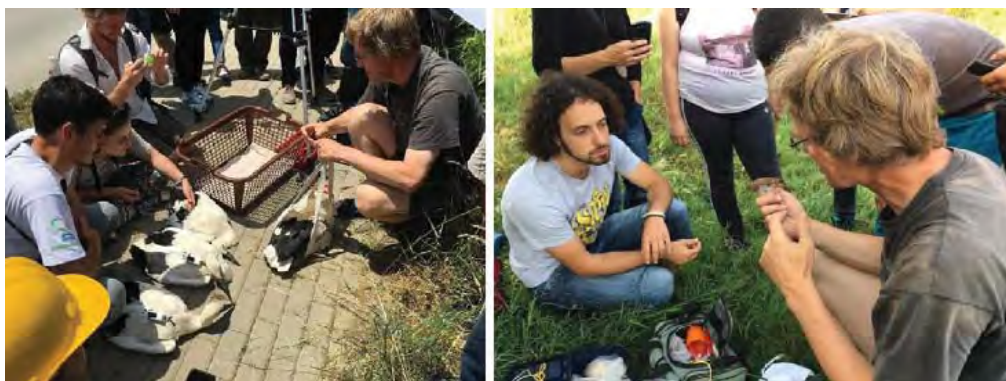
### 12.8.2. Bird banding

At the initiative of the Kosova Environmental Education & Research Center - KEERC, experts of the Max Planck Institute for Ornithology from Germany in cooperation with the University of Konstanz in Germany, University of Prishtina - Faculty of Mathematics and Natural Sciences and Institute for Nature Protection of Kosovo for the first time in Kosovo have conducted training for the wild birds banding and research of bats.

This course, held during 2016 and 2017, was intended to provide an introduction to the bird banding technique, the method of catching birds and bats, bird banding and the tracking of migration of the wildlife. In this training there were representatives not only from Kosovo but also from neighbouring countries such as Albania and Macedonia and it was dedicated both to amateurs and professionals. In total, during 2016-2017, for the first time in Kosovo, 55 birds have been banded with bands brought by the Max Planck Institute since Kosovo still does not have its own national wildlife banding code but it is thought that the procedures for certification with this code will soon begin by the EURING.

During these activities, practical work has been carried out on the banding of eight storks (*Ciconia ciconia*) and the placement of (GPS) equipment for tracking their movements - migration to five individuals of this specie, which enjoys national protection status. By tracking of these individuals, the migration path of storks from Kosovo (on September), which goes through the Bosphorus

to Africa has been identified, where the storks spend the winter period to return (in March) in the same way. The localities in which this activity is carried out are mainly along the Sitnica river basin, which is known for a significant number of stork nests.



*Image 89. Banding of different species of wild birds*

## **12.8. Project of Forest Area of Ancient Beech**

### *“Ancient Beech – World Heritage”*

In 2007, the Ancient Beech Forests of the Carpathians in Slovakia and Ukraine were included as part of the UNESCO World Heritage, while in 2011 this world heritage has expanded with the “Germany's Ancient Beech Forests”. During the expansion phase, the World Heritage Committee has recommended the next stage in this process. Thereafter, three meetings were held, initially with experts and then meetings at government and national level, with the aim of continuing this project in order to identify areas with ancient beech forests in other regions of Europe and the world. Germany has begun the process of further reviewing the research and development of the project, assessing the potential for labelling it as World Heritage in Europe.

The Kosovo Institute for Nature Protection has been involved in this project since April 2014 when an expert-level meeting was organized in Vienna to identify potential areas of ancient beech forests in Europe. Participants from different levels and organizations from 20 countries participated in the meeting and a total of 37 projects were presented. Kosovo was presented with the area of old beech forests within the NP “Bjeshkët e Nemuna”.

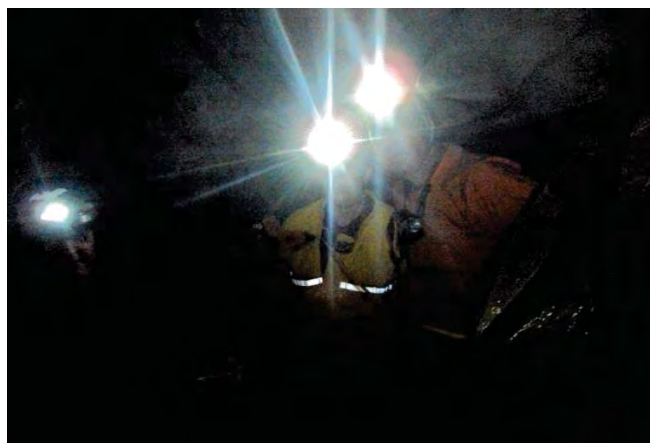


*Image 90. From the National Level Meeting at the Ministry of Environment, Bon*

The following countries are part of the fourth Moesian-Balkan region: Kosovo, Albania, Macedonia, Montenegro, Serbia, Greece and Bulgaria. The criteria used for the World Heritage labelling procedures are: buffer zone, size, age and time off of forest use. While entry procedures in UNESCO's World Heritage include the defining of generally remarkable values.

#### **12.10. Speleological Research Expedition**

During the year (2017), the Kosovo Institute for Nature Protection in cooperation with Bulgarian Speleology Association conducted a research expedition in the limestone territories on Mount Akovan in Zatriq village of the Municipality of Rahovec. During this expedition, 5 caves such as Shpella e Peshterrit, Shpella e Bali Agës, Shpella e Plumbave, Shpella e Mbretëreshës së Bardhë dhe Shpella e Banuar (Gërgavica) were explored, as well as the profiles of each of the explored caves were prepared.



*Image 91. Speleological Research Expedition*

## **13. MEASURES UNDERTAKEN FOR NATURE PROTECTION**

### **13.1. Inspection of Protected Areas**

During 2015-2017, the Inspectorate of MESP inspected a large number of interventions that have taken place in the protected areas and are processed according to the laws in force. In the absence of data for 2015/2017, in the table no. 9 are presented inspections (August - December 2017)).



Table. 9. Inspected area during 2017

No.	Protected area/operator	Municipality	Type of activity	Decision
1	NP "Bjeshkët Nemuna"	Peja	Expansion and asphaltting of the road "Milishevc-Lumbardhë"	Order to obtain environmental approval.
2	NMSI "Ujëvarat Mirushës"	Malisheva	Construction of the road "Llapqevë - Ujëvarat e Mirushës"	Order to obtain environmental approval.
3	"Ajani" LLC	Shtërpca	Limestone users in the location: Izhance, Shtërpce (appearance of elements for "Marble Cave" in limestone at this location)	Interruption of the operating activity until assessment by relevant institutions such as MESP, ICMM, MED which have concluded that there are not enough elements to be declared "Marble Cave".
4	Ura e Fshajtë	Gjakova Rahovec	Excavation of the terrain near the Ura e Fshajtë (assumed for construction purposes)	Restriction tape is placed at the location - the terrain is excavated and the Municipal Inspectorate of Gjakova was ordered to follow the situation.
5	NP "Bjeshkët e Nemuna"	Peja	Asphaltting of the roads Maja e zezë - Peklenë - Shtupeq i Vogël and Shtupë e Madhe - Rugova, from the municipality of Peja.	Prohibition / order of work termination and order to be equipped with environmental consent.
	NGO "Shqiponja" Kopsht zoologjik	Prizren	Zoo, keeping domestic or foreign wild animals in internment.	It is ordered to apply for permission in order to keep animals in internment and present them to the public.

Source: Inspectorate of MESP

### 13.2. Minor offence proceeding in the nature protection area for 2015-2017

In 2015-2017, in the nature protection sector within the requirements for initiation of minor offence proceeding pursuant the Law on Nature and the Law on National Parks as well as the relevant legislation, KEPA / Directorates for the Administration of National Parks submitted a total of 460 criminal charges; 84 requests for initiation of minor offence proceeding; and 3 requests for initiating the proposal claims for civilian dispute.

By initiating these 547 minor offence proceedings it is alleged the compensation of the damage in the total amount of € 1,251,592 for the institution caused by illegal actions from irresponsible persons (table).

Table 10. Initiation of minor offence proceeding in the nature protection area for 2015-2017

Source: KEPA

	Criminal charges		Request for initiation of civil proceedings		Request for initiation of minor offence proceedings	
	Number of cases	Amount of damage in €	Number of cases	Amount of damage in €	Number of cases	Amount of damage in €
2015	148	367280	1	48356	63	56056
2016	83	192616	1	68466	6	1332
2017	229	441364	1	62355	15	15765
Total	460	1001260	3	177179	84	73153

### 13.3. BIO-GEOGRAPHICAL regions

In 2016, the Kosovo Institute for Nature Protection, in cooperation with the Working Group, defined the bio-geographical regions for the purpose of meeting legal obligations, duties and the preparatory condition for initiation of the inventory process of the Natural Protected Areas 2000.

According to the digital map of biogeographic regions of Europe, two biogeographic regions were identified in Kosovo; *Continental Region* (90%, *Alpine region* (10%).



Fig.11. Biogeographical Regions Map

### 13. PARTICIPATION IN NATURE PROTECTION ACTIVITIES

#### 14.1. Activities organized by MESP and its Partners 14.1.1.

##### 14.1.1 Celebrating the International Day for Biological Diversity (2015-2016)

This international event was celebrated with activities held in Prishtina, respectively in "Gryka e Rugovës" in Peja, organized by MESP in cooperation with NGO "Era Group" and the University of Prishtina - Department of Biology. The international theme for 2015 was *"Biodiversity for Sustainable Development"* and for 2016 the theme was *"Mainstreaming Biodiversity; Sustaining People and their Livelihoods"*



22 MAJ 2015  
DITA BOTËRORE E BIODIVERSITETIT  
BIODIVERSITETI PËR ZHVILLIM TË  
QENDRUESHËM



Image 92. Celebrating the International Day for Biological Diversity in 2016

##### 14.1.2. Celebrating the International Day for Biological Diversity 2017

MESP, at the jointly organized event held at NMSI "Ujëvarat e Mirushës", together with the students of FMNS and the Municipality of Klina, marked this day with different activities. On this occasion were also exhibited the works of students under the theme *"Biodiversity and sustainable tourism"*.



Image 93. Celebrating the International Day for Biological Diversity



## 14.2. Reporting in EEA/EIONET

The Kosovo Institute for Nature Protection within its cooperation with the European Environment Agency - EEA and reporting process to the European Environment Information and Observation Network - EIONET, from 2011 reported in the following institutions.

Within the activities and commitments in the process of reporting for biodiversity indicators, KINP even during 2015-2017 has also successfully reported in EIONET on the indicator of nature protected areas - Common Database on Designated Areas (CDDA).

It should be mentioned that even during this period, as in the previous years, this report is estimated with maximal grade by the officials of EIONET.

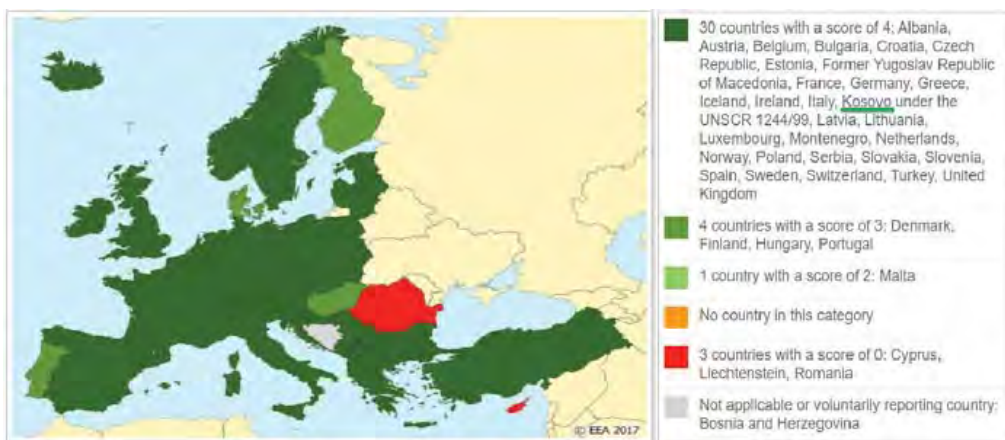


Fig. 12. General Performance of Countries in the Reporting period of 2017

## 14.3. Participation at the 9th Pan-European Green Belt Conference

Under the organization by EURONATURE and the Ministry of Environment of Finland, from 31 October until 3 November 2016, in Kololi Finland, was held the 9th Pan-European Green Belt Conference. This conference, which gathered more than 125 participants from 24 European countries, marks a milestone for future cooperation between these states which were for many years divided by the iron curtain. During this meeting, they exchanged the best practice examples, experiences, and knowledge concerning this activity. The conference also served as a very important place for exchanging ideas and opinions in order to improve, preserve and restore the European Green Belt, as well as increase sustainable development along the European Green Belt.

Within this conference, was held the General Assembly of the European Green Belt Association, attended by representatives of more than 30 governmental and non-governmental organizations from 24 countries, where issues such as financial report for the previous period, the election of Board Members and other important issues were discussed. Kosovo since 2015 is represented in this Association - an important organization for nature protection with a special emphasis on cross-border, through the Institute for Nature Protection.



*Image 94. Participation at the 9th Pan-European Green Belt Conference*

#### **14.4. Participation in the study visit in Austria, Italy and Slovenia (SIDA - Environmental Program for Kosovo in 2017)**

The study visit was organized in Austria, Italy and Slovenia funded by the "Environmental Program of Kosovo" respectively in the Third Component "Strengthening the management of natural cross-border areas". Through meetings and conversations held with responsible institutions from various professional administrative levels, we were offered the opportunity through practical examples to learn about the ways, procedures and key actors in the proper treatment of nature protected areas, including cross-border areas. Main purpose of the visit was to learn about the practices of treating the nature protected areas and institutional responsibilities in their protection and development.



*Image 95. National Park "Hohe Tauern" Austria*

#### 14.5. Participation in the workshop “Global Geoparks in South Eastern Europe”

Participation in the workshop “Global Geoparks in South Eastern” held in Idrija, Slovenia.

The workshop was organized by the UNESCO office with headquarters in Venice, Italy. This workshop was attended by representatives of Southeast European countries, where the topic of discussion was cooperation between Southeastern European countries, in the network of protected areas, with particular emphasis on Geoparks (declared category by UNESCO).



Image 96. Workshop on Geoparks in Slovenia

#### 14.6. Participation in the study visit in Italy within the BorN Project

Under the organization of NGO Born and *Trentino Con il Kosovo* as co-implementers of *BorN project - Borderless nature project, Biodiversity Protection and Development of the Bjeshkët e Nemuna and Prokletije Natural Parks*, from 14 to 20 May 2017, a study visit was held in Trentino, Italy. This visit aimed at exchanging practices between National Parks "Bjeshket e Nemuna" in Kosovo and "Prokletije" in Montenegro with the National and Natural Parks of Trento Province.

During the visit, good forest management techniques were exchanged, not only to promote the protection of nature and biodiversity, but also to establish relationships between people and nature in general.

In the study visit to Trento attended a group of 14 officials from Kosovo and Montenegro, including representatives from the Environmental Protection Agency, representatives of local institutions and non-governmental environmental organizations.

## 15. CONCLUSIONS AND RECOMMENDATIONS

The state of protected areas and biodiversity in Kosovo is unsatisfactory and conditioned by biotic factors (humans, insects, diseases) and abiotic factors (fires, natural disasters, wind, snow etc.).

### *Conclusions*

- Partial implementation of existing laws;
- Lack of adequate institutions for the protection of nature;
- Lack of staff in the KINP and in the Directorates of management bodies for protected areas;
- Lack of spatial and management plans for protected areas;
- Lack of Regulatory Plans for Third Areas for National Parks;
- Lack of management bodies for protected areas stipulated by law (NMSI "Gadime Cave" and "Mirusha Waterfalls");
- Uncontrolled use of natural resources in protected areas;
- Lack of scientific research on biodiversity;
- Lack of full inventory of flora, fauna and habitats;
- Insufficient funds for nature protection;
- Interventions in protected areas (road opening, illegal construction, illegal logging, indiscriminate exploitation of natural resources, infrastructure etc.).
- Uncontrolled tourism in protected areas.

### *Recommendations*

To improve the state of nature in Kosovo, it is necessary the undertaking of measures, such as:

- *Research and inventory of species and habitats;*
- *Research and inventory of geo-heritage;*
- *Drafting the Red Book of Kosovo fauna;*
- *Drafting the Management Plan of the National Park "Bjeshket e Nemuna";*
- *Approval of the Spatial and Management Plan of the National Park "Bjeshket e Nemuna";*
- *Measures to prevent illegal logging in protected areas;*



- *Prohibition of uncontrolled exploitation of natural resources in protected areas;*
- *Application of sanitary measures for rehabilitation of damaged forests from biotic and abiotic factors represented in the relevant plans;*
- *Prohibition of granting of environmental consents and construction permits for hydropower plants and quarries in protected areas;*
- *Drafting of programs and projects to raise awareness and sensitization for nature protection;*
- *Establishment of the coordination office for identification, ratification and implementation of conventions and other international agreements for the protection of nature;*
- *Establishment of departments for management of special importance monuments;(Gadime Cave and Mirusha Waterfalls) and SPZ (Henc wetlands - Radeves);*
- *Impose measures to ensure safety for visitors in Gadime Cave;*
- *Establishment of institutional management on hunting and exploitation of non-wood forest resources (medicinal plants, forest fruits, minerals, ecotourism etc.);*
- *Prohibition of the occupation of forests and forest lands in public ownership and undertaking of measures for the restitution of usurped properties;*
- *Capacity building of employees in protected areas administration;*
- *Marking and digitization of protected natural areas;*
- *Harmonization and categorization of protected areas under the Law on Nature Protection;*
- *Increasing the staff at KINP;*
- *Strengthening cooperation with local and international organizations in the field of nature protection;*
- *Apply for membership in international organizations such as: IUCN, Biodiversity Convention (RIOS), Ramasar Convention etc.;*
- *Implementation of cross-border projects for nature protection (Kosovo-Albania, Kosovo-Montenegro and Kosovo-Macedonia)*
- *Obtain the professional opinion from KINP and obtain consent from the appropriate management body for all interventions in protected areas;*
- *Prohibition of hydropower constructions (dams) within protected areas;*
- *Increase inspections in protected areas by MESP inspectorate;*
- *Prepare regulatory plans for third areas in National Parks;*
- *Defining the competences for granting consents and building permits at National Parks;*
- *Harmonization of the Nature Legislation with the EU Conventions and Directives.*

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## 17. ANNEX I: Map of Protected Areas (2017)

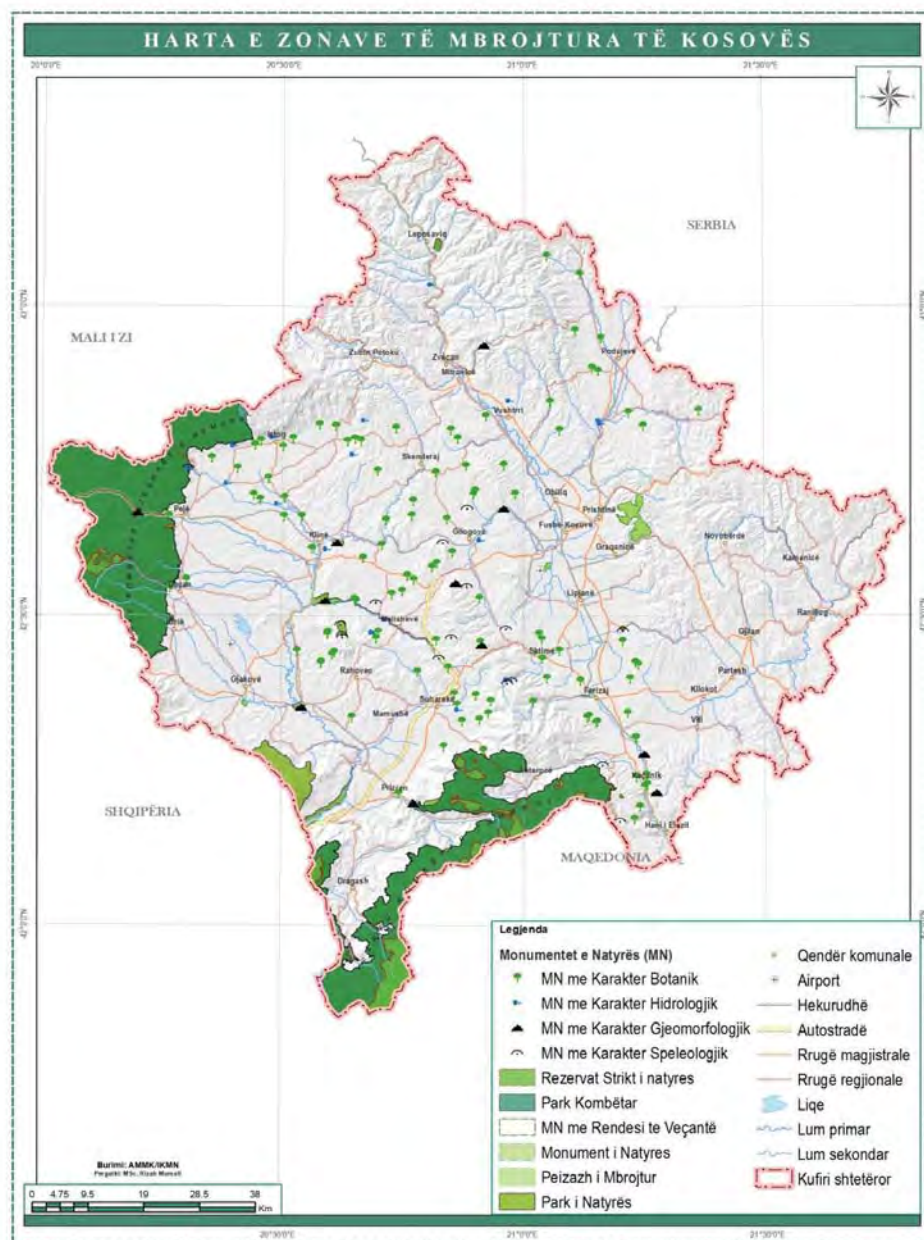


Fig. 13. Map of Protected Areas

18. ANNEX II: Table 11. List of protected areas in Kosovo (2017)

	Name of area/facility	Municipality/ area	Surface/		Category according to IUCN	Year of protection	Brief description of values
			ha	ares			
STRICT NATURE RESERVES (10885.82 ha)							
RN_001	Kamilja	Leposaviq	228		Ib	1988	Special nature reserve with paleontological features
RN_002	“Lëndina e Shenjtë”	NP. “Sharri”	18			2016	Plant nature reserve of Stenoendemic species ( <i>Bornmullera dieckii</i> )
RN_003	Shutman	NP. “Sharri”	5057			2016	The Shutman area represents a habitat of wild goats ( <i>Rupicapra rupicapra</i> )
RN_004	Bredhik	NP. “Sharri”	123	16		2016	Plant reserve of Bulgarian fir ( <i>Abies borisiregis</i> ) and Brown Bear ( <i>Ursus arctos</i> )
RN_005	Pashallare	NP. “Sharri”	400			2016	Plant reserves of ecosystems of Bosnian pine ( <i>Pinus heldreichii</i> ), Macedonian pine or Balkan Pine ( <i>Pinus peuce</i> ), fir ( <i>Abis alba</i> ), spruce ( <i>Picea abies</i> ), mugo pine ( <i>Pinus mugo</i> ), and beech ( <i>Fagus moesiaca</i> )
RN_006	Koretnik	NP. “Sharri”	818			2016	Plant reserve of endemic-relict Bosnian Pine ( <i>Pinetum heldreichii</i> ) forests
RN_007	Canyon	NP. “Sharri”	104			2016	Plant reserve of the community of <i>Fageto –taxetum baccata</i> , autochthones important forest community of tertiary relict tisit ( <i>Taxus baccata</i> ) with beech ( <i>Fagus mosaicae</i> )
RN_008	Lumbardhi	NP. “Sharri”	304			2016	Reserve of botanic and hydrological character
RN_009	Lubeteni	NP. “Sharri”	202.16	16		2016	Reserve of botanic and geomorphologic character
RN_010	Koblica	NP. “Sharri”	199			2016	Reserve of botanic and geomorphologic character
RN_011	Dupnica	NP. “Sharri”	484			2016	Reserve of botanic and geomorphologic character
RN_012	Bistra	NP. “Sharri”	642	12		2016	Reserve of botanic and geomorphologic character
RN_013	Bjeshka e Kuzhnjerit /Maja Ropsit	NP. “Bjeshkët e Nemuna”	1,110	57		2016	Plant nature reserve of pinus peuce, fir tree, pine, beech, and wild goat ( <i>Rupicapra</i> )
RN_014	Malet e Prilepit	NP. “Bjeshkët e Nemuna”	106			2016	Plant nature reserve of Balkan Maple ( <i>Acer heildreichii</i> ) and Macedonian pine ( <i>Pinus peuce</i> )
RN_015	Gubavci	NP. “Bjeshkët e Nemuna”	77			2016	Plant nature reserve of endemo-relict species ( <i>Forsythia europaeae</i> )
RN_016	Rusenica	NP. “Sharri”	270			2016	Animal reserve of Balkans’ Lynx ( <i>Lynx lynx balcanicus</i> )
RN_017	Oshlaku	NP. “Sharri”	550	47		2016	Nature reserve of <i>Pinus heldreichii</i> and of some endemic plants
RN_018	Maja e Arnenit	NP. “Sharri”	145	48		2016	Plant reserve of <i>Pinus heldreichii</i>

RN_019	Pisha e Madhe (Koxha e Ballkanit part)	NP. "Sharri"	44			2016	Plant reserve of <i>Pinus heldreichii</i>
<b>NATIONAL PARK (115.957 ha)</b>							
PK_001	National Park "Sharri"	Prizren Suhareke Kaçanik Shterpce Dragash	53.469		II	(3900 1986) 2013	Characterized with many relict and endemic species of flora, vegetation, and fauna, with geomorphological heritage, hydrological, speleological, cultural, educational and tourist values
PK_002	National Park "Bjeshket e Nemuna"	Peje, Deçan, Istog, Junik, Gjakove	62.448		II	2013	Characterized with many relict and endemic species of flora, vegetation and fauna. With high geomorphological heritage, hydrological, speleological, cultural, educational and tourist values
<b>NATURE MONUMENTS (6059.79 ha)</b>							
MN_001	Mani Sham ( <i>Morus</i> sp.)	Peje		3	III	1957	Nature monument of botanic character
MN_002	Oriental Plane ( <i>Platanus orientalis</i> ) in Marash	Prizren		5	III	1959	Nature monument of botanic character
MN_003	Aspen ( <i>Populus tremula</i> ) in Bajçine	Podujeve		5	III	1959	Nature monument of botanic character
MN_004	Lime ( <i>Tilia argentea</i> ), in Isnqi	Deçan		2	III	1968	Nature monument of botanic character
MN_005	Lime's trees ( <i>Tilia argentea</i> ), in Isnqi	Deçan		5	III	1968	Nature monument of botanic character
MN_006	Cave in Gadime	Lypjan	39		III	1969	Nature monument of geomorphologic and speleological character
MN_007	Minerals - Crystals	Mitrovica		5	III	1970	Nature monument of geological and geomorphologic character
MN_008	Water flow of Minusha river	Suhareka Klina Malisheva	12		III	1983	Nature monument of hydrological character
MN_009	Canyon on river Bistrica	Prizren	200		III	1976	Nature monument of geomorphologic speleological, botanic and hydrological character.
MN_010	Spring of Drini i Bardhë river and the cave in Radave	Peje	90		III	1983	Nature monument of geomorphologic speleological, botanic and hydrological character.
MN_011	Rugova Canyon	Peje	4301		III	1985	Nature monument of geomorphologic speleological, botanic and hydrological character.
MN_012	The spring of mineral water in Dresnik	Kline	0.07	7	III	1985	Nature monument of hydrological character
MN_013	Canyon on river Klina	Kline	205		III	1985	Nature monument of geomorphologic speleological, botanic and hydrological character.

MN_014	Sessile oak trees ( <i>Quercus petraea</i> ) in Lozice	Malisheve		5	III	1985	Nature monument of botanic character
MN_015	Turkish oak tree ( <i>Quercus cerris</i> ), in Zllakuçan	Kline		5	III	1985	Nature monument of botanic character
MN_016	Canyon of "Drini i Bardhë" at the "Ura e Fshajtë"	Gjakove Rahovec	198		III	1986	Nature monument of geomorphologic and hydrological character
MN_017	Cave in Baice	Drenas		11	III	1987	Nature monument of geomorphologic and speleological character
MN_018	Cave in Gllanasellës	Drenas		5	III	1987	Nature monument of geomorphologic and speleological character
MN_019	The spring of termomineral water in Vuqë	Leposaviq	16.6		III	1988	Nature monument of hydrological character
MN_020	Mineral water spring in Sallabajë	Podujeve		31	III	1988	Nature monument of hydrological character
MN_021	Water spring in Shajkovc	Podujeve	1.	41	III	1988	Nature monument of hydrological character
MN_022	Turkish oak tree ( <i>Quercus cerris</i> ), in Pollatë	Podujeve		44	III	1988	Nature monument of botanic character
MN_023	Oak tree ( <i>Quercus cerris</i> ), in Dobratin	Podujeve		7	III	1988	Nature monument of botanic character
MN_024	Common oak tree ( <i>Quercus robur</i> ), in Nekovc	Drenas		5	III	2006	Nature monument of botanic character
MN_025	Common oak trees ( <i>Quercus robur</i> ), in Negroc	Drenas		5	III	2006	Nature monument of botanic character
MN_026	Hungarian oak ( <i>Quercus frainetto</i> ), in Negroc	Drenas		5	III	2006	Nature monument of botanic character
MN_027	Cave in Kishnareka	Drenas	2		III	2006	Nature monument of geomorphologic and speleological character
MN_028	Turkish oak ( <i>Quercus cerris</i> ), in Krajkova	Drenas		5	III	2006	Nature monument of botanic character
MN_029	Rock in Gadine of Llapushnik	Drenas	2		III	2006	Nature monument of geomorphologic character
MN_030	Spring of mineral water in Poklek	Drenas		5	III	2006	Nature monument of hydrological character
MN_031	Oak trees - six trees ( <i>Quercus sp.</i> ) in Likoshan	Drenas		5	III	2006	Nature monument of botanic character



MN_032	Oak tree ( <i>Quercus sp.</i> ) in Terstenik	Drenas		5	III	2006	Nature monument of botanic character
MN_033	Oak tree ( <i>Quercus sp.</i> ) in Likoshan	Drenas		5	III	2006	Nature monument of botanic character
MN_034	"Guri i plakes" in Dobroshec	Drenas		5	III	2006	Nature monument of botanic character
MN_035	White pubescent oak tree ( <i>Quercus pubescens Willd.</i> ) in Aqarevë	Skenderaj		5	III	2007	Nature monument of botanic character
MN_036	Oak tree ( <i>Quercus sp.</i> ) in Polac	Skenderaj		5	III	2007	Nature monument of botanic character
MN_037	Oak tree ( <i>Quercus sp.</i> ) in Likoc	Skenderaj		5	III	2007	Nature monument of botanic character
MN_038	Spring of thermal water in Banje	Skenderaj		1	III	2007	Nature monument of hydrological character
MN_039	Oak tree ( <i>Quercus sp.</i> ) in Prellovç	Skenderaj		5	III	2007	Nature monument of botanic character
MN_040	Complex of oak trees ( <i>Quercus sp.</i> ) in Rrezallë	Skenderaj		2	III	2007	Nature monument of botanic character
MN_041	Complex of pubescent oak ( <i>Quercus pubescens Willd.</i> ) në Klladernicë	Skenderaj		1	III	2007	Nature monument of botanic character
MN_042	Turkish oak tree ( <i>Quercus cerris L.</i> ) in Kotorr	Skenderaj		5	III	2007	Nature monument of botanic character
MN_043	Turkish oak tree ( <i>Quercus cerris L.</i> ) In Padalishtë	Skenderaj		5	III	2007	Nature monument of botanic character
MN_044	Pubescent oak tree ( <i>Quercus pubescens Willd.</i> ) in Çitak	Skenderaj		5	III	2007	Nature monument of botanic character
MN_045	Turkish oak tree ( <i>Quercus cerris L.</i> ) in Runik	Skenderaj		5	III	2007	Nature monument of botanic character
MN_046	Spring of salty water in Leginë	Skenderaj		5	III	2007	Nature monument of hydrological character
MN_047	Sessile oak tree ( <i>Quercus petraea.</i> ), in Lubovec	Skenderaj		5	III	2007	Nature monument of botanic character

MN_048	Common oak tree ( <i>Quercus robur</i> ), in Deiq	Kline		3	III	2007	Nature monument of botanic character
MN_049	Complex of common oak ( <i>Quercus robur</i> ), in Gillarevë	Kline		28	III	2007	Nature monument of botanic character
MN_050	Turkish oak tree ( <i>Quercus cerris</i> ), in Nagllavkë	Kline		12	III	2007	Nature monument of botanic character
MN_051	Spring of mineral water, in Rudicë	Kline		7	III	2007	Nature monument of hydrological character
MN_052	Sessile oak tree ( <i>Quercus pubescens</i> ), in Ujëmir	Kline		2	III	2008	Nature monument of botanic character
MN_053	Oak tree ( <i>Quercus sp.</i> ), in Breshanc	Suhareke		5	III	2007	Nature monument of botanic character
MN_054	Complex of oak trees ( <i>Quercus sp.</i> ), in Savrove	Suhareke		15	III	2007	Nature monument of botanic character
MN_055	Pine tree ( <i>Pinus sp.</i> ) in Delloc	Suhareke		5	III	2007	Nature monument of botanic character
MN_056	Oak tree ( <i>Quercus sp.</i> ) in Grejkoc	Suhareke		15	III	2007	Nature monument of botanic character
MN_057	Poplar trees ( <i>Populus sp.</i> ) in Reçan	Suhareke		5	III	2007	Nature monument of botanic character
MN_058	Spring of mineral water in Reçan	Suhareke		1	III	2007	Nature monument of hydrological character
MN_059	Complex of oak trees ( <i>Quercus sp.</i> ) in Muhlan	Suhareke		15	III	2007	Nature monument of hydrological character
MN_060	Service tree ( <i>Sorbus domestica L.</i> ) in Budakovë	Suhareke		5	III	2007	Nature monument of botanic character
MN_061	Complex of oak trees ( <i>Quercus sp.</i> ) in Papaz	Suhareke		15	III	2007	Nature monument of botanic character
MN_062	Two sessile oaks ( <i>Quercus petraea.</i> ) in Bllacë	Suhareke		1	III	2007	Nature monument of botanic character
MN_063	Turkish oak tree ( <i>Quercus cerris.</i> ) in Vraniq	Suhareke		5	III	2007	Nature monument of botanic character

MN_064	Macedonian oak tree ( <i>Quercus trojana</i> ) in Biraqe	Suhareke		1	III	2007	Nature monument of botanic character
MN_065	Complex of oak trees ( <i>Quercus sp.</i> ) in Luzhnica	Suhareke		15	III	2007	Nature monument of botanic character
MN_066	Mosque Rock (Guri i Xhamisë) in Luzhnicë	Suhareke		15	III	2007	Nature monument of geomorphologic character
MN_067	Two black mulberry trees ( <i>Morus nigra L.</i> ) in Cerrcë	Istog		11	III	2008	Nature monument of botanic character
MN_068	Silver lime tree ( <i>Tilia tomentosa Moench</i> ) in Lubozhde	Istog		1	III	2008	Nature monument of botanic character
MN_069	Red lime tree ( <i>Tilia sp.</i> ) in Istog të Poshtëm	Istog		5	III	2008	Nature monument of botanic character (damaged)
MN_070	Pubescent oak ( <i>Quercus pubescens Willd</i> ) in Sinaj	Istog		17	III	2008	Nature monument of botanic character
MN_071	Silver lime tree ( <i>Tilia tomentosa Moench.</i> ) in Shushicë të Epërme	Istog		5	III	2008	Nature monument of botanic character
MN_072	Spring of natural water in Istog	Istog	3	88	III	2008	Nature monument of hydrological character
MN_073	Service tree ( <i>Sorbus domestica L.</i> ) in Uçe	Istog		7	III	2008	Nature monument of botanic character
MN_074	Silver lime tree ( <i>Tilia tomentosa Moench</i> ) in Kaliqan	Istog		5	III	2008	Nature monument of botanic character (damaged)
MN_075	Thermal water spring in Banje	Istog		85	III	2008	Nature monument of hydrological character
MN_076	Red lime tree ( <i>Tilia sp.</i> ) in Lubove	Istog		7	III	2008	Nature monument of botanic character
MN_077	Common oak tree ( <i>Quercus robur L.</i> ) in Zallq - Zabllaq	Istog		11	III	2008	Nature monument of botanic character
MN_078	Common oak tree ( <i>Quercus robur L.</i> ) in Trubuhovc	Istog		75	III	2008	Nature monument of botanic character

MN_079	Common oak tree ( <i>Quercus robur</i> L.) in Saradran	Istog		5	III	2008	Nature monument of botanic character
MN_080	Common oak tree ( <i>Quercus robur</i> ) in Gurrakoc	Istog		1	III	2008	Nature monument of botanic character (damaged)
MN_081	Spring of water in Vrelle	Istog		26	III	2008	Nature monument of hydrological character
MN_082	Mirusha Waterfalls	Malisheve Kline Rahovec	598.4		III	2012	Nature monument with geomorphological, hydrological, speleological, botanic, landscape character and with scientific and tourist importance
MN_083	Turkish oak tree ( <i>Quercus ceris</i> L.) in Lladrove	Malisheve		8	III	2014	Nature monument of botanic character
MN_084	Cave in Temeqina	Malisheve		69	III	2014	Nature monument of geomorphological and speleological character
MN_085	Turkish oak tree ( <i>Quercus ceris</i> L.) in Llozivce	Malisheve		8	III	2014	Nature monument of botanic character (damaged)
MN_086	Pubescent oak tree ( <i>Quercus pubescens Willd</i> ) in LLozice	Malisheve		8	III	2014	Nature monument of botanic character
MN_087	Pubescent oak tree ( <i>Quercus pubescens Willd</i> ) in LLozice	Malisheve		7	III	2014	Nature monument of botanic character
MN_088	Bozhuri Cave in Damanek	Malisheve	2		III	2014	Nature monument of geomorphological and speleological character
MN_089	Cave of Lladrovicq	Malisheve	2		III	2014	Nature monument of geomorphological and speleological character
MN_090	Pubescent oak tree ( <i>Quercus pubescens Willd</i> ) in Guriq	Malisheve		5	III	2014	Nature monument of botanic character
MN_091	Turkish oak tree ( <i>Quercus ceris</i> L.) in Drenove	Malisheve	1	25	III	2014	Nature monument of botanic character (damaged)
MN_092	Turkish oak tree ( <i>Quercus ceris</i> L.) in Bubel	Malisheve		8	III	2014	Nature monument of botanic character
MN_093	Turkish oak tree ( <i>Quercus ceris</i> L.) in Bubel	Malisheve		8	III	2014	Nature monument of botanic character



MN_094	Turkish oak tree ( <i>Quercus ceris</i> L.) in Bellanic	Malisheve		8	III	2014	Nature monument of botanic character
MN_095	Narrow-leaved ash tree ( <i>Fraxinus angustifolia</i> Vahl) in Javiq	Malisheve		8	III	2014	Nature monument of botanic character
MN_096	Vermica waqf (Vakëfi i Vermicës)	Malisheve		70	V	2014	Nature monument of botanic character
MN_097	Zabeli and Vrella in Javiq	Malisheve		51	V	2014	Nature monument of botanic character
MN_098	Water spring in Carravranë	Malisheve		8	III	2014	Nature monument of hydrological character
MN_099	Cave of Ponorc	Malisheve	279		III	2014	Nature monument of speleological character
MN_100	Nerodime River Bifurcation	Ferizaj	15		III	2015	Nature monument of morphological and hydrological character
MN_101	Cave of Shullan in Sllatine	Kaçanik	1		III	2015	Nature monument of speleological character
MN_102	Abysses on the Qenare slope, in Gilloboqice	Kaçanik	1		III	2015	Nature monument of speleological character
MN_103	Turkish oak tree ( <i>Quercus cerris</i> ) in Kaçanik I vjeter	Kaçanik		5	III	2015	Nature monument of botanic character
MN_104	Long stone in Stagove	Kaçanik	1		III	2015	Nature monument of geomorphologic character
MN_105	Black stone in Llanishte	Kaçanik		20	III	2015	Nature monument of geomorphologic character
MN_106	Turkish oak tree ( <i>Quercus cerris</i> ) in Kaçanik te vjeter	Kaçanik		5	III	2015	Nature monument of botanic character
MN_107	Turkish oak tree ( <i>Quercus cerris</i> ) in Kovaqec	Kaçanik		5	III	2015	Nature monument of botanic character
MN_108	Sessile oak tree ( <i>Quercus petraea</i> ), in Bob	Kaçanik		5	III	2015	Nature monument of botanic character
MN_109	Complex of oak trees ( <i>Quercus</i> sp.), in Runjeve	Kaçanik		5	III	2015	Nature monument of botanic character
MN_110	White willow ( <i>Salix alba</i> ) in Kaçanik	Kaçanik		5	III	2015	Nature monument of botanic character

MN_111	Oak trees in Ivaje	Kaçanik		5	III	2015	Nature monument of botanic character
MN_112	Turkish oak tree ( <i>Quercus cerris</i> ) in Kotline	Kaçanik		5	III	2015	Nature monument of botanic character
MN_113	“Vrella e Zezë”, in Petrove	Shtime	2		III	2015	Nature monument of hydrological character
MN_114	Cave of Imer Devetakut, in Devtak	Shtime	2		III	2015	Nature monument of speleological character
MN_115	Oak trees ( <i>Quercus sp.</i> ) in Mollapolc	Shtime		5	III	2015	Nature monument of botanic character
MN_116	“Lisi i Sahiti”, in Godanc te Epërm	Shtime		5	III	2015	Nature monument of botanic character
MN_117	“Lisi i Alushit”, in Rashince	Shtime		5	III	2015	Nature monument of botanic character
MN_118	Cave of Pjetershtice, in Pjetershtice	Shtime		5	III	2015	Nature monument of speleological character
MN_119	“Lisat Binjak”, in Gadanc te Epërm	Shtime		5	III	2015	Nature monument of botanic character
MN_120	“Gështenjat e Shtimës”, in Shtime	Shtime		50	III	2015	Nature monument of botanic character
MN_121	Cave of Devetakut and the water spring in Devetak	Shtime	2		III	2015	Nature monument of speleological and hydrological character
MN_122	Hungarian oak tree ( <i>Quercus frainetto</i> ) in Dyz	Podujeve		5	III	2015	Nature monument of botanic character
MN_123	Oak tress ( <i>Quercus sp.</i> ) in Llapashtice te Epërme	Podujeve		10	III	2015	Nature monument of botanic character
MN_124	Oak tress ( <i>Quercus sp.</i> ) in Llapashtice te Epërme	Podujeve		5	III	2015	Nature monument of botanic character
MN_125	Vrella and beech tree in Dobratin	Podujeve		10	III	2015	Nature monument of botanic and hydrological character
MN_126	European aspen ( <i>Populus tremula</i> ) in Murgulle	Podujeve		5	III	2015	Nature monument of botanic character

MN_127	European aspen ( <i>Populus tremula</i> ) in Gerdac	Podujeve		5	III	2015	Nature monument of botanic character
MN_128	European aspen ( <i>Populus tremula</i> ) in Orllan	Podujeve		5	III	2015	Nature monument of botanic character
MN_129	Hungarian oak tree ( <i>Quercus frainetto</i> ) in Zhilivode	Vushtri		10	III	2016	Nature monument of botanic character
MN_130	Oak tress ( <i>Quercus sp.</i> ) in Druar	Vushtri		10	III	2016	Nature monument of botanic character
MN_131	Complex of oak trees ( <i>Quercus sp.</i> ) in Galice	Vushtri		15	III	2016	Nature monument of botanic character
MN_132	Sessile oak tree ( <i>Quercus petraea</i> ) in Shitarice	Vushtri		5	III	2016	Nature monument of botanic character
MN_133	Common oak tree ( <i>Quercus robur</i> ) in Dunnice e LLuges	Vushtri		5	III	2016	Nature monument of botanic character
MN_134	Thermo-mineral water spring in Gjelbishte	Vushtri		10	III	2016	Nature monument of hydrological character
MN_135	Turkish oak tree ( <i>Quercus cerris</i> ) in Ceceli	Vushtri		5	III	2016	Nature monument of botanic character
MN_136	European ash ( <i>Fraxinus excelsior</i> ) in Kaznik	Rahovec		8	III	2016	Nature monument of botanic character
MN_137	Hungarian oak tree ( <i>Quercus frainetto</i> ) in Kaznik	Rahovec		3.5	III	2016	Nature monument of botanic character
MN_138	Oak tree ( <i>Quercus sp.</i> ) in Dobidol	Rahovec		13	III	2016	Nature monument of botanic character
MN_139	Hungarian oak tree ( <i>Quercus frainetto</i> ) in the neighbourhood of Berishaj in Drenoc	Rahovec		4	III	2016	Nature monument of botanic character

MN_140	Hungarian oak tree ( <i>Quercus frainetto</i> ) in the neighbourhood of Mehovce - Drenoc	Rahovec		4	III	2016	Nature monument of botanic character
MN_141	Sessile oak tree ( <i>Quercus petraea</i> ) Nagave	Rahovec		5	III	2016	Nature monument of botanic character
MN_142	Turkish oak tree ( <i>Quercus cerris</i> ) and elm tree ( <i>Ulmus minor</i> ) in Bratotin	Rahovec		7	III	2016	Nature monument of botanic character
MN_143	Hungarian oak tree ( <i>Quercus frainetto</i> ) in Bratotin	Rahovec		4	III	2016	Nature monument of botanic character
MN_144	Cave of "Bali Agës" in Zatriq	Rahovec	1ha		III	2016	Nature monument of speleological character
MN_145	Cave of "Peshterr", in Zatriq	Rahovec		70	III	2016	Nature monument of speleological character
MN_146	Sessile oak tree ( <i>Quercus petraea</i> ), in Cërmille	Ferizaj		5	III	2017	Nature monument of botanic character
MN_147	Pubescent oak tree ( <i>Quercus pubescens</i> ), in Greme	Ferizaj		5	III	2017	Nature monument of botanic character
MN_148	Sessile oak tree ( <i>Quercus petraea</i> ), in Greme	Ferizaj			III		Nature monument of botanic character
MN_149	Turkish oak tree ( <i>Quercus cerris</i> ) in Jezerc	Ferizaj		9	III	2017	Nature monument of botanic character
MN_150	Sessile oak tree ( <i>Quercus petraea</i> ), in Komogllave	Ferizaj		5	III	2017	Nature monument of botanic character
MN_151	Sessile oak tree ( <i>Quercus petraea</i> ), in Lloshkobare	Ferizaj		5	III	2017	Nature monument of botanic character
MN_152	Turkish oak tree ( <i>Quercus cerris</i> ) in Pajat	Ferizaj		5	III	2017	Nature monument of botanic character



MN_153	Turkish oak tree ( <i>Quercus cerris</i> ) in Rahovice	Ferizaj			III		Nature monument of botanic character
MN_154	Turkish oak tree ( <i>Quercus cerris</i> ) in Rahovice	Ferizaj		5	III	2017	Nature monument of botanic character
MN_155	Turkish oak tree ( <i>Quercus cerris</i> ) in Zaskok	Ferizaj		5	III	2017	Nature monument of botanic character
MN_156	Pubescent oak tree ( <i>Quercus pubescens</i> ), in Zaskok	Ferizaj		5	III	2017	Nature monument of botanic character
<b>NATURE PARK (5.934/ha)</b>							
PN_002	Pashtrik Mountain and Vermica Lake	Prizren Gjakova	5.934		V	2015	Nature park with biological, geomorphological, hydrological, cultural and tourist values
<b>PROTECTED LANDSCAPE (2437 ha)</b>							
PM_001	Shkugza	Gjakove	70		V	2011	Area with botanic, educative and tourist values
PM_002	Pines of Deçan (Pishat e Deçanit	Deçan	15		V	1969	Area with botanic, educative and tourist values
PM_003	Complex of pines (kompleksi i pishave) in Strazhe	Kaçanik	25ha		V	2015	Area with botanic, educative and tourist values
PM_004	Complex of pines (kompleksi i pishave) in Shtime	Shtime	25		V	2015	Area with botanic, educative and tourist values
PM_005	Germia	Prishtina	1949		V	2016	Nature park with scientific, educative, culture and tourist values
<b>SPECIAL AREA – SPA and SAC (109 ha)</b>							
ZVM_001	Wetland of Henci-Radeve	Fushe Kosove, Graçanic Lipjan	109	5	V	2014	Area with specific nature characteristics: ornithological, ihtiological, hydrological, botanic and landscape

## ANNEXII: Decision on the approval of the report on the state of nature 2015-2017



**Republika e Kosovës**  
**Republika Kosova - Republic of Kosovo**  
*Qeveria - Vlada - Government*

Nr. 14/81

Datë: 24.12.2018

Në mbështetje të nenit 92 paragrafi 4. dhe të nenit 93 paragrafi (4) të Kushtetutës së Republikës së Kosovës, duke u bazuar në nenin 4 të Rregullores nr. 02/2011 për Fushat e Përgjegjësisë Administrative të Zyrës së Kryeministrit dhe Ministrive, e ndryshuar dhe e plotësuar me Rregulloren nr. 14/2017, me Rregulloren nr. 15/2017, me Rregulloren nr. 16/2017, me Rregulloren nr. 07/2018 dhe me Rregulloren nr. 22/2018, si dhe në nenin 19 të Rregullores së Punës së Qeverisë së Republikës së Kosovës nr. 09/2011, Qeveria e Republikës së Kosovës, në mbledhjen e mbajtur më 24 dhjetor 2018, nxjerr këtë:

**V E N D I M**

1. Aprovohet Raporti për Gjendjen e Natyrës për vitet 2015-2017.
2. Raporti nga pika 1. e këtij vendimi i dërgohet Kuvendit të Republikës së Kosovës për informim.
3. Vendimi hyn në fuqi ditën e nënshkrimit.

Ramush HARADINAJ

  
Kryeministër i Republikës së Kosovës**Iu dërgohet:**

- Zëvendëskryeministrave
- të gjitha ministrive (ministrave)
- Sekretarit të Përgjithshëm të ZKM-ës
- Arkivit të Qeverisë

## STATRE OF NATURE REPORT 2015-2017

### **Publisher:**

Ministry of Environment and Spatial Planning  
Kosovo Environmental Protection Agency  
Kosovo Institute for Nature Protection

It was prepared by the Kosovo Institute for Nature Protection  
The report was prepared in cooperation with the experts of the Kosovo Environmental Protection Agency,  
the Department of Environmental Protection and Water of MESP, KC. “Sharri” and other relevant  
institutions.

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