

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

STATE OF NATURE REPORT

2010 - 2014

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

STATE OF NATURE REPORT

2010 - 2014

Prishtinë, 2015

Dear Readers,



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% 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

CONTENT

1. INTRODUCTION PART 13
1.1. INTRODUCTION 13
1.2. KOSOVO PROFILE 13
1.2.1. Geographical position 13
1.2.2. Relief 13
1.2.3. Climate 14
1.2.4. Hydrography 14
1.3. Brief history of nature protection in Kosovo 15

2. LEGAL AND INSTITUTIONAL FRAMEWORK 17
2.1. LEGAL FRAMEWORK 17
2.1.1. Laws 17
2.1.2. Sub legal acts 18
2.1.2.1. Regulations 18
2.1.2.2. Administrative instruction 18
2.1.2.3. Decisions 19
2.1.3. Strategies, Spatial Plans, Management Plans and other Documents 19
2.1.3.1. Documents under approval procedure 20
2.1.3.2. Sectoral strategies 20
2.1.4. Regional Agreements 21
2.1.5. Harmonization with European Union directives in the field of nature protection 22
2.1.6. International Conventions 23

2.2. INSTITUTIONAL FRAMEWORK 25
2.2.1. Decision making bodies 25
2.2.1.1. Ministry of Environmental and Spatial Planning –MESP 25
2.2.1.2. Ministry of Agriculture, Forestry and Rural Development – MAFRD 26
2.2.1.3. Ministry of Culture, Youth and Sport and - MCYS 26
2.2.1.4. Local level – Municipalities 27
2.2.1.5. Scientific Institutions 27
2.2.1.6. Environmental Civil Society Organisations 27

3. CLASIFICATION OF PROTECTED AREAS 28
3.1. STRICT NATUR RESERVES 28
3.2. NATIONAL PARKS 28
3.3. SPECIAL PROTECTED AREA 29
3.4. NATURE PARK 29
3.5. NATURE MONUMENT 29

3.6. PROTECTED LANDSCAPE 30
3.7. MONUMNETS OF PARK ARCHITECTURE 30
4. CHRONOLOGY OF DECLARATION OF PROTECTED AREAS 31

5. NATURE PROTECTED AREAS 33
5.1. NATURE STRICT RESERVES 35
5.1.1. Maja e Arnenit 36
5.1.2. Rusenica 36
5.1.3. Pisha e Madhe 37
5.1.4. Oshlaku 38
5.1.5. Kozhnjeri and Maja e Ropsit 39
5.1.6. Gubavci 40
5.1.7. Malet e Prilepit 40
5.1.8. Nerodime River Bifurcation 41
5.1.9. Kamilja 41
5.1.10. Gazimestan 41

5.2. PROPOSED AREAS FOR PROTECTION 42
5.3. NATIONAL PARKS 44
5.3.1. National Park "Sharri" 44
5.3.2. National Park "Bjeshkët e Nemuna" 53

5.4. SPECIAL PROTECTED AREAS 59
5.4.1. Wetland of Henc - Radeve 59

5.5. NATURE MONUMENTS 64
5.5.1. Gadime Cave 64
5.5.2. Nature Monument of Special Importance " Mirusha Waterfall" 67
5.5.3. Rugova Canyon 69
5.5.4. Spring of Drini i Bardhe with Radavci Cave 70
5.5.5. Museum of crystals 71

5.6. PROTECTED LANDSCAPES 72
5.6.1. Shkugza Park 72
5.6.2. Gërmia Regional Park 75

5.7. INTERVENTIONS IN PROTECTED AREAS 2010-2014 77

6. OTHER PROTECTED AREAS 79
6.1. NATURA 2000 AREAS 79
6.2. HUNTING RESERVES OF SPECIAL IMPORTANCE 81
6.2.1. Hunting reserve of special importance "Blinaja" 81
6.2.2. Hunting reserve of special importance "Duboçaku" 82

7. BIODIVERSITY 85
7.1. THE STATE OF BIODIVERSITY 87
7.1.1. The state of flora and vegetation 87
7.1.2. The State of fauna 88
7.2. INVASIVE AND ALIEN SPECIES 91
7.3. NATURE EXHIBITS IN THE MUSEUM OF KOSOVO 93

8. KOSOVO FOREST 94
8.1. STATE OF FOREST'S ECOSYSTEM 94
8.2. INVENTORY OF FORESTS 95
8.3. FORESTATION SURFACES 96
8.4. FIRES 96

9. ECOTURISM
9.1. ECOTURISM OF PROTECTED AREAS 99

10. REPORTING IN EIONET AND COOPERATION WITH EUROPEAN ENVIRONMENT AGENCY 101

11. MEASURES UNDERTAKEN FOR NATURE PROTECTION 102
11.1. NATIONAL PROJECTS AND THOSE FINANCED BY DONORS 102
11.1.1. Red Book of vascular flora 102
11.1.2. Bear Sanctuary 104
11.1.3. Sustainable Management of Land Use and Conservation of Biodiversity in Dragash 106
11.1.4. Germia project 106
11.2. REGIONAL AND CROSS-BORDER PROJECTS 107
11.2.1. Dinaric Arc Park 107
11.2.2. Project on beech forest area 107
11.2.3. Trans-boundary protected Areas 109
11.2.4. The establishment of the European Green Belt Associateion 110
11.3. PROMOTION OF NATURE PROTECTION SIGN ON THE INTERNATIONAL DAY OF BIODIVERSITY22 MAY 2013 111
11.4. DESIGNATION OF PROTECTED SPECIES 111

12. CONCUSIONS AND RECOMMENDATIONS 113

13. REFERENCES 115

14. ANNEX I: Map of protected areasra 120

15. ANNEX II: Table of protected areas 121

Index of Abbreviations

CITES	Convention of International Trade of Endangered Species
DEP	Departament of Environmental Protection
EIA	Environmental Impact Assessment
SEA	Strategic Environmental Assessmen
ENVSEC	Environmental Security Initiative
EU	European Union
FAO	Food and Agriculture Organisation
GIZ	German International Cooperation
IKMN	Kosovo Institute for Nature Protection
ISP	Institute for Spatial Palnning
IUCN	International Union of Nature Conservation
KCB	Kosovo Consolidated Budget
KEAP	Kosovo Environmental Action Plan
KEPA	Kosovo Environmental Protection Agency
KES	Kosovo Environmental Strategy
KFA	Kosovo Forestry Agency
KOG	Kosovo Official Gazette
MAFRD	Ministry of Agriculture, Forestry and Rural Development
MCYS	Ministry of Culture, Youth and Sport
MESP	Ministry of Environment and Spatial Planning
NGO	Non Gonvernmental Organization
NP	National Park
NPD	National Park Directory
NWFP	Non-Wood Forestry Products
REC	Regional Environmental Center
UNDP	United Nations Development Program
UNEP	United Nations Environmental Program
UNSECO	United Nations Educational Scientific and Cultural Organization

Index of Tables

Table 1.	European Union Directives and Conventions in the field of nature protection	22
Table 2.	International Convention	23
Table 3.	Nature Protected Areas according to categories	33
Table 4.	Interventions in protected areas	80
Table 5.	Species of Fauna in Blinajë	84
Table 6.	Preliminary List of invasive alien species in Kosovo	94
Table 7.	Standing volume in forests, main wood species (dbh >=7cm) (1000 m3)	96
Table 8.	Forest fires for the period 2010 - 2014	98
Table 9.	List of national projects and those financed by donors	101

Index of figures

Fig. 1. Hydrography of Kosovo 14
Fig. 2. Number of Nature Protected Areas 1950 – 2014 31
Fig. 3. Map of Nature Reserves 40
Fig. 4. Zoning Map of NP "Sharri" 45
Fig. 5. Surface of NP PK Bjeshkët e Nemuna according to Municipalities –Participation 55
Fig. 6. Wetland of Henc 61
Fig. 7. Map of Shkugza 74
Fig. 8. Forestation surfaces 2005-2012 97
Fig. 9. Burned areas on years for the period 2003-2014 99
Fig.10. Presentation in graphs the number of plant species which depending on the different categories of threat 103
Fig. 11. Nature Protection logo 111

Index of Photos

Photo. 1. Maja e Arnenit, forestry communion of rouble and beech
Photo. 2. Rusenica Canyon
Photo 3. Pisha e Madhe: Bosnian Pine Forestry ecosystems
Photo 4. Oshlaku (south exposition), habitat of rrobull and wild goats
Photo 5 and 6. Kozhnjeri and Maja e Ropsit
Photo 7. Prilepi mountains
Photo 8 and 9. Interventions in Nerodima River Bifurcation within the EU projects
Photo 10. Quarry at the Canyon of Rusenica
Photo 11. Reservation of Arneni 2011
Photo 12. Landscape from Sharr Mountains
Photo 13. Consequences of hypodemic
Photo 14. Koritniku: Consequences of fires in Bosnian Pine Forests
Photo 15 and 16. Destruction of Forests from natural factors (Lubinje)
Photo 17. Ilegal loggings of forests within the Park
Photo 18. Bark Tumor (Nectria ditissima)
Photo 19. Decay mushroom (Fomes fomentarius)
Photo 20. Forests of Arneni – Lost Waters
Photo 21 and 22. Fires in NP "Sharri"
Photo 23. Sharr (Vraca), herbaceous vegetation (pastures) during autumn
Photo 24. Brezovica River
Photo 25. Livadhishte Lake
Photo 26 and 27. Prevalla: summer camping before destruction (2011) after destruction (2013)
Photo.28. Landscape from NP. "Bjeshkët e Nemuna"
Photo 29. Roe (Capreolus capreolus)
Photo 30. Brown Bear (Ursus arctos) (Photo KFA)
Photo 31 and 32. Illegal loggings of forests and fires within the park
Photo 33 and 34. Constructions in Juniku Gorge and using of inertest Deçani Lumëbardh
Photo 35. Landscape from the Wetland of Henc - Radeve
Photo 36. Adonis aestivalis
Photo 37. Equisetum palestre
Photo 38. Podiceps cristatus
Photo 39. Ardea cinerea
Photo 40. Himantopus himantopus
Photo 41. Acrocephalus scirpaceus
Photo 42. Ardea purpurta
Photo 43. Ixobrychus minutus
Photo 44. Dried and Burned ecosystems
Photo 45. Aragonite Crystals in Gadimes Cave
Photo 46. Crystals in Gadime Cave
Photo 47 and 48. State within the Cave 2010 - 2013
Photo 49 and 50. Crystals broken
Photo 51 and 52. Construction of water reservoir on the Gadime Cave and Stone mining near the cave
Photo 53. Improved state in 2014
Photo 54. The Visit of Minister and the French Ambassador

Photo 55. Mirusha Waterfalls
Photo 56 and 57.Ilegal constructions within the protected area and soil sliding
Photo 56. Rugova canyon (photo F. Katallozi)
Photo 59 and 60. Interventions in Rugova Canyon
Photo 61. Spring of Drini i Bardhë
Photo 62 and 63. Museum of crystals
Photo 64. View from Shkugeza Park
Photo 65. Endangered Stag Beetle (lucanus cervus)
Photo 66. Turtle (Testudo hermanni)
Photo 67. Lacerta muralis (Wall lizard)
Photo 68. Bombina variegata
Photo 69. Restaurant and other facilities
Photo 70. Inadequate waste management
Photo 71. View from Recreative Area
Photo 72. Salamander (Salamandra salamandra)
Photo 73 and 74. View of pathways regulated in the Park
Photo 75. The scheme of functioning of Ecological Network
Photo 76 and 77. Landscape from Blinaja
Photo 78 and 79. Roes in Blinaja (Photo KFA)
Photo 80. Landscape in Duboçaku
Photo 81. Lilium albanicum
Photo 82. Plantago gentianoides
Photo 83. Polygala doerfleri
Photo 84. Using without criteria of flora creates big damages
Photo 85. Lacerta viridis (Green lizard)
Photo 86.Vipera ammodytes
Photo 87. Picus viridis
Photo 88. Vulpes vulpes (Fox)
Photo 89 and 90. Placing of grass and salt for herbivorous in NP "Sharri"
Photo 91. Buteo buteo
Photo 92. Merops apiaster
Photo 93. Emplacement of cameras in NP "Sharri"
Photo 94. Photo of Lynx in Albania
Photo 95. Ambrosia artemisiifolia
Photo 96. Pseudorasbora parva
Photo 97. Forest landscape- NP "Bjeshkët e Nemuna".
Photo 98. Conifer forests in Sharri Mountains
Photo 99. Fire in Sharr forest
Photo 100. Volunteers during the extinction of fire
Photo 101. Ecotourism in NP PK "Sharri"
Photo 102. Ecotourism in NP "Bjeshkët e Nemuna"
Photo 103. Achillea alexandri-regis
Photo 104. Dianthus barbatus
Photo 105. Helleborus purpurascens
Photo 106. Leontopodium alpinum
Photo 107. Micromeria cristata
Photo 108. Linaria alpine

Photo 109. Adonis microcarpa
Photo 110. Fritillaria graeca
Photo 111. Laburnum alpinum
Photo 112 and 113. Part of the Park and educational visit of a group of pupils
Photo 114 and 115. Moments from promotion of bears shelter
Photo 116 and 117. "Ecologic" train to be installed in the park and lower pathway for pedestrians
Photo 118. Part from the web page of the project where are presented the Kosovo's Parks
Photo 119 and 120. View from the activities within the implementation of the Project
Photo 121. Visit in the territory of Bjeshkët e Nemuna
Photo 122. Meeting of working group of the project

1 INTRODUCTION PART

1.1. INTRODUCTION

Drafting of the Report on the State of Nature in Kosovo, is under the responsibility and a duty of the Kosovo Institute for Nature Protection, set out under Article 142 of the Law on Nature Protection. [1].

The main purpose of the report is to inform the public about the state of nature, protected areas and biodiversity of Kosovo, however thorough this report it is aimed to inform the policy makers to be influenced on the improvement of the policies about the management and conservation of natural heritage values and biodiversity. This report can serve as a good guide to address the projects and support of donor on the nature protection sector.

The report includes information about the legal, institutional and strategic framework on nature sector, the state of nature conservation areas, biodiversity, rare species of plants and animals, forest ecosystems and ecotourism. Important parts of the report are the measures taken for the protection of nature as well as conclusions and recommendations.

The data presented in this report are collected during field visits by KINP, data provided by the management bodies of protected areas, as well as other governmental and non-governmental institutions. Parts of the report are information from the laws, strategies, publications, reports and other relevant documents for nature protection.

The data of this report are mainly referred to the period 2010-2014, but in some cases because of the lack of data and comparing aspects here are presented some data from the previous period.

1.2. KOSOVO PROFILE

1.2.1. Geographical Position

Kosovo is located in the central part of Balkan Peninsula. It lies between 41˚50'58" and 43˚51'42" of northern geographic latitude and 20˚01'3" and 21˚48'02"of east geographic length. Kosovo's geographical position is considered with particularly economically, culturally and politically importance with the region and the world. Kosovo has an area of 10,908 km2, with around 1.8 million inhabitants (census of 2011) and with average density of 165 inhabitants for km². According to preliminary results from the preliminary census conducted by SOK in 2011, Kosovo has 1.73 million inhabitants and the average density of 159 inhabitants per km2 (this census does not include the municipalities of Leposavic, Zubin Potok and Zvecan) 2. It is surrounded by Albania (southwest), Macedonia (southeast), with Serbia (east, north and northeast) and Montenegro (west). The total length of Kosovo border with neighbouring countries is about 700.7 km2.

1.2.2. Relief

Kosovo is a mountain and lowlands country, composed by Kosovo Field (Fusha e Kosoves) (with 510-570 m above sea level) and Dukagjin Plain (230-450 m above sea level).

1 Law No. 03/L-233 – Law on Nature Protection

Morphologically, it is a real mosaic of hollows with different dimensions, defined by medium and high mountains. In the morphology of the relief are distinguished the mountainous areas, on the construction of which participate rocks of various geological ages. Most present are Palaeozoic (Pz) and mezozoikut (Mz), while in the lower area of the field dominate new Pliocene sediments (Pl), composed mainly of terigen rocks, namely clay rocks, sandstone and conglomerate and less limestone

The average above sea level of Kosovo is 810m. The lowest point is 270m, while the highest 2656m (Gjeravica). In terms of Hypsometry the area below 300m above sea level includes only 16.4 km2 (0.2%) to 1000 m are expanded 8754 km2 (80.7%), from to 2000m 1872.3 km2 (17%) and over 2000m to 250.6 km2 (2.3%). The main forms in Kosovo landscape are: mountains with (63%) and hollows (37%).

1.2.3. Climate

Kosovo is characterized by a Mid - Continental climate, with a dominant influence of Adriatic- Mediterranean climate in Dukagjini Plane through the valley of Drini i Bardhe. The average annual rainfall is 596 mm. The average annual temperature in Kosovo is 10oC, (with the minimum temperature reached to -27oC and maximum 39oC. [2]

Important factors that affect Kosovo's climate are: its position towards Eurasia and Africa, hydrographic masses (Atlantic ocean and Mediterranean sea), atmospheric masses (tropic, arctic and continental), position of baric systems (the maximum of fazores and Iceland). The main local factors that affect the climate of Kosovo are: landscape, water, land and vegetation.

Hydrography

1.2.4. Hydrography

Kosovo has insufficient reserves of water, which in the future will be a limiting factor for economic development. It is estimated that Kosovo has only 1600 m3 / water/ year per capita. Regarding the hydrographical aspect Kosovo waters are divided into 4 River Basins: Drini i Bardhe, Iber, Morava e Binçes, and Lepenci. In an average wet year, from the territory of Kosovo flows approximately 3.8 x 109 water, respectively 121.2 m3/sec. The main characteristic of hydrological conditions in Kosovo is the unequal distribution and inadequate water resources compared to needs. The potential for water energy in Kosovo is very small and so far its use is quite modest.

Groundwater reserves are limited and are founded mainly in western part of Kosovo, where surface water reserves are larger compared to the eastern part, with small reserves and the south- east part, where water needs are very high.

Kosovo has few natural lakes. Artificial lakes are Batllava, Gazivoda, Radoniqi, Perlepnica and Badovc, whose water is used for water supply of population, industry, agriculture etc. Kosovo has important sources of thermal waters that are used for healing purposes and recreation. Protection, conservation and development of water resources is very important and one of the biggest environmental challenges of Kosovo.

2 Kosovo Hydro-meteorological Institute

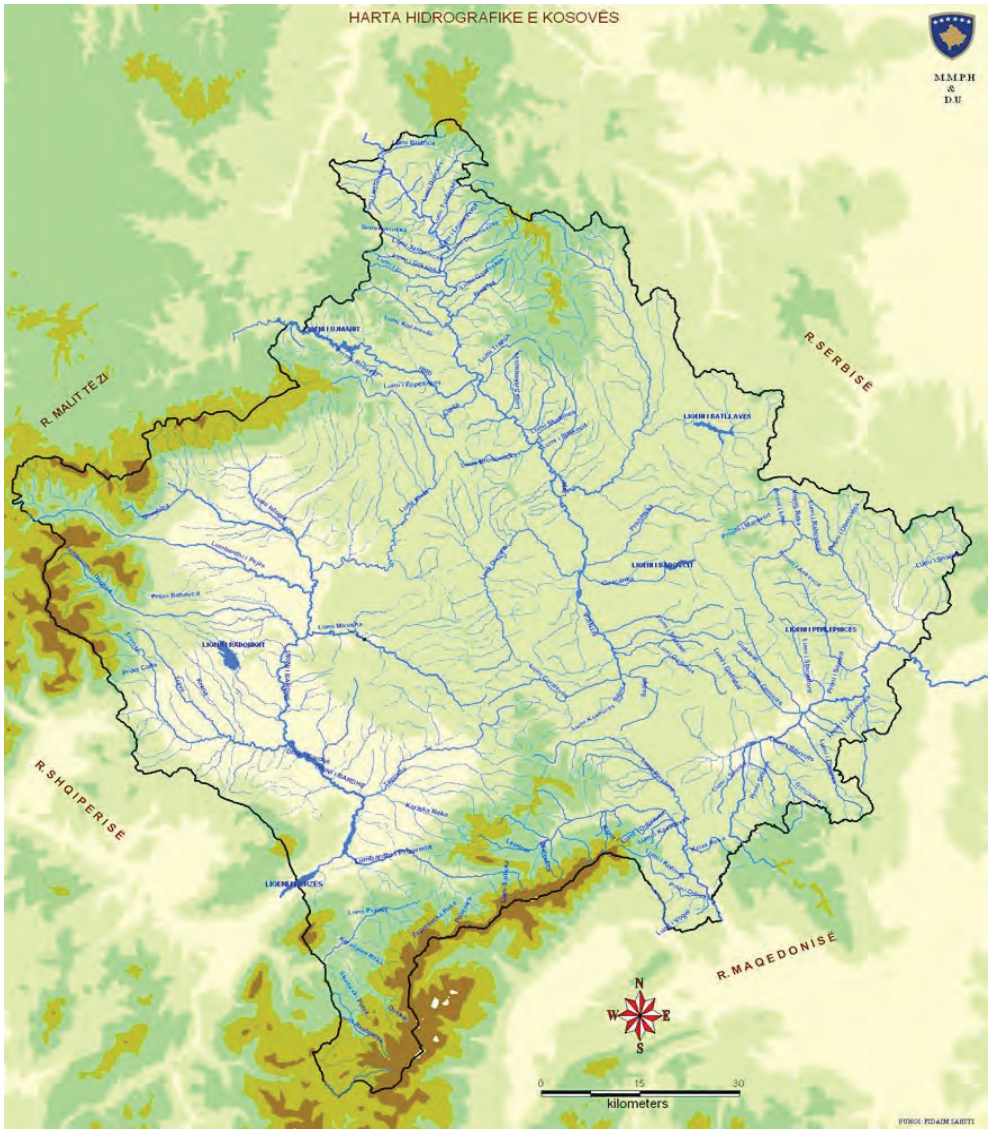


Fig. 1. Hydrography of Kosovo

1.3. BRIEF HISTORY OF NATURE PROTECTION IN KOSOVO

First steps of nature and environmental protection in Kosovo begun in late of 60s. 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 the Kosovo's Office for Protection of Cultural Monuments of Kosovo, the

Office for the Protection of Nature is established[3], which continued to work with the same name under the Law on Kosovo Office for Nature Protection[4]. Whereas in 1088 the Assembly of Kosovo issued the Law on Protection and Development of Natural Values and Values created by the Work of Human Environment[5], Article 78 paragraphs 2 of this Law it is determined the activity of this Office. Based on this law, one year later the Assembly of Kosovo has issued the Law for the Office of Kosovo on Protection of Nature and Environment[6].

After the war in Kosovo, new governing circumstances are established. In 2000, the former Kosovo Office for Protection of Nature and Environment gets registered in the UN Interim Civil Administration with the name "Institute for Protection of Kosovo's Nature and Environment" with the headquarter in Prishtina.[7] 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[8].

In 2002 the Kosovo Assembly adopted the Law on Environmental Protection No. 2002/8 (Rreg.2003 / 22) this law foresees to establish 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), which repealed the law of 1988, and according to this law the Institute carries out only 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.

With the establishment of the Kosovo Environmental Protection Agency the majority of the staff of the Institute for Nature Protection was passed to the new position of KEPA. Since 2006 the nature protection sector acted within KEPA, while in May 2013, it is selected the Director of the Kosovo Institute for Nature Protection.

Currently, the duties and responsibilities for nature protection are carried out by the Kosovo Institute for Nature Protection, which operates under the Kosovo Environmental Protection Agency.

3 Decision for division of Nature Protection Section ("KOG". 42/74)
4 Law on the Establishment of Provincial Office for Nature Protection ("KOG". 15/81)
5 Law on Protection and Development of Natural Values and Values created by the Work of Human Environment ("KOG" 39/88)
6 Law on Protection and Development of Natural Values and Values created by the Work of Human Environment ("KOG" 39/88)
7 Kosovo Institute for Nature and Environmental Protection: No. of provisional registry of the business entity 80156359, date 14.08.00)
8 Establishment of MESP (Reg. 2001/19 and 2002/5).

2 LEGAL AND INSTITUTIONAL FRAMEWORK

2.1. LEGAL FRAMEWORK

Main principles of nature protection are defined by the Constitution of the Republic of Kosovo. Article 52 of the Constitution defines the responsibilities for environment with the following paragraphs:

Nature and biodiversity, environment and national inheritance are everyone's responsibility.

Everyone should be provided an opportunity to be heard by public institutions and have their opinions considered on issues that impact the environment in which they live.

The impact on the environment shall be considered by public institutions in their decision making processes.

The legal framework on Nature Protection and biodiversity in the Republic of Kosovo consists of:

2.1.1. Laws

- Law No. 03/L-233 on Nature Protection KOG No. 85/09 (November 2010);
- Law No. 04/L-086 on National Park "Bjeshkët e Nemuna" KOG No. 2/21 (January 2013);
- Law No. 04/L-087 on National Park "Sharri" KOG No. 2/21 (January 2013);
- Law No. 03/L-25 On Environment Protection KOG No. 50/09 (April 2009)
- Law No. 2003/3 On Kosovo Forestry with amendments 2004/29;
- Law No. 02/L-53 on Hunting , (11 August 2006);
- Law No. 03/L-214 on Environmental Impact Assessment, (23 September 2010);
- Law No. 03/L-230 Strategic Environmental Assessment , (30 September 2010);
- Law No. 04/L-174 on Spatial Planning, (31 July 2013);
- Law No. 02/L-85 o Fishery and Aquaculture (10 October 2006);
- Law No. 02/L-122 on Organic Farming, (08 January 20008);
- Law No. 02/L-95 on Plant Protection , (31 January 2007);
- Law No. 02/L – 41 on Fire Protection, etc.
- Criminal Code of the Republic of Kosovo Nr. 04/L-082 in chapter XXVIII respectively from Article 347 to 364 includes the criminal offenses against the environment, animals, plants and cultural objects.

Law No. 03/L-233 on Nature Protection KOG No. 85/09 (November 2010);

- This Law regulates nature protection, its sustainable use and particularly:
- Protection, conservation, renewal and sustainable use of natural resources, in condition of natural balance;
- Revitalization of damaged areas of nature or their parts and compensation for inflicted damages;;
- Establishment of protected areas network, planning system, management, stocktaking, monitoring, information and funding for the purpose of protection of

nature;

- Preventing the over use of endangered types of flora and fauna, especially those of particular importance, rare and endangered, and their habitats;
- Ensuring the right of the public for information on the nature state and participation in decision making for nature protection;
- Ensuring the exercise of the right of citizens for healthy environment, relaxation and recreation in nature;
- Prevention of harmful activities in the nature, as a consequence of economical activities by legal or physical persons;
- To maintain or restore, at favourable conservation status, natural habitats and species of interest for Kosovo according to EU standards;
- Conservation of all species of naturally occurring birds in the wild state (birds, their eggs, nests and habitats).

2.1.2. Sub Legal Acts:

Within the obligations arising from the Law on Nature Protection, three types of secondary legislation are derived: Regulations, Administrative Instructions and Decisions:

2.1.2.1. Regulations:

- Regulation No. 21-2013 of MESP promulgated in the KOG No. 46/08.11.2013 on Internal Order of National Parks;
- Regulation No. 23-2014 of MESP on Internal Order for the Nature Monument of Special Importance "Shpella e Gadimes".

2.1.2.2. Administrative Instructions:

- Administrative Instruction for the collection of protected wild plants species, with the purpose of processing and trading No.08/2011/ (13.07.2011),
- Administrative Instruction for the sorts of natural habitat types, natural habitat map, threatened and rare natural habitat types, as well as safeguard measures for conservation of natural habitat types No. 12/2011/ (18.08.2011),
- Administrative Instruction for maintenance conditions, the manner of marking and Evidencing of the protected animals in captivity No. 01/2012/ (28.02.2012),
- Administrative Instruction on the content and manner of keeping nature protected values nature No. 07/2012 (18.06.2012),
- Administrative Instruction on wildlife crossings No.16/2012/(01.08.2012),
- Administrative Instruction for proclamation of wild species protected and strictly protected No.18/2012/ (01.08.2012),
- Administrative Instruction on the content, form and manner of issuing of identification card and appearance of uniform for the supervisors an nature ranger No. 24/2012/ (05.12.2012),
- Administrative Instruction on the cross-border movement ant trade in wild protected species No. 26/2012/ (10.12.2012),
- Administrative Instruction for the form and manner of providing the official card and sign for nature protected inspector No. 27/2012/ (20.12.2012,
- Administrative Instruction on type, appearance, procedure and manner of award of gratitude's and rewards for achievements in the field of nature protection

No.06/2013/(20.05.2013),

- Administrative Instruction on the sign of nature protection No.07/2013/ (20.05.2013),
- Administrative Instruction on the manner of development and implementation of risk assessment study for the introduction, re- introduction and cultivation of the wild species No. 14/2013/(01.07.2013),
- Administrative Instruction on assessment of acceptability of plan, program or intervention on ecological network No.19/2013/ (26.08.2013),
- Administrative Instruction on the manner and conditions of performing the ranger tasks for nature protection No.23/2013/ (12.11.2013),
- Administrative Instruction GRK on proclamation of the ecological network No 03/156/(13.11.2013),
- Administrative Instruction for prevention and compensation of damages caused by wild species of animals strict protection No. 15/2014/(02.06.2014),
- Administrative Instruction for classification of nature conservation values by importance No. 24/2014/ (27.11.2014).

2.1.2.3 Decisions:

- Decision of the Assembly of Kosovo No. 04 – V - 772 dates 11.02. 2014 for the adoption of the Spatial Plan of the National Park "Sharri".
- Decision of the Assembly of Kosovo No. 3023/3 – 2013 date 18.03. 2014 for the adoption of the Spatial Plan of NMSI "Ujëvarat e Mirushës-Mirusha waterfalls".
- Decision of Government No. 04/57 date 13. 03.2009 for putting under protection of the Nature Monument of Special Importance " "Shpella e Gadimes-Gadime Cave", Gadime e ultë, MA Lypjan.
- Decision of Government No. 06/75 date 23. 05. 2012 for proclamation of the Nature Monument of Special Importance "Ujëvarat e Mirushes-Mirusha Waterfalls".
- Decision of Government No. 03/156 date 13. 11. 2013 on the approval of the AI for Proclamation of Ecologic Network.
- Decision of Government No. 01/178 date 18. 03. 2014 on proclamation of wetland of Henci - Radeves – Special Birds Protected Area.
- Decision of Minister No. 03/2013 date 11. 02. 2013 on establishing the Directorate for the Administration of National Park "Sharri", with Headquarter in Prizren.
- Decision of Minister No. 04/2013 date 11. 02. 2013 on establishing the Directorate for the Administration of National Park "Bjeshkët e Nemuna" with Headquarter in Pejë.
- Decision of Minister No. 5034/14 date 15. 10. 2014 for proclamation under protection of the race Kosova Logcrower rooster national domesticated specie.
- Decision of Minister No. 5035/14 date 15. 10. 2014 for proclamation of the race of the dog Deltari Ilir national domesticated specie.

2.1.3. Strategies, Spatial Plans, Management Plans and other Documents

- Strategy and Action Plan on Biodiversity 2011 - 2020, approved by the Assembly of Kosovo, date 07 October 2011;
- The national strategy for the sector of non-wood forest products (NWFP) 2014-2020;

- The Strategy on Climate Protection for the Forestry Sector in Kosovo (December 2012)
- Forest Strategy 2010-2020;
- Spatial Plan for National Park "Sharri";
- Management Plan for National Park "Sharri";
- Spatial Plan for Nature Monument of Special Importance "Ujëvarat e Mirushes-Mirusha Waterfalls";
- Local Action Plan on Biodiversity for the Municipality Dragash.
- Local Action Plan on Biodiversity for the Municipality Prizren.
- Working Plan for selection of the Areas of NATURA 2000 with indicators for required data, responsibilities, deadlines and budget;
- Guideline for the Management Plans of National Parks in Kosovo, (02. May. 2012);
- Technical Report on preliminary identification of the areas of NATURA 2000 in Kosovo, 30. 06. 2008.

2.1.3.1 Documents under approval procedure:

- Spatial Plan for National Park "Bjeshket e Nemuna", (drafting procedure);
- Professional Proposal for re-categorization of the Nature Regional Park "Gërmia" as Protected Landscape category;
- Professional Proposal for proclamation of the Vasileva Lakes as Protected Landscape.

2.1.3.2 Sectoral Strategies

In the Kosovo environmental legislation except drafting the Kosovo Environmental Strategy and Action Plan it is foreseen also drafting of sectoral strategies, action plans and programs for key sectors of the environment such as biodiversity, climate change, soil protection, forests protection, etc.

During 2011 was approved by the Assembly of Kosovo the Strategy and Action Plan for Biodiversity 2010-2020, while other strategies are under the approval procedure for.

Strategy and Action Plan on 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 value, and also the manner of implementation in harmony with general economical, social, cultural development in Republic of Kosovo.

Purpose of this strategy it is not to list all opened issues which have to deal with biodiversity in Kosovo, but to create a framework of aims and activities and a better coordination, by setting prior programs and by offering a strategic access for development of initiatives in the future.

Purpose of this strategy is:

- Conservation (preservation) of biodiversity;
- Sustainable development based on sustainable use of natural recourses;
- Creation of revenue and
- Share of benefits from the use of biodiversity in equal manner.

Action plan has identified an action list and main projects which will be undertaken for a future period from 5 years for five pilot areas.

Forestry Strategy 2010 – 2020

The strategy is designed for the purpose of formulating policies and strategies to govern the future development of the Forest Sector in Kosovo.

The new economic environment and conditions in the forestry sector emphasize the needs for creating effective systems for multipurpose management of the forest resources, and development of a forest industry in harmony with the forest resource base.

Policies and strategies are consistent with existing legislation on Forestry and set the stage for all major decisions concerning the sector for the next 10 years.

The strategy of wildlife management and hunting (2012-2022)

This strategy is a long-term document for conservation of ecosystem and ecological balance, adequate protection of wild animals, ensuring their welfare and conditions for economic utilization of their natural resources.

The strategy should enable the protection of Kosovo's natural resources, flora, fauna, and their environments and the progress the relation regarding the animal species, so they could survive and remain in optimal number of population. The strategy also provides recommendations for the maintenance and improvement of the existing situation and responsibilities and cooperation with stakeholders.

The main aim of the strategy is: to respect the whole ecosystem, to achieve adequate protection of wildlife species and other species, to ensure the welfare and conditions for economic utilization of resources, so that they contribute to the economy of Kosovo

The strategy of non-wood forest products (NWFP)

The national strategy for the sector of non-wood forest products (SNWFPs) is the basic document for the protection, cultivation, collection, use and trading of NWFP, which sets out long-term goals for the conservation of this national asset that is of interest for the economic development of rural areas of Kosovo

The aim of this strategy is the development of a legal and institutional framework, where activities within the sector strategy on NWFP would contribute to the management and sustainable use of resources, thereby facilitating income generation in rural areas.

The strategy focuses on the: socio-economic, environmental and legal aspects.

Through the Strategy will be defined the directions of the development of this sector, respectively identification of priorities, activities, action plan and the addressing of responsibilities to the institutions.

2.1.4. Regional Agreements

In the field of nature protection, Kosovo has signed the following documents:

- Resolution for sustainable development of the Dinaric Arc region signed in Brdo, Slovenia 09.03.2011.
- Agreement for the development of ecotourism in transboundary protected area Sharr-Korab, Tetove 11/07/2013.
- Joint Agreement (Big Win 2) between countries of Dinaric region for better preservation of nature within the Dinaric Arc region, Budva, Montenegro 10/02/2013.
- Memorandum of Understanding between KEPA / KIEP and Research Centre of the Academy of Sciences and Arts of Slovenia - Karst Research Institute.

2.1.5. Harmonization with European Union directives in the field of nature protection

Table1. European Union Directives and Conventions in the field of nature protection

Nr.	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 re-establishment 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 bio-diversity, 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 become legally and financially responsible all damagers to damage the environment (water, soil and nature).	76%

2.1.6. International Conventions

Tabela 2. International Convention

Nr.	Title of Convention	Ratification Year	Purpose
1	Convention on Biological Diversity (Rio Convention).	Rio, 5 June 1992	The objectives of this Convention, to be pursued in accordance with its relevant provisions, are the conservation of biological diversity. the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding.
2	Convention on International Trade in Endangered Species of Wild Fauna and Flora s- CITES.	The agreement was made at the meeting of representatives of 80 countries in Washington, DC, United States of America, on March 3, 1973, and on 1 July 1975 CITES entered in force.	Convention on International Trade in Endangered Species of Wild Fauna and Flora is an international agreement between governments. Its purpose is to ensure that international trade in specimens of wild animals and plants does not threaten their survival.

3	Convention on Wetlands on International Importance, (RAMSAR Convention).	The treaty was signed in the Iranian City RAMSAR in 1971 and the member states of the convention covered all geographical regions of the planet.	The Convention on Wetlands of International Importance, called the RAMSAR Convention is an intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. The RAMSAR Convention is the only global environmental treaty that deals with a particular ecosystem. The mission of the Convention is "the preservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world."
4	Convention on the Conservation of Migratory Species of Wild Animals (BON Convention).	1 November 1983, Bon	The Convention on the Conservation of Migratory Species of Wild Animals - more commonly abbreviated to just the Convention on Migratory Species (CMS) or the Bonn Convention-aims to conserve terrestrial, marine and avian migratory species throughout their range. It is an intergovernmental treaty, concluded under the aegis of the United Nations Environment Programme, concerned with the conservation of wildlife and habitats on a global scale.
5	Convention on Protection of the World Cultural and Natural Heritage	The Convention entered into force on 17 December 1975. Paris.	The purpose of the convention is to preserve the natural and scenic areas and historic sites in the world for the present and future of all citizens of the world.

2.2. INSTITUTIONAL FRAMEWORK

2.2.1. Decision Making Bodies:

ASSEMBLY OF THE REPUBLIC OF KOSOVO

- Environmental Protection Board
- Functional Committee of the Assembly on Agriculture, Forestry, Rural Development, Environment and Spatial Planning.

Responsible Bodies for Management of Nature Protection are the following:

2.2.1.1. Ministry of Environment and Spatial Planning – MESP

Coordinates activities in the field of environmental protection in order to promote the coherent development of policies for environmental protection, develops norms and standards and issues guidelines in the field of environmental protection with special regard on international standards, monitors the implementation of such standards, as appropriate, conducting inspections and other services, participates in the development and implementation of public information campaigns and other promotional schemes to increase public awareness in compliance with environmental protection standards.

Kosovo Institute for Nature Protection – KINP:

Kosovo Institute for Nature Protection[9] within its field of activity carries out professional works on nature protection such as:

- Data collection and processing related to the protection of nature;
- Drafting certain databases for species of plants, animals, mushroom, habitats, ecosystems and sceneries;
- Monitoring biological and scenery diversity and proposition of measures for nature protection'
- Preparation of professional bases for the protection and conservation of parts of nature, or natural values;
- Design of professional bases for the needs of determining the conditions for the protection of nature, protected areas management and use of natural resources;
- Carrying out statistical analysis, summarizing results and drafting report on the nature protection situation;
- Participation on Implementation of international instruments on nature protection.

Directorate of National Park "Sharri"

This directorate is competent institution to govern directly the National Park "Sharri" according to legal duties and responsibilities.

The park is managed based on the Law on National Park Sharri, No. 04/L – 087 (13 December 2012). The Management of the park is regulated as well through Spatial Plan and Management Plan of the Park.

9 Law on Nature Protection No. 03/L-233

Directorate of National Park "Bjeshkët e Nemuna"

This directorate is competent institution to govern directly the National Park "Bjeshkët e Nemuna" according to legal duties and responsibilities.

The park is managed based on the Law on National Park "Bjeshkët e Nemuna", No. 04/L – 086 (13 December 2012).

Nature Protection Division

This division operates under the Environmental Protection Department and performs administrative and professional work related to the conservation of biodiversity, protection of natural heritage values, and protection of soil from pollution and sustainable use of natural resources in the Republic of Kosovo.

Institute of Spatial Planning

Is a competent institution for drafting Spatial Plans for Special Protected Areas, according to the Law on Spatial Planning No. 04/L-174.

2.2.1.2. Ministry of Agriculture, Forestry and Rural Development [10]- MAFRD

Is responsible for: drafting and developing forestry policies, Laws and Sub Legal Acts that regulate the field of forestry, wild animals and ecotourism in the Republic of Kosovo[11].

Kosovo Forestry Agency

Is responsible for regulating issues related to forests and forest lands, implementation of forestry legislation, issuing permits for using forestry wood and non wood products in the Republic of Kosovo.

Kosovo Forestry Institute

Provides technical and scientific support for Forestry Department and Kosovo Forestry Agency.

2.2.1.3. Ministry of Culture Youth and Sport - MCYS

Museum of Kosovo

Nature Section within the Museum maintains a part of Kosovo nature heritage.

Established in 1952, Nature Division of the Museum of Kosovo in 2001 was destroyed, transferring it to the current ethnographic museum. In the absence of the space, the artefacts that owned the museum now are located in the basement of the Museum of Kosovo.

This museum has had a total of 1,812 exhibits after the last war in Kosovo, because some of them were taken by Serbs during the war. Exhibits left in the basement are totally inadequate and the on lack of adequate space. Humidity and not spraying are main two factors that mostly harm these exhibits. Museum collections presented in this section, represent a very valuable material because they documenting the diversity of life forms from the botany and zoology in ecological and biogeographically aspects of these spaces.

10 www.mbpzhr-rks.net
11 www.mbpzhr-rks.net

Many of the collections of birds and animals that has owned the museum and which now are in danger of destruction, are very rare not only for the Balkans but for Europe also.\

2.2.1.4. Local Level – Municipalities

In accordance with the Law on Nature Protection, Strategy and Action Plan and spatial planning documents, they are obliged to take care of the conservation of biological and landscape diversity in their territory. Municipalities are obliged also to issue programs for nature protection for their territory.

2.2.1.5. Scientific Institutions

Kosovo Science Academy and University of Prishtina, are dealing with scientific exploration and research in the field of nature and biodiversity.

The Gene Bank

Gene banks shall preserve biological material, controlled and bred populations or parts of animals, fungi or plants, especially seeds, spores, gametes and other biological material manipulated for the purposes of conservation of species or their genetic resources.

The operation terms for gene banks shall be set out by the head of the central state administration body competent for science, subject to approval of the respective Ministries.

Such institution operates under the University of Prishtina, Faculty of Agriculture and Veterinary.

2.2.1.6. Environmental Civil Society Organizations

Although despite the considerable number of environmental NGOs, almost none of them have their own program for nature and biodiversity conservation oriented only.

3 CLASSIFICATION OF PROTECTED AREAS

Categorization of Protected Areas in the Law on Nature Protection is made according to the World Union for Conservation of Nature - IUCN. Nature protected areas under this Law are classified in 7 categories:

3.1. 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 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.

From the territory of protected areas, nature reserves take up 847 ha. In Kosovo, so far we have 3 types of protected reserves: Plant reserves (7), animal reserves (2) and special reserves (2).

3.2. NATIONAL PARK

National park is a large area of the 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 - hotelier and recreation activities which are with assignment of visits, education, healthy needs – touristic and recreation, extensive traditional agriculture, fishery, if they don't present any dangerousness of 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 PK "Bjeshkët e Nemuna" with 62.488 ha. Totally 115.957 ha.

3.3. SPECIAL PROTECTED AREA

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 science.

Special area could be: floristic, mycological, forestall 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, catching and killing 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 ones 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 with an area of 109 ha.

3.4. NATURE PARK

Nature Park presents large natural area or partly artificial 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 of protection is still not classified any protected area in Kosovo.

3.5. 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 educational 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 locality which is component part of protected area, shall not be permitted activities that endanger characteristics and its values.

In Kosovo are under protection 99 Nature Monuments with an area of 5.972 ha. Out of them 66 with botanic character, 17 hydrological, 7 geomorphologic and 9 speleological.

3.6. 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 ones it is declared protected.

Within this enters the Regional Park Germia with an area of 1.126 ha, the Park of Shkugëza with an area of 70 ha and Pishat e Deçanit with 15 ha. Totally 1.211 ha.

3.7. MONUMNETS OF PARK ARCHITECTURE

Park architecture monument it's an artificially created space: botanic garden, arboretum, city park, tree typesetting and other forms of parks and gardens, respectively individual or grouping timbres with high aesthetic values, cultural - historical, ecological or scientific.

In the park architecture monument and in his direct nearness, 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

4 CHRONOLOGY OF DECLARATION OF PROTECTED AREAS

In the chronology of declaration of the nature protected areas in Kosovo can be divided into 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 putted under protected the following: Shpella e Gadimes and some other monuments with botanic importance such as: Rrapi në 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 Cawe and Waterfall in Radavc (1983) and some other monuments of nature.

The period after 2000, characterizes 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, 80 new nature areas have been taken under legal protection and over 100 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.

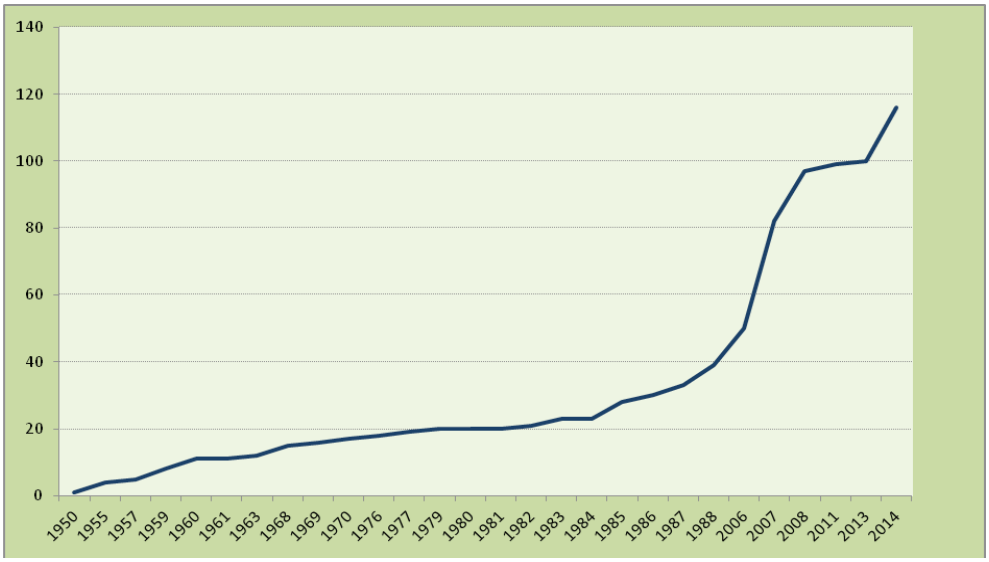


Fig.2. Number of Nature Protected Areas 1950 - 2014



NATURE PROTECTED AREAS

5 NATURE PROTECTED AREAS

Currently the number of nature protected areas in Kosovo (2014) is 116 and includes a territory of118.913,95 ha (10.9% of the territory of Kosovo). These areas include:: 11 Nature Strict Reserves Nerodime River Bifurcation", "Arnen's Reserve", "Maja e Ropsit", "Rusenica", "Kamilja", etc), 2 National Parks (NP "Sharri", NP "Bjeshkët e Nemuna"), 99 Nature Monuments The spring of Drini i Bardhe", "Gadime Cave", "Rugova Canyon", "Fshajtë's Bridge" many bio-monuments", etc.), 1 Regional Nature Parks ("Germia") Two protected landscapes ("Deçani Pines" and Shkukeza). And one Special Protected Area of Birds ("Wetland of Henci-Radeve").[12]

Greatest territory of protected area is taken up by the National Parks: "Bjeshkët e Nemuna" and "Sharri".

Table 3. Nature Protected Areas according to categories

IUCN Category	Name	Nr.	Surface /ha	Participation of PA %
I	Nature Reserves	11	847	0.08
	NR. Vegetative	7		
	NR. Animal	2		
	NR. Hydrologic	1		
	NR. Geologic	1		
II	National Parks	2	115957	10.6
III	Nature Monuments	99	5972	0.5
	NM. Speleological	9		
	NM. Hydrologic	17		
	NM. Geomorphologic	7		
	NM. Botanic	66		
V	Nature Regional Park	1	1126	0.1
V	Protected Landscape	2	85	0.007
V	Special Protected Areas of Birds	1	109	0.009
	Total	116	118913.95[2]	10.90 %

5.1. NATURE STRICT RESERVES

In Kosovo, currently the number of nature reserves is 11 with a total area of 847 ha or 0.68% of the total territory of Kosovo. Of these 4 reserves are located inside the National Park "Sharri" (Maja e Arnenit, Rusenica, Pisha e Madhe and Oshlak), 4 are within the National Park "Bjeshkët e Nemuna" (Kozhnjeri, Gubavci, Malet e Prilepit and Maja e Ropsit) and 3 other reserves (Bifurcation of the River Nerodime, kodrina e Kamiljes and Gazimestani).

12 Explanation: This surface of protected areas does not include the protected areas inside the National Parks "Sharri" and "Bjeshkët e Nemuna"

5.1.1. Maja e Arnenit

"Maja e Arnenit" area is rich with endemic type forests - relict of Bosnian pine (Pinus heldreichii), which in southern slopes of Oshlak limestone forms Pinetum Seslerio heldreichii community, while in south-eastern slope, which has more moisture, forms a community of Luzulo maximae - Pinetum heldreichii. These communities lie to the altitude of 1946 m. One part of these forests with an area of 30 ha, in 1960 has been declared as strict nature reserve. In the eastern part of the area under Bosnian Pines' forests, coniferous forest community Fagetum montanum is located. Bosnian Pine forest area proposed as 1 protection area (strict nature reserve) is rich in endemic plants, of which we emphasize: Sharr fish grass (Vrbascum scardicolum - st. end.) Bulgarian Gentiana (Gentianella bulgarica var. Albanica), Kartusian's clove (Dianthus cartusonarum), Rock clove (Dianthus integer) Albanian bell-flower (Campanula albanica) Albanian Thyme (Thymus albanus etc).



Photo 1. Maja e Arnenit, forestry communion of rouble and beech

5.1.2. Rusenica

Rusenica is home to Balkans' Lynx (Lynx lynx balcanicus), which is rare and endangered species. It is located inside the "Sharr Mountains" National Park in the Municipality of Suhareka, and it is a Protected Nature Reserve with a protected area of 300 ha. This reserve was declared in 1955, in order to protect the residence of lynx.

Rusenica is characterized by limestone cliffs and two forest communities: coniferous and firry forests (Abieti-Fagetum) and low forests of Orno-Ostryio carpinetum.

This location is also important in floristic terms, whereby from other types of plants we must emphasize the presence of endemic species: Burnmullera dieckii, Greek maple (Acer heldreichii), etc

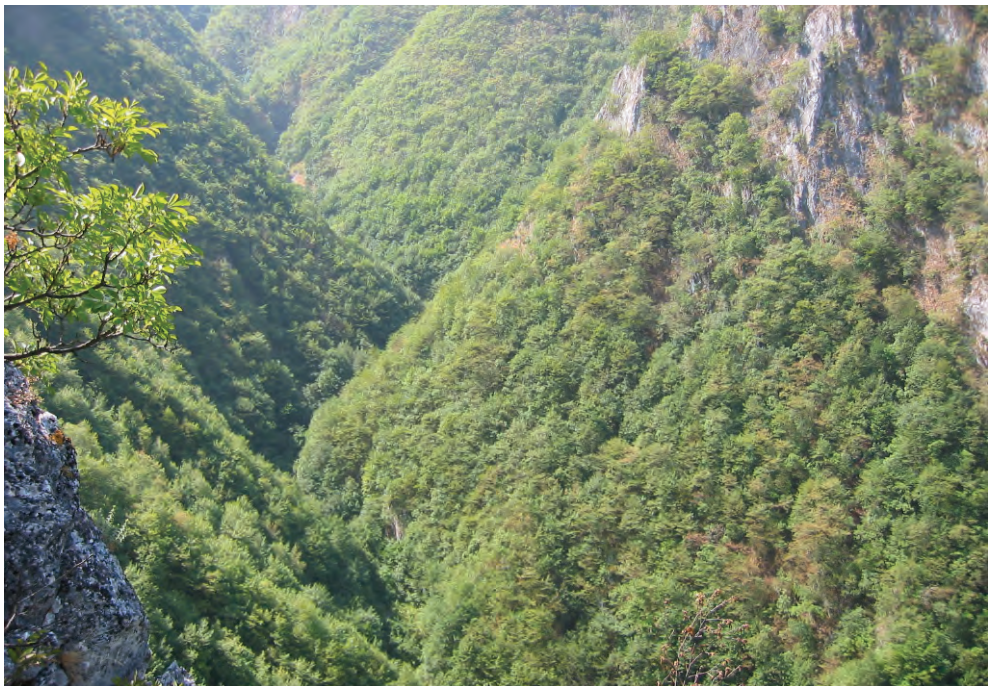


Foto 2. Rusenia Canyon

5.1.3. Pisha e Madhe

Pisha e Madhe is characterized by old forests of Bosnian Pine from the community of Seslerio-Pinetum heldreichii, which represent the prettiest and the most interesting complex of Bosnian Pine forest in the Balkans. An area of this forest of 35 ha, in 1960 was declared as strict nature reserve.

The area is rich with numerous species of flora which are mostly cosmopolite (widely spread in the national park). Particular value are of endemic type Sedum flexiosum and curative character types, such as: white asphodel (Asphodelus Albus) leech without stalk (Carlina acaulis), cross gentian (Gentiana cruciata), Fever grass (Centaurium erytrea) etc.

Pisha e Madhe represents a habitat for numerous species of wild animals, while the most important are: Brown bear (Ursus arctos), Deer (Capreolus capreolus), Wild cat (Felis sylvestris), Badger (Meles Meles), Marriage foina, Mountain hawk (Falco biarmicus) Mouse-eating eagle (Buteo buteo), etc.



Photo 3. Pisha e Madhe: Bosnian Pine Forestry ecosystems

5.1.4. Oshlaku

This reserve is characterized by specific floristic, faunal, phytocenologic and geomorphologic values. Within the rich biodiversity of flora, many species of endemic – relict and their rare phytocenosis could be emphasized.

From the tree types, except for Bosnian Pine, Macedonian Pine and Silver fir present are the following as well: fir (Abies alba), Macedonian Pine (Pinus peuce), wild willow (Salix caprea), etc.. Special symbol of Oshlak is local endemic type of Achillea alexandri Regis glacial age, where with the other endemic type from the central Balkans Onobrychis scardica, forms specific community of Achilleo alexandri Regis – Onobrychis scardica.

From many other types of endemic, which Oshlak area is rich in we emphasize: Hoary rockrose (Helianthemum canum), Sharr clove (Dianthus scardicus) Stone clove (Dianthus integer,) Albanian lily (Lilium albanicum) etc. The area is rich with numerous species of birds and mammals: capercaillie (Tetrao urogallus), the Rock partridges (Alectoris graeca), Hazel grouse (Tetrastes bonasia), Wild goat (Rupicapra rupicapra), Brown bear (Ursus arctos), etc.



Photo 4. Oshlaku (south exposition), habitat of Bosnian pine and wild goats

5.1.5. Kozhnjeri and Maja e Ropsit

The Mountain of Kozhnjer and the Peak of Ropsit are located in the western part of Deçani. The surface area of Kozhnjer is 150 ha while the Peak of Ropsi is 20 ha. These areas are declared as nature strict reserves in 1955. The altitude is from 1708 (Kozhnjeri) m up to 2501 m (Ropsi).



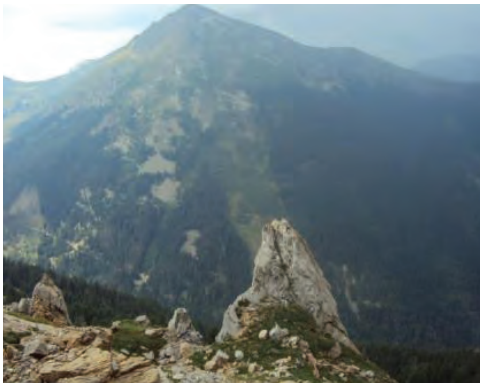


Photo 5 and 6. Kozhnjeri and Maja e Ropsit

These reserves are areas of high limestone and Serpentin Mountains that features the rare herbaceous ecosystems and forestry.

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 Highest parts of the area are covered with herbaceous communities, rich in endemic plants. The most important types of this area are Pinus peuce, Pinus heldreichii, Abies alba, Picea excelsa, Cerastium alpinumn, Saxifraga stellaris, Saxifraga aizoides, Nartecium scardicum, Valeriana tripteris, Malva moschata, Cirsium candelabrum, Gnaphalium sylvaticum, Lychnis flos- cuculi, Lychnis coronaria, Tanacetum vulgare, Angelica pancicii, Acer intermedium, Achillea grandifolia, Saturea subspicata, Salix eleagnos etc.

The highest rock parts of the mountains of Kozhnjeri represents the habitat wild goat (Rupicapra rupicapra), while forests represent the habitat of Brown bear (Ursus arctos), European Roe dear (Capreolus capreolus), Wild Boar (Sus scrofa), Wild Cat (Felis sylvestris), European badger (Meles meles), Western capercaillie (Tetrao urogullus), Rock Partridge (Alectoris graeca), Goshawk (Accipiter gentilis), Brown Trout (Salmo trutta m. Fario), Alpine Salamander (Salamandra atra) etc.

5.1.6. Gubavci

Gubavci is located in the western part of Peja, creating a pretty view near the Koprivniku. The surface area is 38 ha., declared as strict nature reserve in 1959.

The most important values of the area present the several endemic and relict species with special emphasis to Forsythia europaea species. Other interesting species are the: Centaurea kosaninii, Fumana bonapartei etc. According to the literature it is mentioned the Stenoendemic Rubus Ipecensis species too.

5.1.7. Malet e Prilepit (Prilepi Mountains)

Prilepi Mountains are located in the northwest part of Deçani. The surface area is 0.92 ha, declared as strict nature reserve in 1963.

Prilep Mountain is the area of high mountains on limestone with special phytocenologic, geomorphologic, geological and landscape value. The characteristics of the area are the emphatic Biodiversity of dendroflora (wood species) among which are distinguished endemic species of Acer heldreichii and Pinus peuce.

The area is dominated by forest communities and limestone rocks in the high parts of the area.

Other types of wood are: the White pine (Pinus silvestris), Norway spruce (Picea abies), Fir Tree (Abies alba), Maple mountain (Acer pseudoplatanus), Norway Maple (Acer platanoides), Balkan Beech (Fagus moesiacae), Silver Birch (Betula pendula), Wild Poplar (Populus Tremula), Wild Willow (Salix caprea) etc. The most important types of fauna are: Brown Bear (Ursus arctos), Beech Marten (Martes foina), European badger (Meles meles) and others. From the species of ornitofauna are distinguished: Stone Partridge (Alectoris graeca), Wild Dove (Columba oenas), Raven (Corvus corax), Owl (Cuculus canorus), mountain spotted woodpecker (Dryobates leucotos), Woodlark forests (Lullula arborea) etc.



Photo 7. Prilepi Mountains

5.1.8. Nerodime River Bifurcation

Nerodime river bifurcation represents the only example in Europe, flowing of the river into two seas. The river springs in the Jezerc Mountains and in the village of Nerodime, it splits irreversibly into two branches, which are pouring in two different seas. Northern branch (left branch) flows into Sitnica River and continues its route to Ibar River, Morava and through Danube flows into the Black Sea, while the southern branch (right branch) through Lepenc River and through Vardar River flows into the Aegean Sea.

This natural curiosity is quite attractive for researchers and visitors and is of great educational, scientific and tourist importance.

Since 1979 it has been put under legal protection as special nature reserve. Protected reserve area is 12.78,71 ha. (Decision No: 633-1 date 24 January 1979, Ferizaj).

5.1.9. Kamilja

It is declared special nature reserve in 1988 with an area of 228 ha. Kamilja limestone hills, is characterized by special natural value of paleontological period. This reserve is not monitored by the institutions of Republic of Kosovo for political issue.

5.1.10. Gazimestani

The first protected area declared in 1950, in the category of vegetative Reserve of Scarlet paeony (Paenonia decora Anders). According to the findings of recent years this area has lost natural values for based on which it was declared as protected area. It's under procedure the assessment of existing situation and the review of measures to remove this area from the list of protected buildings.

5.2. PROPOSED AREAS FOR PROTECTION

With the Spatial Plan of the National Park "Sharri" and National Park "Bjeshkët e Nemuna" (under procedure) was proposed 25 more areas of protection that should be declared as Strict Nature Reserves. 11 of them in NP "Sharri" and 14 in NP "Bjeshkët e Nemuna".

- Kopilicë, Dupnicë and Lumbardhë (Municipality of Prizreni);
- Bistra and Gryka (Municipality of Shtërpca);
- Pashallare and Lendina e Shenjtë (Municipality of Suhareka);
- Luboteni (Municipality of Kaçanik);
- Shutmani, Bredhiku and Koritniku (Municipality of Dragash);
- Gjeravica and Rasa e Zogut (Municipality of Junik);
- Bjeshka e Kurvallës-Dervishkomit, , Bellaja-Bjeshka e Strelcit, Marjashi, Bjeshka e Prilepit and Bjeshkët e Lumbardhit (Municipality of Deçan);
- Rugova Canyon, Bjeshkët e Koprivnikut, Guri i Verdhë, Gryka e Sushicës, Spring of Drin i Bardhë, Rusolia and Zhlebi (Municipality of Peja);

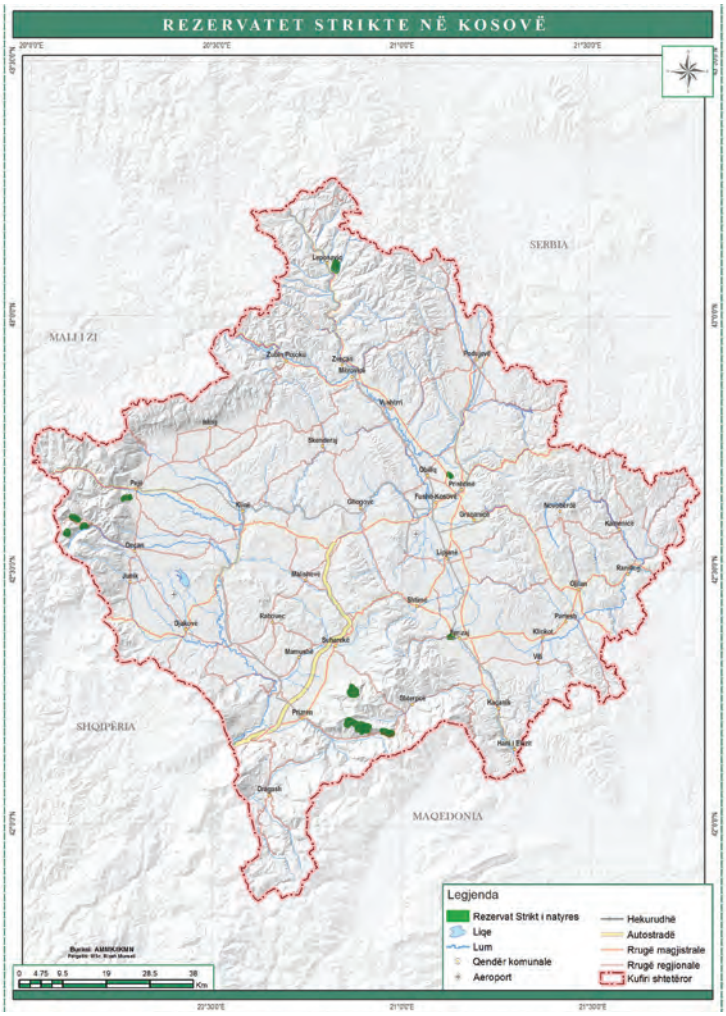


Fig. 3. Map of Nature Reserves

The State of Nature Reserves

The negative impacts of anthropogenic factors such as: illegal construction and interventions without scientific criteria, uncontrolled logging, but also other non-anthropogenic factors on the nature reserves in Kosovo such as disease, fires etc., are directly interfered with the objectives of protection, legislation and international norms. Such effects and lack of institutional and scientific care are making these reserves to permanently lose their natural characteristics for which they are under protection.

Such example is the Nerodime River Bifurcation which still is not functional due to numerous obstacles in the river bed, especially in the left branch that discharges water to Sazlia flow which then flows into the river Sitnica.

During 2012 through a donation from the European Union it is invested only in a small part of the riverbed in the regulation of the river Nerodime watershed (in bifurcation) where are not respected the professional criteria in cases of interventions in protected areas.

It is also noticed that within the protected area near Bifurcation it is built a hotel which has no environmental consent by MESP. Construction of this building has stifled the space near the marine watershed of Bifurcation.

The Institute for Nature Protection based on continuous field visits, the Law on Nature Protection (Article 10 describing criteria for strict areas) and developments around Nerodime Bifurcation River has stated as following:

- Within the special nature reserve - Nerodime River Bifurcation are many interventions in contradiction with the law, both in suburbs and in its bifurcation phenomenon;
- Intervention in Nerodime River Bifurcation with the project funded by the European Union and Ferizaj Municipality implemented in 2012 which did not solve the problem to make functional the bifurcation;
- Regulation of Nerodime riverbed from "Restaurant Ujvara" up to the village Sazli;
- For any interference in Nerodime riverbed to be prepared concrete projects;
- For all interventions in the riverbed should be taken the professional opinion from KINP.





Photo 8 and 9. Interventions in Nerodima River Bifurcation within the EU projects

Natural values in some of the reserves are endangered by the presence of many visitors who visit the area (Prevalla, Bifurcation etc.). The most difficult situation is presented in the Bosnian Pine (rrobull) forests at the top of Arneni and Oshlak who have suffered significant damages from the fires of previous years and the development of hypodermic insect pests

(Blastophagus sp., Ips typographus) that have been developed massively after the fire. From the impact of these damaging factors are dried several hectares of these forests, and many other trunks are at seriously medical condition and of weakened immunity.

In fir trees have been identified the illness such as tumour diseases of bark (Melamsporella caryophyllacearum) that appears in the form of deformation of trunks and branches of decay mushrooms (Armilaria Mele). In beech tree is presented the bark tumour (Necctria sp.,) and the cause of decay (Fomes fomentarius).

The general situation of wild animals is unstable due to ongoing concerns by human activities. Also the danger for animals is presented from illegal hunting, from which, in particular, are at risk the roes and wild goat. These illegal actions occur mainly during the weekends.

A bigger problem is the use of stone in strict nature reserve "Rusenica" that caused considerable ecological and landscape damage. The constant interference in protected nature of this area has caused as a considerable consequence concern for the protected species of the lynx (Lynx lynx). To protect the habitat of this endangered species, it is needed to take measures to prohibit the use of stone in this area and return the ecosystem to its former condition.



Photo 10. Quarry at the Canyon of Rusenica



Photo 11. Reservation of Arneni 2011

5.3. NATIONAL PARKS

National Parks are spatial integrity which are characterized with natural values and rarities, with a large number of important forest ecosystems and other ecosystems preserved, with the number of endemic and relict species, with rich characteristics of geomorphologic features, hydrological and that have scientific values, cultural, historical, landscape, sportive, tourist – recreational and activities that contribute the economic development according to the environmental criteria.

5.3.1. National Park "Sharri"

Sharri ranks among the most attractive and most important mountains in the Balkans and Europe. The majority territory of Sharr mountain which lies in the Republic of Kosovo and the mountains surrounding Sharr, in December 2012 are included within the expansion of the National Park (Law on NP "Sharri" No. 04 / L-087) with an area of 53,469 ha. A part of this territory with an area of 39,000 ha had the status of National Park since 1986 under the Law on the National Park "Sharr" No. 11/86.

NP "Sharri" is located in the southern part of Kosovo and lies in the territory of five

municipalities: Dragash (45.1%), Shterpce (23.9%), Prizren (22.2%), Suhareka (4.7%) and Kaçanik (4.1%). The southern border of the NP coincides with the state border of the Republic of Kosovo and FYR of Macedonia and Albania that passes through the highest peaks of Sharr, many of which are over 2500 m above sea level: Çuka e liqenit (lake) (2604 m), Bistra (2651 m), Black Peak (2584 m), Kobilica (2526 m), Vrtopi (2555 m), Vraca e madhe (2582 m), Rudoka (2658 m) etc.



Photo 12.Landscape from Sharr Mountains

NP "Sharri" is characterized by special beauty and natural values (biological, bio-geological, geomorphologic, hydrological, climatic and landscape) that have special scientific, educational, cultural, historical, recreational, tourist and aesthetic importance.

The structure of surfaces are dominated by herbaceous vegetation (pastures) that cover approximately 58% (30,904.85 hectares) of the territory of NP "Sharri", while forest vegetation covers about 35% (18,298.82 hectares) of the territory. Most part of pastures lies in the municipality of Dragash who represent the biggest area of high mountain pastures in Europe. Besides herbaceous and forest vegetation in the surface structure of the NP "Sharri", according to the land use participate: transitional bushes - 2.65% (1,419.15 ha), water surfaces - 2.74% (1,467.64 ha), urban areas - 00:04% (23:21 ha) and bare surfaces - 2:53% (1,355.33 ha) .[13]

Sharri ranked among the six areas (centre) with the richest biodiversity in Europe [14]. Parts of this rich biodiversity are:

- Over 2000 species of plants (about 400 endemic plants, 20 types steno-endemic, over 250 medicinal plants, 160 types of wood),
- Over 180 communities (associations) plant,
- 32 species of mammals (excluding bats),
- 19 types of reptiles,

13 Management Plan of NP "Sharri" 2015
14 WCMC, 1989

- 12 types of amphibian species,
- 200 species of birds,
- 147 species of butterflies etc.

Particular importance has rich biodiversity of endemic flora and fauna that makes Sharr specific endemism centre of high mountains in the Balkans and Europe.

The state of natural resources in the National Park "Sharri" is unstable due to the negative impacts of biotic (human, insects, diseases) and abiotic factors (fires, natural disasters: wind, snow, etc.). In recent years regarding the un-sustainability of the situation of natural resources, particularly forest ecosystems have influenced the reduction of annual precipitation, especially snow and also high temperatures during the summer.

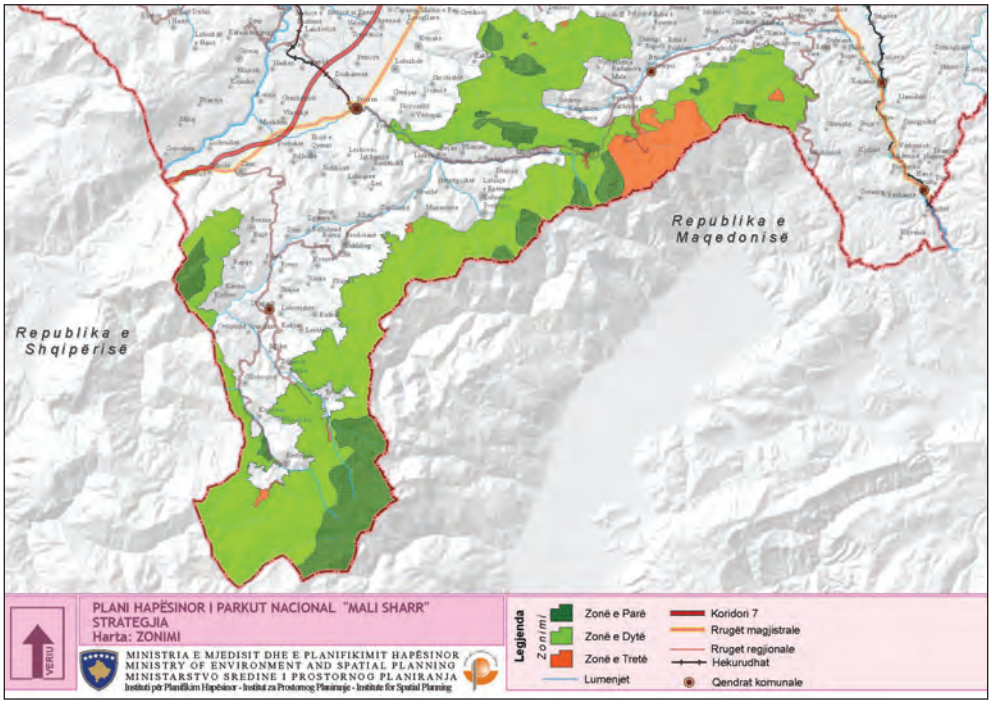


Fig. 4. Zoning Map of NP "Sharri"

The state of Forest Ecosystem

The condition of forests in NP "Sharri" is hindered as a result of the negative impacts of biotic and abiotic factors. These factors have contributed to the deterioration of forest health and forest damage that endangers the biological sustainability of forest ecosystems.

Most vulnerable are forests of Bosnian Pine (Pinetum heldreichii) who have suffered significant damage from forest fires (2000, 2007 and 2012) and the great development of insect pests, skin insects (Ips. Sp. And Blatophagus sp.) That is a consequence of the weakened immunity of damaged trees. The Largest damages are presented in Bosnian Pine of Koritnik forests where in 2012 were burned about 600 hectares of these forests that have been under the management of KFA. The consequences of the fires in the form of drying trees are present in the forests of Bosnian Pine in the areas of Pisha e Madhe and Prevalla.

Improving the health state of Bosnian Pine forest in recent years is noted in the region of Prevalla as a result of undertaking the sanitary cleaning of dry and infected trees by diseases

and insects in the second zone of protection. On the most damaged parts of Bosnian Pine forest has begun development of pioneering wood species: Wild willow (Salix caprea), birch (Betula pendula) and Euroasian Aspen poplar (Populus Tremula). From the Herbaceous types is distinguished the major development of fireweed (Epilobium angustifollium) which prevents natural regeneration of Bosnian Pine. Bosnian Pine forests are constantly endangered by fires caused 100% by the anthropogenic factor (man).



Photo 13: Consequences of hypodemic



Photo 14. Koritniku: Consequences of fires in Bosnian Pine Forests

In the clearly forests of fir (Abietum Alba) and Hormoq (Picetum excelsae) damages are of smaller intensity and have mainly sporadic character. The most important pests that are found in the forests of fir are:

- Mushrooms – the cause of bark tumour and deformations of branches (Melampsorella caryophyllacearum Schröt.);
- Mushrooms - the cause of the decay of roots and trunk (Heterobasidion annosum Bref.);
- Mushrooms - the cause of the decay of roots, trunk and drying (Armillaria mellea Staude);
- Fir –tree hypodermic (Ips curvidens Germ.) etc.

From the harmful biotic factors that are presented at Hormoqi are distinguished:

- Mushrooms - the cause of the decay of roots and trunk (Heterobasidion annosum Bref.);
- Pests insects Hermes (Cheremes Abietis L.);
- Hypodermic of hormoqit (Ips typographus L.) etj.

Beech forests have greater expansion in NP “Sharri”. Most forest damage are caused by natural disasters (wind and snow), which appear in the form of fractures and tweak (crash) of timber and illegal logging of forests. This negative phenomenon is present, in particular, in the regions of Delloc and Maçiteva village, Suhareka municipality, Manastiricë and Koritniku 1 of Prizren Municipality and in different regions of the municipality of Shterpca that remained outside the governance of MESP (DANP). NP areas that lie in the municipality of Shterpca since after the war of 1999, are being managed by illegal parallel institutions, while in the municipality of Kacanik the management is carried out through the Municipal Forest Unit within KFA. The main cause of the appearance of illegal logging is a difficult socio-economic situation of the rural population which uses oak wood as the main source for heating and also the failure of appeals from the DANP “Sharri” in the respective courts.





Photo 15 and 16 Destruction of Forests from natural factors (Lubinje)



Foto 17. Ilegal loggings of forests within the Park

Forest damages of the beech forest from harmful insects and phytopathogens (diseases) are of low intensity and do not have special ecological and economic important. The most important diseases caused by mushrooms in damaged and old trees, are the following:

- Mushroom – the cause of bark tumour (Nectria ditissima Tul.) ;
- Mushroom - the cause of decay (Fomes fomentarius Gill.).

Gjendja shëndetësore e pyjeve të përziera të ahut me halorët (bredhin, hormoqin, rrobullin The health condition of mixed beech forest with conifers (pine, hormoq, pines and Arnenin) is good and stable. These forests are sustainable and show good resistance at negative

impacts of biotic and abiotic factors. The impact of these factors, in particular the insect pests and diseases, is most be emphases in clean forests as they usually attack the certain types of wood, while in mixed forests their development and spread is limited due to the diversity of trees.



Foto 18. Bark Tumor (Nectria ditissima)



Foto 19. Decay mushroom (Fomes fomentarius)

Forest of arneni (Pinetum peucis), together with Bosnian Pine forests, due to endemic relict character represent the most important forests of NP "Sharri". These forests have limited spread, while the largest area is found in the areas of Lost Waters and Durlës Streams. Arneni forests are in good condition and have largely preserved the natural resource value .



Photo 20. Forests of Arneni – Lost Waters

Beside the aforementioned pests, in the forests of NP "Sharri", respectively on other kinds of wood, are identified many damaging of secondary character and limited spread, such as:

- Insect pest of pine (Thaumatopoea pityocampa);
- Mushrooms - cause of bark tumor of hotnbeam (Taphrina carpini Rostr.);
- Mushrooms - cause deformation of leaves of elm-treeTaphrina ulmi Fck.);
- Annual and diffuse viral chlorosis on the mountain maple leaves, etc.

Natural regeneration of forests is relatively good. Insufficient regeneration occurs in some areas of beech forests because of the great coronal-density and thick layer of) forest lëgushës (steles) which prevents oak seed cultivation and developing of seedling. In the Bosnian Pine forests regeneration is hampered as a result of damage to forests from fires and the development of dense herbaceous vegetation. Better regeneration has firs in the Mountain areas of Mushtisht and Koxha Balkans and Arneni in the areas of Pashallares and Missing Water that have effected on the spread of forests of these species in the NP "Sharri". In good development of Arneni and fir affected favourable natural conditions and failure of using mountain pastures due to the reduction of livestock in rural areas.

There is no economic exploitation of forests within the NP "Sharri". Only sanitary limited measures (cleaning) apply, with the purpose of protecting, preserving and maintaining forest ecosystems based on appropriate plans and legislation for the management of national parks. Sanitary cleanins are applied in the forests of damaged beech and Bosnian Pine that influenced to avoid infections and improve forest health.

During 2012 in the region of Prizren, in Koretnik forest had fireplace of low intensity involving 1.5 ha, fire which was brought under control and extinguished by the Forestry officials. The phenomenon of occurrence of fires has been intensified especially during August, exactly on 08.22.2012 and is localized and brought under control on 28/08/2012 involving larger areas but also better quality of culture coniferous forests.





Photo 21 and 22. Fires in NP "Sharri"

The state of shrubs and herbaceous ecosystems

The most common vegetation of shrubs in NP "Sharri" is the vegetation of Mugo pine (Pinus mugo) that lies in northern expositions of Oshlak, Koxha Balkans and Pashallaret mountains. The state of the vegetation in general is good, but fires pose a permanent risk during the summer, of which in 2011 and 2012 were damaged nearly 10 hectares of vegetation of mugo pine. In areas where there is no mugo pine, are developed the vegetation of dwarf Japanese garden (Juniperus nana), blueberry (Vaccinium myrtillus) etc. During the summer blueberry fruit are collected throughout the territory of NP"Sharri" by local residents and visitors. For sustainable

use of forest fruits and herbs are under the preparation the necessary legal and planning acts.

Herbaceous vegetation lies mainly above the forest vegetation, while in the municipality of Dragash, ranging from Guri i Zi area up to the village of Krushevc (along the border with Macedonia and Albania) which completely covers the territory of NP "Sharri".

The state of herbaceous vegetation is good, and in some areas, particularly in the municipality of Dragash, during the summer season is used for grazing of livestock (sheep) from local and the regional farmers of Prizren. DANP "Sharri" is dedicated on raising awareness of farmers for sustainable use of pasture in order to eliminate any fire case from unconscious farmers. Herbaceous vegetation of high mountains is rich with many endemic species that are in good condition. To ensure the sustainability of these rare plants, locations that are richer in endemic plants, are designated as first category of protection areas in the Spatial Plan of NP "Sharri". Some rare species of herbs are subject of illegal use. The most endangered plant is gentiana (Gentiana lutea), which is collected by local residents and visitors to use it for trade (personal benefits) as it has special curative value. Gentiana is found in the highest parts of the NP territory (over 1800 m), and as a consequence of uncontrolled use in the past, its survival is quite vulnerable.



Photo 23. Sharr (Vraca), herbaceous vegetation (pastures) during autumn

The state of water Resources

PK "Sharri" is rich with a considerable number of water sources, streams, rivers and lakes that make the park important on natural value. Streams and rivers that are characterized by grabber flow and considerable waters represent the habitat of stream trout. The most important rivers are Lepenci, Lumbardhi, Pllava, Brod, Restelica and Radika River belonging to two basins, Aegean and Adriatic. Within the NP "Sharri" are the following lakes: LIvadhi, Jazhinca, Katundi i Eperm and Shutman Lake located at an altitude above 2000 m.

Many water sources in the past were given for use to local villages to meet the demands for

drinking water. There were presented the cases of usurpation of water resources in the area of Prevalla (2012) by some owners of summer camping and Pashallare (2013) by a resident of Mushtisht village. There are initiated legal measures to justice for usurpers. There is not water pollution, but in certain areas of waterfalls which are visited by citizens represented various types of wastes. This issue can be regulated by the institutional management of waste in the territory of the NP. During 2014 all the attempts of usurpation of water resources are eluded from DANP "Sharri", but it will be necessary to return to previous natural state the occupied resources during the earlier years. The lack of rainfall and high temperatures during the past few years have contributed to reducing the quantity of water resource.



Photo 24. Brezovica River



Photo 25. Livadhishte Lake

The state of touristic areas

In the NP "Sharri" are 9 tourist areas proposed in the Spatial Plan of NP "Sharri" (2013): Brezovica, Prevalla, Guri i Zi (Zapluzhe), Ujerat e Gropuar, Gradanci, Guri i Delocit, Luboteni, Brod and Restelica. The most important and most frequented by visitors are Brezovica and Prevalla. So far, tourism has been unorganized, but this issue should be regulated with the approval of the Spatial Plan of NP "Sharri" and drafting of regulatory plans for tourist areas. The biggest problem in the tourist areas represents illegal construction. MESP during 2013 and 2014 has taken important measures to prevent illegal construction and regulation of the tourist area of Prevalla. Illegal houses and summer camping have been destroyed and returned to the previous state of nature. Negative phenomena in tourist areas represent waste generated by visitors. This issue should be regulated by proper institutional management of waste in all tourist areas.





Photo 26 and 27.Prevalla: summer camping before destruction (2011) after destruction (2013)

Challenges and problems in the management of NP "Sharri "Sharri"

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

- Permanent risk of natural resources from the negative impacts of biotic factors (human, harmful insects and phyto-pathogens) and abiotic (fires, natural disasters: wind, snow, etc.). Major damages are caused by anthropogenic factor (man) through various illegal actions, logging of forests, hunting, construction, fires etc.
- Lack of external and internal border marking (first, second and third area) of the NP;
- Lack of sufficient staff to ensure sustainable management of natural resources. In 2013 with the new Law on NP "Sharri" No. 04 / L - 087 is doubled the area of NP territory from 22,660 ha to 53,469 ha, but it is not added (hired) any worker in the Directorate for the Administration of NP "Sharri" in three municipalities: Dragash, Shterpce and Kacanik. This situation has hindered the protection and management of the natural resources throughout the NP "Sharri".
- Insufficient budget for sustainable management of NP "Sharri". This situation is reflected with the lack of investments in the protection and development of NP "Sharri". Improving financial situation of NP "Sharri" is closely related to the economic development of Kosovo
- Un-execution of criminal appeals and offences for illegal actions in the respective courts. The Review of appeals is delayed and in many cases are in the favour of the lawbreakers. In this way are stimulated the damagers of nature, whereas NP "Sharri" is significantly meeting ecological and economic damaged.
- Attempts to develop tourism in contradiction with the principles of nature protection ;

The Strategy and development measures of NP "Sharri"

With the approval of the Spatial Plan and Management Plan of NP "Sharri" during the last two years (2014-2015) is created the strategic planning basis for the management of this Park. The measures that should be taken to ensure sustainable management (protection and development) of NP "Sharri" are the following:

- Completion of legal, organizational, financial and planning infrastructure for managing of NP "Sharri" in accordance with the European Union countries;
- Expansion of the management authority of the Directorate throughout the NP "Sharri" according to the Law.
- Transformation of social property of the former Social Agriculture (cooperatives) and Forestry forest economies) Enterprises under the ownership of NP "Sharri";
- Application of modern techniques and measures for protection and development of natural resources.
- Development of tourism in accordance with the protection and development of natural values of the National Park;
- Transformation of DANP "Sharri" in the State Agency or Public Enterprise;
- Membership in the National Parks Federation of Europe, UNESCO and other international institutions;

5.3.2. National Park "Bjeshkët e Nemuna"

"Bjeshket e Nemuna" in regard to geological, geomorphologic, fauna and floristic composition represents important and interesting massif to Kosovo and whole Balkan Peninsula".



Photo.28. Landscape from NP. "Bjeshkët e Nemuna"

The severity of the terrain and beautiful nature has aroused the curiosity of many local and international scientific researchers of different fields. Bjeshket e Nemuna constitutes the western suburb of Kosovo, descends almost vertically and ends on the east and northeast at the end of Dukagjini valley and the valley of Iber and in west closes the mountains (border) with Albania and Montenegro. Bjeshket e Nemuna in Kosovo have an extension in a north-south length of almost 50 km, while their width does not exceed 26 km. They lie from deeply and transversal valleys, often in canyon shape as in the case of Lumbardhi (Bistrica) of Peja, Decani and Erenik.

This mountain in January 2013 is declared National Park (Law on National Park "Bjeshkët e Nemuna" No. 04/L – 086, KOG / No. 2/21) and it will be managed by the Directorate of NP "Bjeshkët e Nemuna" with headquarter in Peja.

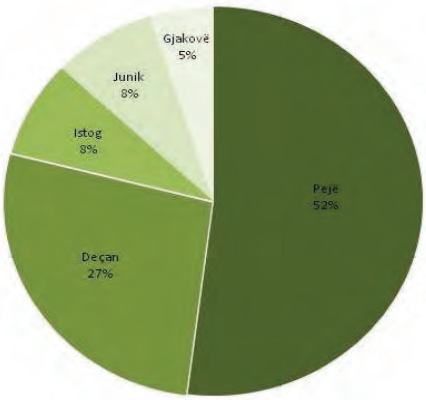


Fig. 5. Surface of NP PK Bjeshkët e Nemuna according to Municipalities – Participation

The National Park lies within the territory of 5 Municipalities: Peja with 32.311 ha or 52 %, Deçan 16.881 ha or 27 %, Istog 4973 ha or 8 %, Junik 5.300 ha or 8% and Gjakovë 3032 ha or 5 % and approximately the surface of 62.488 ha or 5.7 % of Kosovo surface.

Bjeshket 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 researches would continue further. In addition, in this number are not included the researches of musk, lichens and mushrooms.

The vegetation in Bjeshket e Nemuna undergoes changes during the long process of its historical development. All plant species that survived the glacial period together with new types created after diluvium today create different plant communities (phytocenosis) where some of them are characteristic of the Bjeshket e Nemuna.

Within Bjeshket e Nemuna so far have been found the following Associations:

1. *Ass. Abieti – Fagetum moesiacae,*
2. *Ass. Fagetum subalpinum scardo – pindicum,*
3. *Ass. Picetum abietis bertisceum montanum,*
4. *Ass. Picetum abietis bertisceum subalpinum,*
5. *Ass. Wulfenio – Pinetum peucis,*
6. *Ass. Pinetum peucis typicum,*
7. *Ass. Pinetum heldreichii bertisceum,*
8. *Ass. Wulfenio – Pinetum mugo,*
9. *Ass. Bruckenthalio – Juniperetum,*
10. *Ass. Nardetum subalpinum montenegrinum,*
11. *Ass. Salicetum herbaceae balcanicum,*
12. *Ass. Pinguiculo – Narthecium scardici,*
13. *Ass. Carici Crepidetum dinaricae,*
14. *Ass. Festucetum albanicae dhe*
15. *Ass. Senecio – Rumicetum alpini.*

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, Aconitum pentheri (Akonitum of Rusolia), Rubus ipecensis (Blackberry of Peja), Saxifraga scardica, Wulfenia blecicii, Centaurea nervosa, Thlaspi cuneifolium, Thymus rohlenae, etc.

From relic types outstretched 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 fauna, heterogeneous, endemic and interesting. This wealth fauna of Kosovo and with this also Bjeshket e Nemuna, as the largest massif in the Balkans, is the result of multiple influences of the Mediterranean region, and the Nordic euro-Siberian-Alpine, as well as frequent changes of environmental conditions in the past.

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, etc.

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



Photo 29. European Roe (Capreolus capreolus)

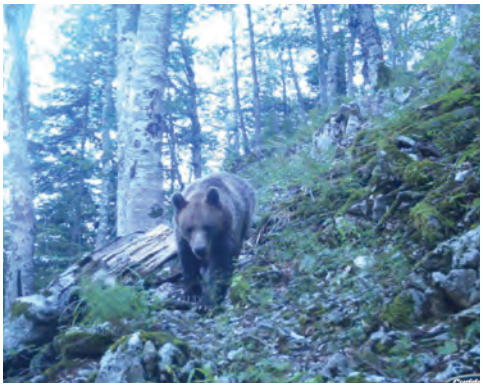


Photo 30. Brown Bear (Ursus arctos) (Photo KFA)

The state in the park

One of the major problems identified during this period, in the territory "Bjeshket e Nemuna" are logging, fires, illegal constructions etc.

Illegal loggings are ongoing almost in all municipalities where the territory of the NP "Bjeshket e Nemuna" lies, in particular in the municipality of Decani and Pec.

Uncontrolled logging of forests have irreparable consequences, that besides losing the wood mass, also directly reflects on the disorder of ecosystems, concern of animal world, damaging the landscape, production of erosion etc.

The phenomenon of setting the fires has been present especially in the period 2010-2012, before the declaration of this area National Park, whereby significant areas of forests and pastures within the park were burned.

The situation in 2013 and 2014 is much better than it was earlier in almost all aspects, such as the protection of forests, flora, fauna etc. There has been selected forest cutting apart sanitary cleaning which are allowed by the Internal Order Regulations of the National Parks. It is worth mentioning that about 30.000 m3 of technical wood as they were allowed to be logged in the time before the declaration of this area National Park, during 2014 are allowed some 3,000 m3 of technical wood, in private forest, while in state forests except in Deçan municipality in any other location are not allowed loggings.





Photo 31 and 32. Illegal loggings of forests and fires within the park

The other current problem remains the construction of many buildings, mainly hotels, but also residential. Because of the lack of Spatial Plan, which is under drafting procedure, the buildings are made without environmental, spatial and urban criteria. Construction of buildings is associated with the erosion which affects the surrounding landscape and biodiversity.

Constructions are much more expressed in tourist potential areas such as the Rugova Gorge, Bog, Leqinët, Gropa e Erenikut, Lugu i Bute, Source of Drini i Bardhe etc.





Photo 33 and 34. Constructions in Juniku Gorge and using of inertest Deçani Lumëbardh

In the current situation it is of particular importance the establishment of cooperation and reciprocal interaction of all stakeholders, particularly between local and central institutions on finding a way for an efficient management, by respecting first of all the legal status and the economic, ecological and touristic importance.

Providing of accurate data from the inventory of natural resources should create a database that provides building of an analysis to determine the future management of existing potential of flora, fauna and other resources of the area.

Zoning of the National Park "Bjeshkët e Nemuna"[15]

During 2013 MESP / KEPA in collaboration with the University of Prishtina and civil society realized the project zoning of NP "Bjeshket e Nemuna". The purpose of this activity has been the identification and designation of zones I, II and III of protection according to the protection level, with the aim of drafting the Spatial Plan of NP "Bjeshket e Nemuna".

Field research in order to identify the species of flora, fauna, ecosystems, geo-heritage and determining their status, are mainly concentrated in areas that have been identified with special natural values which are proposed as First (I) category of protection areas.

The zoning objectives were:

- Identification of natural values (geological, geo-morphological, speleological, pedological, hydrological, hypsometric, landscape, flora, vegetation, fauna and other anthrop-geographical characteristics);
- Determination of 3 protected areas (first - I, second - II and third – III zone) according the regime of protection and destination in the territory of NP "Bjeshket e Nemuna";
- Creating a database about the natural values of NP "Bjeshket e Nemuna" for the purpose of drafting the Spatial Plan, Management Plan and information-promotional and educational materials;
- Assessment of the natural values state in special areas;
- Proposal of measures for sustainable management (protection, preservation and development) of natural values of NP " Bjeshket e Nemuna" "
- Promotion of natural values in national and international opinion;

Based on natural values and designation are proposed the natural areas according to the first, second and third category of protection, which are described below.

First Protection Area (Zone I)

As the first protection area of NP "Bjeshket e Nemuna" are proposed 15 areas with totally 11,424.10 hectares. These areas represent special natural values which are characterized by rich biodiversity of flora, fauna, habitats and ecosystems.

The first area of protection regime includes parts of the territory of NP "Bjeshket e Nemuna" with exceptional natural features, with rare, endangered plants and animals species and habitat types in terms of wild nature. This zone has strictly protected character.

Second Protection Area (Zone II)

As second protection area in NP "Bjeshket e Nemuna" is proposed the area of 47,288 ha, located outside the first and third protection area, substantial part of which belongs to the second area of the surface, covered with grasses which represents very important area for sustainable use of the territory of NP "Bjeshket e Nemuna". The second area is the largest area compared to the other two areas characterized by forest and grass ecosystems. Within this area there are the following forest types: beech (Fagus moesiaca), fir (Abies alba) and spruce (Picea excelsa) that are widespread in NP "Bjeshket e Nemuna". Herbaceous ecosystems, respectively pastures are widespread on herbaceous vegetation.

In this area are present rare species of endangered and endemic flora and fauna, but compared to the first zone of protection their presence is limited. The second area, except rich natural biodiversity, possesses important biological, geological, geo-morphological,

15 Report on Zoning the NP "Bjeshkët e Nemuna", NO. Prot. 777/14, 21.02.2014

hydrological, and pedological and landscape value.

This area requires active management and includes parts of the territory of NP "Bjeshket e Nemuna" that are characterized by ecosystems, landscape values and other nature values that can be practiced the ecotourism, traditional agriculture and activities that are not inconsistent with the purposes of protection.

Third Protection area (Zone III)

As a third area of development in the territory of NP "Bjeshket e Nemuna" are proposed totally of 61 areas with 4318.21 ha. For the third protection areas proposed for the development of tourism and construction of tourist facilities, Regulatory Plans should be drafted in order to use the area in accordance with the function of protecting the nature values. Constructions should be limited and consistent with the natural environment. Priority should be given to tourist capital facilities (hotels, motels and sanatoriums) as they allow maximum use of space with minimum negative effects on nature, while construction of small tourist facilities (weekend cottages) should be limited. Areas proposed for skiing during the summer season can be used for grazing.

As III protection area are proposed herbaceous surface areas that are designated for tourism development and construction of tourist facilities. These areas, in comparison with the areas of first and second category of protection, are of low nature values and have favourable geographical, relief e and climate conditions for tourism development.[16]

5.4. SPECIAL PROTECTED AREAS

5.4.1. Wetland of Henci - Radeve

The Wetland of Henc - Radeves lies in the centre of the field of Kosovo, near the International Airport "Adem Jashari" in between the villages, Henc - Municipality of Fushe Kosova, Vrellë – Municipality of Lipjan and Radevë - Municipality of Gracanica on a sea level around 545m and a total area of 109 ha 52 ari 35 m2.

The Wetland of Henc - Radeves was created from the merger of watercourses of Vrella and Magura, which are left branches of the river Sitnica. The Wetland was created in 60s, with the aim of cultivating the type of fish Carp (Cyprinus carpio).

The Wetland of Henc - Radeves considering that is the only ecosystem of such specie in Kosovo, although artificially formed, is characterized by special natural value as: ornithological, ihtiologjike, geological, botanical, landscape, etc.

In 2013, the Institute for Nature Protection has prepared a professional argumentation for declaring the Wetland of Henc - Radev as protected area.

Because of these values, the Government of Kosovo in 2014 issued the decision (No. 08/178, date 18.03.2014) for Declaring the Wetland of Henci – Radeva as Bird Protection Area.

16 Report on the zoning of NP "Bjeshkët e Nemuna", No. Prot. 777/14, 21.02.2014



Fig.6. Wetland of Henc

The purposes intended by the declaration of this protected area are:

- Sustainable use,
- Protection of ecosystem,
- Taking measures for rehabilitation of damaged ecosystems,
- Rational use of natural resources,
- Increasing opportunities for scientific, educational, instructive and cultural research,
- Other professional works in accordance with modern concepts in the development of this area.

In terms of flora, taking into account the geographical position and climate conditions, the area is characterized by a great wealthy of the presence of plant species. According to the findings made by KINP in this area are present more than 50 species of vascular plants:

The Wetland of Henc - Radeves is very rich area from the zoo-diversity point of view. According to researches made by the Institute for Nature Protection in this area is noted that live a large number of species of wild fauna, of which the greater number represent the wild birds for what is distinguished this area. The number of bird species found so far is 78, but this number should be much higher taking into account that so far there has never conducted any systematic and desired professional research level.

Natural habitats of the Wetland of Hencit - Radeves with the surroundings offer settlement for many species of birds, many of them rare species and with unfavourable conservation status here and in Europe.



Photo 35. Landscape from the Wetland of Henc - Radeve



Photo 36. Adonis aestivalis



Photo 37. Equisetum palustre



Photo 38. Podiceps cristatus



Photo 39. Ardea cinerea



Photo 40. Himantopus himantopus



Photo 41. Acrocephalus scirpaceus



Photo 42. Ardea purpurta



Photo 43. Ixobrychus minutus

The area is characterized with economic activities such as fishing, agriculture, livestock, hunting, etc. Basins are mainly y used for raising fish while in the directly vicinity of them the agricultural production activities take place, and is well developed the rural tourism and recreation.

All areas of the wetland of Henci- Radeves are public property and managed by the Privatization Agency of Kosovo (PAK).

State

Since the area is not under the management of a professional institution, its consequences observed every day more and more. The most significant problem appears by drying of the basins and other surrounding areas due to the stoppage of water flow. Especially this lack of water, and often drying of these ecosystems, is observed during the summer season, which is expressed in the absence of fish species and what is more important, the number of bird species present early in these ecosystems has fall drastically .

It should be mentioned the great impact that illegal and uncontrolled hunting by irresponsible people in bird species present has, so if the current trend continues, it will certainly jeopardize the presence of a large number of species, both domestic and migratory ones.

It is important to be mentioned also that in the border of this area is the Civil Airport of Prishtina. There is information that a number of birds are endangered as a result of the proximity of the airport andthe fight of aircraft with birds.

It remains that in the future to work together with the airport management staff in order to increase the overall security at the airport, and in this case to be reduced to a minimum or even completely eliminated through the use of modern devices for removing birds from the flight area.



Photo 44:Dried and Burned ecosystems

5.5. NATURE MONUMENTS

Within Protected Areas, Nature monuments according to number occupy first place with 99 of them, and second place regarding the area with 6296.93 hectares. Out of these, 2 monuments are of special importance (Ujvara e Mirushes -Mirusha Waterfall and Gadime Cave) 66 of botanical character, 17 hydrological, 7 geomorphologic, 9 speleological.

Nature Monuments which had effects in these three years are: Gadime Cave, Mirusha Waterfalls, Rugova Canyon, Drini I Bardh Spring with the Cave in Radavc, etc.

5.5.1. Gadime Cave

It is located near Lipljan (near the road Prishtina - Ferizaj), in the village Gadime e ulët. It is called marble cave because it is built in marble rocks and is one of the most beautiful caves not only in Kosovo but also in the Balkans and beyond.

In this cave are presented all kinds of ornaments, stalagmites and stalactites in various shapes and sizes, with especially attention to aragonite ornaments. It was discovered and put under protection in 1969.



Photo 45. Aragonite Crystals in Gadime Cave

The state of Gadime Cave 2010-2013

During 2009, by the decision of the Government of the Republic of Kosovo, the Gadime Cave was taken under protection as Nature Monument of special importance. But there is still no result from the implementation of this decision. Also this year a redefinition of the Gadime Cave's boundaries has taken place and the map was prepared.



Photo 46. Crystals in Gadime Cave

In Gadime Cave, there are same problems that started years ago which still remain. Actions form outside and their impact to the cave such as:

- The occurrence of eroding the rocky material from rains,
- Construction of buildings in the protected area and in the cave's vicinity,
- Operations of quarries from which they exploit limestone,
- Affect of mining in the cave's destabilization,
- Different operations at the river bed of Klysyr River opposite the cave, etc.

Whilst serious problems can be noticed in the inner part of the cave such as:

- Big cracks on the wall and at the beginning of Tear Gallery canal.
- The risk of landslide and rockslide in the corridors having a lot of visitors;
- Obvious hydro-geological changes which were considerably manifested in the reduction of underwater circulation.
- Appearance of moss and mushrooms due to microclimatic changes conditioned by the hermetic closure of the gate as well as long-term and inadequate lighting;
- Physical damages (breaking etc) as well as mechanical washing of ornaments
- Inscriptions and graffiti's through the cave corridors, damage the cave's originality;
- Inadequate lighting and electrical network in the cave is damaged and poses a risk for visitors;
- Illegal explorations of other corridors, without consultations with responsible institutions;
- Non-professional management of the cave etc.

In 2013, the Ministry of Environment and Spatial Planning takes the decision to close and temporary ban all activities important monument of special nature "Gadime Cave". The decision taken as a general measure for the protection and preservation of the monument from illegal activities which risk their characteristics and values.



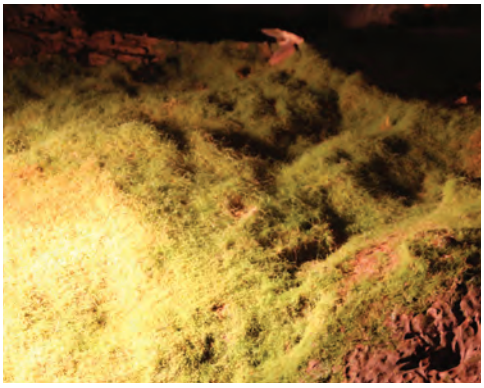


Photo 47, 48. State within the Cave (damaged electrical network and the development of flora) 2010 - 2013





Photo 49 and 50. Crystals broken





Photo 51 and 52. Construction of water reservoir on the Gadime Cave and Stone mining near the cave

The State of the Cave 2014

The Board of the Privatization Agency of Kosovo in 2013, has decided to release the administrative jurisdiction of the KPA, the legal entity "Marble Cave" and the same with all the rights and obligations transfers under the administration of the Ministry of Environment and Planning Spatial (Decision No. 1692/AV)

In 2013, KEPA hires a staff with temporary contract until the establishment of the Directorate for Management and Administration of the Monument of Special Importance "Gadime Cave" including the supervisor, guides, security and opened the cave for visitors in May of 2014, as a result within three months it is visited by over 20 thousand visitors from the country and abroad.

French Embassy in Kosovo and the Kosovo Environmental Protection Agency in 2014 has allocated a budget to establish new lighting which has increased the security for visitors of the cave.

For Nature Monument of special importance "Gadime Cave" is being prepared the internal order regulation and the tickets price list.



Photo 53. Improved state in 2014



Photo 54. The Visit of Minister and the French ambassador

5.5.2. Nature Monument of Special Importance "Ujëvarat e Mirushës- Mirusha Waterfall"

Mirusha Waterfall is 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 Nature Monument of Special Interest with a total surface of 598.4 ha.

The canyon of Mirusha is one of most interesting nature areas in Kosovo. The downstream of Mirusha Rivers passes through a gorge which is known as Canoyn of Mirusha River. In this part of the canyon are located 16 exciting waterfalls with lakes that make the most attractive part of the canyon.

State

In Nature Monument of special importance "Mirusha Waterfalls" at a distance of about 300 m, from the Canyon Lakes of Mirusha a hotel was built with strong material that is contrary to the principles of nature protection. The investor does not have a professional opinion and construction permits from the authorities of MESP's.

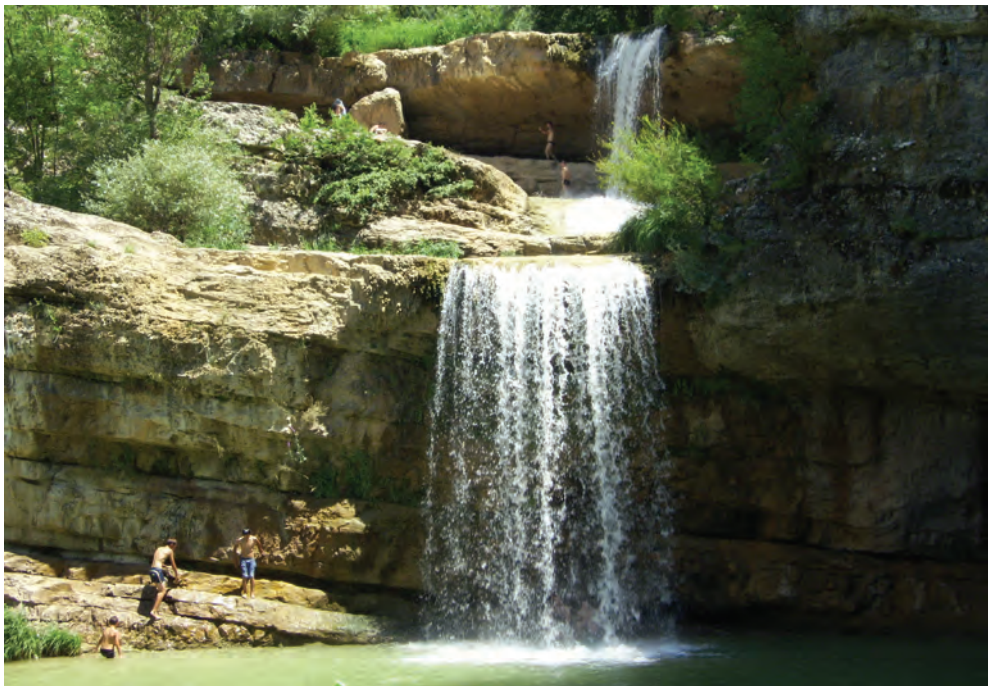


Photo 55. Mirusha Waterfalls





Photo 56 and 57.Ilegal constructions within the protected area and soil sliding

In 2010 it was opened the road from the Municipal Assembly of Malisheva, without respecting legal and professional procedures, which has affected the sliding of rocky material and degradation of the natural landscape around the canyon. Opening of the road close the lake, has enabled starting of illegal construction, large number of cars and water pollution in the river Mirusha. The large number of cars represents a serious concern in the degradation and pollution of the natural values of the area. Such actions directly affect the loss of rare geo-diversity and diversity values, affecting the pollution of river Mirusha.

The problem remain the established of management body for the Nature Monument of Special Importance "Mirusha Waterfalls", as set out by the Law on Nature Protection (Article 77).

Spatial Plan of NMSI "Mirusha"

In March 2014 the Kosovo Assembly adopted the Spatial Plan for the Protected Area "Mirusha Waterfalls- Ujvarat e Mirushes", compiled by the Institute for Spatial Planning.

The main purpose of the Plan is to influence in stopping unplanned developments that harm the area, to make redefinition of the boundary line of the area and to guide the planning of future investments and developments that should be implemented according to the plan in this protected area.

Ujvarat e Mirushes are distinguished for the unique natural, national and cultural heritage values, so through this document is intended that this area to be protected from external influences, be used in a rational way and to have sustainable tourism development for the benefit of the local and regional community

According to the plan in the next 10 years, from the institutions of the country, donors and private-public partnership, it is expected to be invested about 30 million Euros in this area. The document represents the result of a joint work of important sectors of the Government of Kosovo, municipalities, relevant institutions, professionals from various fields, as well as participants from civil society.

5.5.3. Rugova Canyon

Rugova Canyon as Nature Protected Monument is among the areas of special geomorphologic, geological, hydrological values and biodiversity and touristic and recreative values.



Photo 56. Rugova Canyon (photo F. Katallozi)

It was created with the performance of vertical fluvial erosion, mainly in Triasik limestone before and after glacial period. Rugova Canyon was declared in 1985 a nature monument with hydro-geomorphologic significance, with an area of 4.301.05.49 ha. Besides richness

in terms of flora and fauna (biodiversity), the Rugova Canyon introduces prettiness of landscape, geo-diversity and hydrological features that can be rarely found.

State

During the continuous monitoring of the situation in the field in the Nature Monument "Rugova Canyon", might be concluded that in this monument has had interferences of anthropogenic factor, especially in its middle (near the tunnel) and upper part due to the construction of several business premises.

Also it should be noted that with the investment of the Municipal Assembly in several parts of the gorge are emplaced seats for visitors rest.

Kosovo Institute for Nature Protection requires that in the future for all interventions in this area to be taken the professional opinion by KINP and the approval by the Directorate of NP "Bjeshket e Nemuna".





Photo 59 and 60. Interventions in Rugova Canyon

5.5.4. Drin i Bardh Spring with Radavci Cave

Drin i Bardhe Spring and Radavci Cave have been putted under protection in 1983, as natural monuments with total area of 89.94 ha. The Cave and the Spring of Drin i Bardhe are located near the village Radavc, about 11 km from the town of Peja, near the road (Peja-Rozhaje). These two beauties of the natural heritage are located in the north-eastern part of Bjeshket e Nemuna Mountains. Radavc Cave is typical cave resources. Its formation is associated with erosion and groundwater chemical work of Drin i Bardhe.

State

Based on the continuous monitoring of the situation in the field of the Nature Monument "Drin i Bardhe Spring and Radavci Cave", it was found that this monument has passed numerous interventions of anthropogenic factors.

Interventions were mainly conducted in the Drin i Bardh Spring around the Waterfalls which consist with construction of: visitor paths, stairs, placing kiosks, interventions on regulating the network for the needs of hydropower and supplying the population with drinking water, and the over use of water by hydropower which directly affects on the drastic reduction of the amount of water in the waterfall.



Photo 61. Spring of Drini i Bardhë

All these interventions are carried out without:

- Preliminary project design,
- Prior professional consultation about the activities conducted, and
- Professional opinions on the activities carried out in this area.

In the future all investments around the Nature Monument "Drin i Bardh Spring and Radavci Cave" should be in compliance with the Law on Nature Protection (No. 03 / L-233) and the opinion of experts from the Institute of Nature Protection for all the activities to be performed in this area.

5.5.5. Museum of Crystals

The Mine of "Trepça in Stanterg is probably the well known and the only in the world which is characterized by the amazing beauty of crystals and minerals of various kinds.

Given this fact, in 1964 the Museum of Mineral Crystals was established where are located 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 are exhibited also old working tools with which are served the miners at the beginning works in the mine.

In 1970 the Kosovo Office for Nature Protection has putted under protection 512 crystals exhibited at the museum, increasing in this way even more 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.



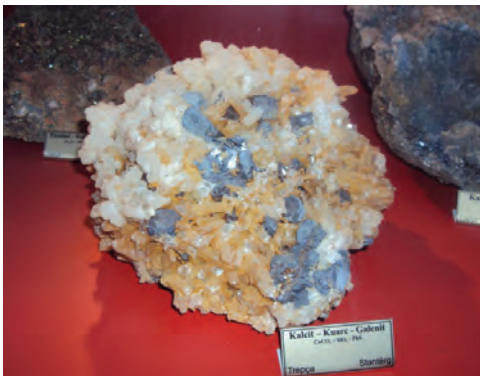


Photo 62. and 63. Museum of Crystals

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 has been built the modern building of the crystals. The investment value for the construction of this museum was about 560 thousand Euros (out of which the Ministry of Environment has allocated about 300,000 Euros) and is exposed nearly 1,500 exhibits of selected crystals and minerals ".

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, Brazil, which the museum received in exchange with the crystals of "Trepça" Mine.

5.6. 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. (LNP 03/L-233).

5.6.1. Shkukeza Park

"Shkukeza Park", is located in the southern part of the city of Gjakova, lying between two hills separated by a small river Shlepica, at an altitude of 410-460 m.

Gjakova municipality and the Ministry of Environment and Spatial Planning through a UNDP project, in cooperation with the Faculty of Biology of the University of Prishtina have conducted a short advisory study regarding the evaluation of conditions for the protection of this protected area.

The base study was designed according to data collected from the field work of students of the University of Prishtina, Department of Biology.[17]

17 Bank, P, Bemmerlein-Lux, F., Hajdari, A., Hajredini, E., Ibrahimi, H., Mustafa, B. (2012) PROJEKTI "SHKUKZA" GJAKOVË, Plani i peizazhit për "Parkun e Shkukzës, UNDP



Fig. 7. Map of Shkugeza



Photo 64. View from Shkugeza Park

"Shkugza Park" has a significant importance for the city of Gjakova, among other things also for recreational activity. A part of this area is publicly owned and about 1/3 of its territory is private land. In the public land are constructed private restaurants with parking which makes the are an attractive location for various recreational activities.

Flora and Vegetation

In 1960, Shkukeza was afforested with Black Pine (Pinus nigra). An initial rough estimation of plant diversity results in about 280 species, which are: Festuca ovina agg., Agrostis capillaris, Poa pratensis, Bromus sterilis, Achillea millefolium, Trifolium, Euphorbia cyparisias, Plantago lanceolata, Teucrium chamaedrys, Thymus spec., Stachys spec, Hieracium pilosella, Hypochoeris radicata and others. Climb plants as Humulus lupulus and Clematis vitalja makes difficult the access to the forest.

Juniperus communis, Rosa canina and Prunus spinosa, especially on the slopes of the river Shlepica show that in these parts has had intensive grazing in the past, and now these shrubs no longer might be reproduced because of the shadow development.

Dominant trees, depending on the special locations, are: Pinus nigra, Carpinus orientalis, Acer campestre, Ulmus speculim., Fraxinus ornus, Coryllus avellana, Crataegus monogyna, Cornus mas and Quercus cerris, Quercus pubescens and Quercus frainetto .

Black pines are not part of the original vegetation and they are do 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 isfound 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.

By bird species most present are: Picus viridis (green woodpecker), Lyscinia meganchynchos (nightingale) and some other types.



Photo 65. Endangered Stag Beetle (lucanus cervus)



Photo 66. Turtle (Testudo hermanni)



Photo 67. Lacerta muralis (Wall lizard)



Photo 68. Bombina variegata



Photo 69. Restaurant and other facilities



Photo 70. Inadequate waste management

State

Recently within the Park area are constructed restaurants without the prior approval of the competent authorities, 3 restaurants (made of wood) with terraces, playgrounds and parking places which are located between the black pine trees. Another problem is the

management of waste and the risk of fires which are evident in some parts of the Park. The disposed waste are often burned, and same time it poses a permanent risk of fire spreading to other parts of the forest. Illegal logging, discharge of sewage, uncontrolled activities during picnic, inadequate waste management (owners of restaurants, the public who visits the area, local residents in the surrounding farms) are some of the other concerns for the area, which is expected to be resolved in the future with the approval of the Regulatory Plan for this area.

5.6.2. Germia Regional Park

It lies in the northeast of Pristina, and includes an area of 1,126 ha. Germia relief consists of hills with different altitude and aslope, divided between them with the spaces of valley, streams and rivers. Here is especially distinguished the Vellusha river valley that has the source in the western part of the hill of Butovcit, which also represents the most characteristic landscape of an altitude of 1000 m and a length of approximately 8 km.

Thanks to its geographical position, pedological, climate conditions, the mountain massif Germia is quite rich in terms of flora, vegetation and fauna. From the researches made so far, 610 vascular species of flora are evidenced which are collected in 82 families and 83 mushroom species not including taxons of weeds, ruderale and other low plants. Out of them 5 species are endemic and 12 medical types.

The complexity of natural biotopes of Germia provides living conditions for a variety of animal species. According to the research conducted so far and according to the literature data in Germia region are recorded: 5 types of amphibians, 7 species of reptiles, 19 species of mammals and 30 species of birds. Also, there live a large number of insects that comprise the largest group of animals in this massive



Photo 71. View from Recreative Area



Photo 72. Salamander (Salamandra salamandra)

Because of special natural beauty, aesthetic and natural resource values, which are of cultural - educational, scientific and tourist – recreation importance, in 1987, the Municipal Assembly of Prishtina has taken under protection the Complex "Gërmia" in the category of Nature Regional Park, with the area of 1,126 hectares.

State

Despite the good maintenance of the recreational area by the managing organization Horticulture, there have been evidenced several problems about conservation of values within the protected area of Germia Park.

Damages to forest ecosystems are caused by anthropogenic factor, the impact of insects, fires etc. Also without respecting the preliminary opinion of KINP are identified such interventions:

- Construction of private facilities in different parts of the park;
- Installation of mobile phone antennas;
- Installation of electric cable network;
- Construction of facilities for children's holiday house near the tennis field.

Still problem remains:

- Lack of Management and Regulatory Plan,
- Marking of the park,
- Presence of minefields,
- Presence of dry and fallen trees,
- Waste in remote parts of the park etc.

During 2013 the Municipality of Prishtina in cooperation with the European Commission has started implementing the project "Towards sustainable development of Germia Park". With this project, among other things, was foreseen the regulation of pedestrian paths within the park, putting on operation the ecological train, drafting of a study about the flora and fauna values of the area, development of a Regulatory Plan for the park, etc.

So far the municipality of Pristina through this project has implemented a set of activities such as the repairing of pedestrian paths that are extended to the recreation area and to the second area of the protection regime. According to the first findings of KINP, the regulation of these pathways is being done by non ecological material - concrete, and which is in contradictions with the principles of nature protection and the recommendations given by the KINP.



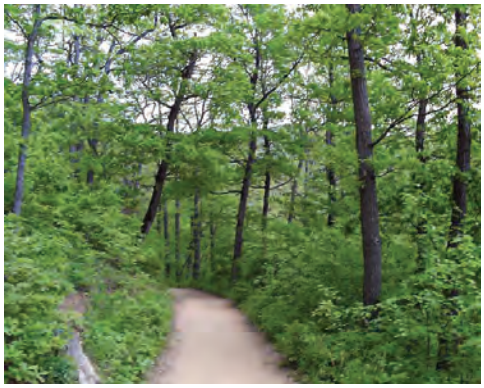


Photo 73: View of pathways regulated in the Germia Park

According to the Law on Nature Protection No. 03 / L-233 KOG No. 85/9 November 2010 the category of Regional Nature Park does not exist in law, and it is envisaged that the Regional Nature Park "Gërmia" to be re-categorized into a new category under the applicable law.

For this purpose KEPA with Decision No. 1317/14 dated 18/03 2014 has established the Working Group for preparation of professional rationality for the Regional Nature Park "Germia".

At the same time, by the Municipality of Pristina, namely the European Commission project

during 2014, it has been engaged a team of experts from the University of Prishtina, who drafted a study on the natural values in the area of this park.

Based on the preliminary Decision and the results of the study, the working group has drafted a professional proposal for expanding the territory of the protected area which will be included in the new boundaries of Protected Landscape "Gërmia" and the same was delivered to the Municipality of Prishtina for approval. Since this mountain massif entails natural values, landscape, biodiversity etc. almost similar with the rest of the park protected part of Gërmia Park, as such should be taken under protection a greater area (including 1,176 ha) which includes territories around the existing borders up to Badovci Lake with a real possibility of sustainable exploitation, especially for the development of ecotourism.

5.7. INTERVENTIONS IN PROTECTED AREAS 2010-2014

Table 4. Interventions in protected areas

No.	Protected Area	Municipality	Type of Activity	Category
1.	Sharri	Prizren, Shtërpce, Kaçanik	• Summer Camp in Prevalla • Mobile phone Antenna • Hotel building and others • Wood logging and illegal collection of non wood forest products (NWFP) • Quarry	National Park
2.	Bjeshkët e Nemuna	Pejë, Deçan, Junik, Istog	• Illegal logging of wood and collection of NWFP • Interventions in the Lumëbardhi River bed, Deçan • Quarry • Hotels	National Park
3.	Rusenica	Therandë	• Quarry	Nature Reserve
4.	Gadime Cave	Lipjan	• Hotel Building • Investments within the cave • Water reserve above the cave • Quarry close to the cave	Nature Monument of Special Importance
5.	Bifurcation of Nerodime River	Ferizaj	• Hotel building • Regulation of a part of teh river bed	Nature Reserve
6.	Spring of Drini i Bardhë and Radavci Cave	Pejë	• Hotel building • Overusing of water in the spring of Drini i Bardhë by hydro power	Nature Monument
7.	Thermo-mineral spring	Istog	• Intervention in water spring	Nature Monument

8.	Gërmia	Prishtinë	• Hotel building • Mobile Phone Antenna • Sport fields for children • Installation of electricity network	Regional Park
9.	Rugova Canyon	Pejë	• Hotel building	Nature Monument
10.	Ujëvarat e Mirushes (Mirusha Waterfall)	Malishevë Klinë	• Hotel Building • Opening of the road up to the waterfall	Nature Monument of Special
11.	Canyon of Drini i Bardhë "Ura e Fshajt"	Rahovec, Gjakovë	• Hotel building	Nature Monument
12	Spring of Mineral water in Sallabajë	Podujevë	• Intervention in the water spring	Nature Monument
13	Spring of Mineral water in Shakovicë	Podujevë	• Intervention in the water spring • Hotel building	Nature Monument
14	Spring of thermo-mineral in Banjë	Istog	• Intervention in the water spring	Nature Monument

Source: *Inspectorate of MESP, KINP*

6 OTHER PROTECTED AREAS

6.1. NATURA 2000 AREAS

"NATURA 2000" is an integrated system of protected areas within EU. It includes protected areas according to the directive on habitats (92/ 43/EEC), as well as protected areas according to the directive on birds 79/409/EEC). The areas of "NATURA 2000" represent a joint interest of EU and they are proposed by member states. The habitat directive and bird directive represent an important legal tool for species and their habitat conservation and contributes to meet the principles of biodiversity convention (CBD Rio 1992) for conservation of species diversity and their habitats The bases for identification of areas for "NATURA 2000" network are such like Article 3; Paragraph 1 of the directive 92/43 on habitats conservation.

This directive has established the concept of the network "NATURA 2000" which should be integrating special protected areas (SPA) as described in habitats directive and special areas of conservation (SAC) as described in bird directive.

The European Network NATURA 2000 is established from two types of areas:

- Special Protected Areas– SPAs" – declared area in accordance with EU Directive for wild birds, the most suitable territories in number and size for the conservation of species listed in Annex I and for regularly occurring migratory species;
- Special Area of Conservation - SAC" – a site of Community importance declared through legal administrative measures, and/or contract act when measures of necessary conservation are implemented for maintaining or restoration in favourable status of nature habitat conservation and/or population of the species for which's the area is declared[18].

Each Member State should identify the main areas for the conservation of rare or endangered natural habitat types of the present community in their own territory and their integration into the network NATURA 2000. After determining, these areas should be managed to ensure long-term survival of habitats and their species.

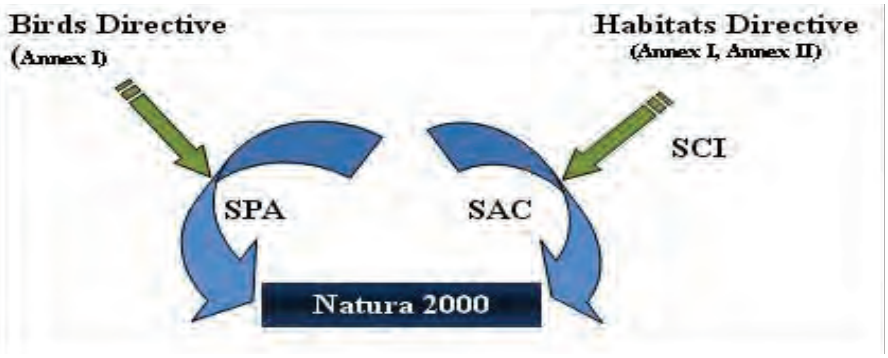


Photo 75. The scheme of functioning of Ecological Network

18 Law No. 03/L-233, Article 7 paragraph 1.62

In the entire world there is a dramatic digression of populations of many species, mainly due to the deterioration of natural habitats necessary for their survival. In recent decades, the intensification of many human activities such as industrial, energy, transport, agriculture, forestry, tourism, etc. - have led to the loss or fragmentation of natural habitats, leaving little space for wild flora and fauna[19].

To promote better management of natural heritage of Europe, the community apply gradual implementation of nature conservation policy on its territory. In particular, in 1979 and 1992 the European Union (EU) adopted the legislation which aim was to protect the most vulnerable habitats and species across Europe. This legislation is known as the Wild Birds Directive and the Directive on Natural Habitats. The main objective of these Directives is to establish a network of protected areas called NATURA 2000. A very important aspect of NATURA 2000 is that it is in full compliance with the objectives of the Berne Convention and the UNO Convention on Biodiversity..

The Directive on Natural Habitats and Wild Birds Directive are binding in all EU member states. Countries aspiring to become EU members are obliged to implement these Directives from the date of accession and onwards. It is therefore important for these countries to plan in time developing required policies and strategies.

The process of determining the network NATURA 2000 areas in Kosovo has not started yet, however a legal platform and policies which support the creation of it is created. The Strategy and Action Plan on Biodiversity 2011 - 2020 has identified the need for an inventory of protected areas in accordance with NATURA 2000 requirements.

To begin this process, the project on Sustainable Forest Management has undertaken preliminary identification of potential areas NATURA 2000. The Draft List of Areas for Future Consolidation is prepared with a comprehensive participation and consultation of key stakeholders.

Also in the network of "NATURA 2000" should be included existing protected areas which meet the criteria, KORINE locations, important bird areas (IBA)

Kosovo is not an EU member state and it is not obliged to follow the "NATURA 2000". But, the process of EU integration that Kosovo is oriented on, among other criteria and standards, environment and nature protection have an important role. Therefore, being aware that meeting these standards requires a long time, initiating to identify the potential areas for NATURA 2000 should be a priority.

The project for identifying the areas potential for NATURA 2000 is initiated within the project on "Sustainable Forest Management" which is implemented by "Project Management Group" in consortium with "Green Belt" and Project Management International Services Group SRL" financed by EU. In this process working groups consisted by experts from Prishtina University, Governmental institutions and NGOs is created

It is under preparation procedure the draft work plan for the selection of NATURA 2000 areas with indicators for the necessary data, responsibilities, timelines and budget that represents a good basis to fulfil the obligations of the Republic of Kosovo's path towards European Union integration.

This draft plan is also a reflection of the institutions of the Republic of Kosovo (MESP) on "Monitoring Report on the implementation of short-term requirements" April 2013, which report confirms that Kosovo has met all the criteria's for starting negotiations for the Stabilization Association Agreement – SAA.

19 Project Plan for NATURA 2000

6.2. HUNTING RESERVES OF SPECIAL IMPORTANCE

Hunting areas of special importance are an important pillar of cultivation of wild animals because they can contribute to achieving ecological balance by helping to increase the species and number of wild animals of private and common hunting areas.

So far in the framework of MAFRD are established two hunting areas of special importance, "Blinaja" in the municipality of Lipljan and "Duboçaku" in the municipality of Skenderaj, Mitrovica and Zubin Potok.

6.2.1. Hunting Area of Special Importance "Blinaja"

This management unit lies in the western part of Kosovo Plain, south-west of Pristina at a distance of 32 km and rises to the heights of 600-850 m above the sea level, in a hilly region hunting area. According to the destination, it is a special importance hunting area founded in 1955 and reconstituted in February of 2009 with total surface area of 2,794 ha.

Flora of this management unit is represented by a large number of native species, as well as wild fauna. The vegetation is wealthy and diverse as a result of evolutionary and historical processes and very convenient geographical, orographic, climatic, geological and pathologic conditions. It is characterized by a hilly terrain with average breakage and without significant slope. The hydrography consists of small streams which are completely dry during the summer. There are built 30 dams catchments in order to provide constantly supply water.





Photo 74 and 75. Landscapes from Blinaja

The majority part of forest area (over 90%) is stumpy forests, while the rest of the areas are high forests, meadows, pastures, water surface etc.

Participation of species in total volume at the management unit level is mainly dominated by oaks, where Turkish Oak has the biggest participation 49%, Sessile oak 33%, less White oak with 6%, also other types of woods such as beech, lime-tree etc. have about 11%, while the remaining part has the black pine. The most representative species cultivated within the management unit of Blinaja are: Roe (Capreolus capreolus), wild boar (Sus scrofa), fallow deer (Dama dama), ordinary boar (Cervus elaphus) and others. Besides cultivated species in this management unit might be found carnivore species such as: wolf (Canis lupus), fox (Canis vulpes), badger (Meles meles), wild cat (Felis silvestris), birds like the imperial eagle (Aquilla heliaca), Rock Partridge (Alectoris graeca), northern goshawk (Acipiter gentilis), etc.Time to time within the year, during different seasons, come many other migratory birds.

Table 5: Species of Fauna in Blinajë

Name	Number per heads according to census of 2007	Number per heads according to census of 2013
Deer	131	148
Fallow deer	88	97
Mouflon	0	0
Wild Boar	346	504
Roe	48	65
Total	613	814

Sourc: AKP





Photo 78 and 79. Roes in Blinaja (Photo KFA)

Natural conditions are suitable for cultivation of wild animals and hunting birds, which make this management unit a good location for recreational hunting. Blinaja represents a kind of closed hunting area, which would mean that there is no free movement of cultivated fauna and natural predators. The lack of predators makes hunting as the main tool to control the number of animals or the preservation of biological balance, not allowing the addition of a large number of animals on the biological balance and on conditions or promising opportunities for food and thus preserving this ecosystem

6.2.2. Hunting Area of Special Importance "Duboçaku"

This area in 2009 with the decision of the Minister of MAFRD was declared hunting area with special importance. The hunting reserve lies at an altitude of 320 m up to 1050 m above sea level. Its total area is 6805.05 hectares, of which 2,470 hectares are managed and administered by the KFA, while the other part of forestry private owned properties which are under the management and administration of their owners. The types of trees in this area are: oak, beech, hornbeam, maple, red spruce, white fir etc..

Having a very good geographic position this management unit has spread and good development of flora and fauna. This unit is rich in rivers that crossing through this territory. Inside there exists a great number of medical plants, such as: Salvia officinalis), Juniperus communis L, Primula veris L., Sambucus negra, Hypericum perforatum L. etc. Also, the existence of different mountain fruits increase the value of this unit, where exists: Raspberry (Rubus ideus), Wild strawberry (Fragaria vesca), Cornus (Cornus mas) hazelnut

(Corylus avelana), mushrooms, such as: Boletus edulis and Cantharellus cibarius, etc.

Relying on geographical location, geological, pedological, and hydrological and landscape conditions and the characteristic of relief and climate Duboçaku offers very favourable conditions for cultivation of wildlife, mostly mammals that are of great importance for recreational hunting.

The most prevalent types of mammals in management unit Duboçak are; Roe (Capreolus capreolus), wild boar (Sus strofa), brown bear (Ursus arctos), red deer (Cervus elaphus), wolf (Canis lupus), fox (Canis vulpes), badger (Meles meles), wildcat (Felis sylvestris), rabbit (Lepus europeus), then birds, such as: common buzzard (Buteo buteo), partridge (Alectoris greca), corbie (Corvus corax), woodpecker (Dendrocopus major), northern goshawk (Accepiter gentilis) etc. Within the year during the different seasons, time to time come many other migratory birds.

Natural conditions are suitable for wild animals and hunting birds that make this management unit a good location for recreational hunting.

This hunting area has all the prerequisites for the development of ecotourism, cultivation and the development of hunting sector. The diversity of plants, animals and trees, the presence of two rivers, beautiful landscapes, etc., would create ideal conditions for the development of these profitable sectors.

To achieve these goals it is necessary the investment in road infrastructure as elementary precondition for the creation of elementary conditions for guests



Photo 80. Landscape in Duboçaku



BIODIVERISTY

7 BIODIVERSITY

7.1. THE STATE OF BIODIVERSITY

Geographical location, geological, pedology and hydrological factors, the landscape and climate have enabled Kosovo to have a rich biology and diverse landscape.

7.1.1. The state of flora and vegetation

The Republic of Kosovo, although a state with small territory (10.908 km2), is rather rich in its plant diversity. The flora of the Republic of Kosovo consists of algae, lichens, mushrooms, ferns, gymnosperm and angiosperm that are the basis of life and create the green layer of the earth that has direct impact in the life of human beings and animals. Without negating the importance of any vegetative group for the life in our planet, including life in Kosovo; vascular plants, in particular seed plants (gymnosperm and angiosperm) have the main role in the vegetation of Kosovo.

Although research of the flora and vegetation in Kosovo have been conducted by various local and international authors, still there is no inventory of flora, and the exact number of vegetative taxons in Kosovo is not known. According to data available by various authors, it is thought that in Kosovo there are approximately 2.800-3.000 species of vascular flora.[20]



Photo 81. Lilium albanicum



Photo 82. Plantago gentianoide



Photo 83. Polygala doerfleri

Indiscriminate wood-cutting, degradation of habitats and global climate changes are factors that have direct impact in the extinction of various plant and animal species. Important habitats are being damaged and degraded, and ecosystems are being destabilized as a consequence of human intervention, particularly in the ecosystems near settlements. In the last years, as a consequence of indiscriminate wood-cutting and fires, various species are faced with the danger of losing their habitat and incoming invasive species that often change the floristic structure of ecosystems.

In the aspect of floristic diversity, Sharri Mountains, the Albanian Alps (Cursed Mountains), Koritnik and Pashtrik are particularly distinguished with endemic, relict and endemic-relict plant species, without leaving aside the Northern and Central Kosovo

20 Red book of vascular flora of the Republic of Kosovo

that are also rich in endemic and relict species.[21]

Edhe pse fitodiversiteti i Kosovës është shfrytëzuar me shekuj, brengosë fakti që kohëve të fundit ky shfrytëzim është jo shumë racional dhe pa planifikim, gjë që në të ardhmen mund të rezultojë me pasoja të paparashikueshme. Dëme të mëdha po i shkaktohen bimëve mjekuese, aromatike dhe industriale nga grumbullimi pa kriter i tyre.

Although Kosovo's phyto-diversity is used for centuries, worrying is the fact that recently this use is not rational and without planning, which in future may result with unpredictable consequences. Great damages are caused to the curative, aromatic and industrial plants flora, by their collector withaut any criteria



Photo 84. Using without criteria of flora creates big damages

7.1.2. The state of Fauna

The state of fauna in terms of fauna Kosovo is characterized by a large variety of species, although research in this aspect has not been completed. The richest areas of fauna in Kosovo are all Kosovo mountains' massif, but it is worth emphasizing: Sharr Mountains and Bjeshket e Nemuna.

The overall situation of fauna is degenerated as a result of increased human presence in their homes and constant danger from illegal hunting that occurs from time to time, especially during the weekends within protected areas.

21 There



Photo 85.Lacerta viridis (Green lizard)



Photo 86.Vipera ammodytes



Photo 87. Green woodpecker



Photo 88. Vulpes vulpes (Fox)

From illegal hunting most vulnerable are roes and wild goats, while better evaluations have brown bear and wolf. The greatest risk reduction up to extinction is lynx due to the use of stone in strict nature reserve "Rusenica" which presents the main residence of this rarely specie in NP "Sharri". Endangered are also the migratory bird species.





Photo 89 and 90. Placing of grass and salt for herbivorous in NP "Sharri"

It is estimated that in Kosovo live about 250 vertebrate species, 200 species of butterflies and over 500 water macrozoobenthos taxon. The exact number of species of fauna should be determined based on the inventory that is planned to be implemented in the future both in the drafting of the Red Book for fauna and within other projects.



Photo 91. Buteo buteo



Photo 92. Merops apiaster

Monitoring of endangered species of mammals in the National Park "Sharri"

Within the activities for monitoring and inventory of biodiversity in nature protected areas, during 2014 KEPA respectively Institute for Nature Protection and the Department for the Administration of National Park "Sharri", started to install monitoring devices in various parts of NP "Sharri".

Installing of deadfall cameras is conducted in some parts of the park where it is believed that they are potential movement areas of wild animals, with particular emphasis on Lynx (Lynx lynx).

Deadfall cameras are devices with automatic gun, equipped with a sensor which detects the movement of warm-blooded animals and photographs them in the moment passing before the device. These devices are mounted on wood or special pins. This is non-intensive method for studying the fauna, since it generates information about the presence and number of different species, without disturbing them.

This activity is also part of the project for the recovery of the lynx (Lynx lynx) in the Balkans, financed and implemented by International Organizations EURONATURE and KORA together with its local partners in Kosovo. Within this project it is foreseen monitoring of the situation of the Balkan lynx in the territory of National Park "Sharri" and "Bjeshket e Nemuna". Part of these activities is the Institute of Nature Protection in cooperation with the American University in Kosovo.

Soon is expected the installation of about 15 other cameras By the University, that as a whole is expected to be covered a substantial part of the territory of the National Park "Sharri" with these types of cameras that will provide sufficient data to establish the condition of fauna in this protected area.



Photo 93. Emplacement of deadfall cameras in NP "Sharri"



Photo 94. Photo of Lynx in Albania

7.2. INVASIVE AND ALIEN SPECIES

Alien species refer to species, subspecies or a lower taxon, the introdoced outside the current or previous natural spread; including any part, Game, seeds, eggs or propagule of such species that might survive and subsequently reproduced.

Invasive alien species means an alien species, introduction and / or spread of which threatens the biological diversity.

Invasive species are also introduced even here, intentionally or unintentionally for centuries. In recent times this process is driven by the development of transport, trade, travel, tourism and the use of invasive species in aquaculture, fisheries, agriculture, forestry, horticulture, tourism and the globalization of markets. These activities serve as vectors and access road for the living organism plants, animal or biological materials through bio-geographical barriers that hinder their spread.

In general, only certain types of introducted species can survive in the new environment and therefore be naturalized without creating problems. Most types of introduced species do not cause major ecological changes or damage to the environment because they mostly live in habitats that are already subject of human intervention; such types are not considered invasive.

Invasive species are already listed as the cause of the second most important global biodiversity loss, after the direct habitat destruction. They have harmful effects on the environment, economy and social filed from the local communities up to the global level.

Invasive species belonging to all major taxonomic groups; including viruses, mushrooms, algae, musk, high plants, invertebrates, fishes, amphibians, reptiles, birds and mammals. Although only a low percentage of species that move across borders become invasive, these have a very broad impact.

In recent years, the problem of invasive alien species has taken a particular importance in international policy with the objective requirements for a better intersectoral coordination between responsible institutions and all stakeholders at all levels. Because of this in 2010 with the support of the European Environment Agency is established the East and South European Network for Invasive Alien Species (ESENIAS), where is represented Kosovo too.

Kosovo still does not have an official list of invasive alien species. Based on current literature references the number of invasive alien species known so far is six, although this

number should be much bigger than it is in reality.

Regarding the identification of invasive alien species there is currently an ongoing project by the staff of the University of Prishtina for the verification of the presence and distribution of the species Harmonia axyridis in Kosovo. The aim of this project is to determine the model of delivering this foreign insect species in Kosovo and their impact on autochthones family types Coccinellidae.

Table 6. Preliminary List of invasive alien species in Kosovo[22]

Taxon	Family
Plant species	
Ambrosia artemisiifolia L.	Asteraceae
Datura stramonium L.	Solanaceae
Robinia pseudoacacia L.	Fabaceae
Amorpha fruticosa	Fabaceae
Fallopia japonica	Polygonaceae
Helianthus tuberosus	Asteraceae
Fish species	
Oncorhynchus mykiss (Walbaum,1792)	Salmonidae
Carassius gibelio (Bloch, 1782)	Cyprinidae
Pseudorasbora parva (Temminck & Schlegel, 1842)	Cyprinidae
Ctenopharyngodon idella (Valenciennes, 1844)	Cyprinidae
Lepomis gibossus (Linnaeus, 1758)	Centrarchidae

Preventing the international movement of alien species requires cooperation between governments, economic sectors, non-governmental organizations and organizations of international treaties.

Currently, regarding the spread of invasive alien species in Kosovo, there are no data that represents a big lack for their control. Further studies on capacity building in relation to their biology and control and bio-security issues should be given in a near future a special attention and priority.

22 Q. Maxhuni, H. Ibrahimi: Overview of the invasive alien species in Kosovo, country report (http://www.esenias.org/)



Photo 95. Ambrosia artemisiifolia



Photo 96. Pseudorasbora parva

7.3. NATURE EXHIBITS IN THE MUSEUM OF KOSOVO

Established in 1952, the Division of Nature of the Museum of Kosovo was destroyed in 2001, transforming it into the current ethnographic museum. Because of the lack of the space the exhibits that owned this museum now are emplaced in the basement space of the Museum of Kosovo. Exhibits on that time where located in the basement and inadequate spaces for their conservation, and now they are in poor conditions, because except they have not been protected from bacteria, insects and rodents , they are also exposed to mechanical damage, moisture and dust. This museum has had a total of 1,812 exhibits after the last war in Kosovo because some of them were taken by Serbs during the war.



Photo 97. Exhibits located in the basement of the Museum of Kosovo

All these, once were well exposed in a permanent exhibition in which has been invested alternately for more than fifty years. The exhibits left now in the basement of the museum are completely in bad conditions and on the lack of adequate space. Humidity and not spraying are the two factors that mostly harm these exhibits. Museum collections presented in this section represent a very valuable material for documenting the diversity of life forms from botany and zoology in ecological and bio-geographical aspects of these spaces. Many of the collections of birds and animals that had owned the museum and which now are in danger of destruction, are very rare not only for the Balkans but for Europe too.[23]

23 http://old.zeri.info/artikulli/24369/bodrumi-ruan-muzeun-e-natyres

8 KOSOVO FORESTS

8.1. STATE OF FOREST'S ECOSYSTEM



The forest area in Kosovo is around 481.000 ha (44.7% of total area).

About 38% of the forest area is privately owned, while 62% are public forests. Stump forests dominate the forest area of 84%. Clean broadleaf forests cover almost 83% of forest area.

Kosovo's forests are very rich on wood species, 132,000 ha (27.5%) of the forest area is consisted of four or more species. Almost all forests (99%) show in a way, the human impact.

Photo 97. Forest landscape-NP "Bjeshkët e Nemuna"

More than 90% of the standing volume of forests in the National Parks "Sharri" and "Bjeshkët e Nemuna" are coniferous and mixed coniferous forests / timber.



Photo 98. Conifer forests in Sharri Mountains

8.2. INVENTORY OF FORESTS

The main objective of Kosovo's National Forest Inventory (NFI) is to promote a sustainable forest management by assessing the total forest resources and the annual sustainable harvest level. The first country-wide forest inventory was carried out in 2002-2003 through UN Food and Agriculture Organisation (FAO), and implemented by Norwegian Forestry Group (NFG). Kosovo's second National Forest Inventory (NFI) was carried out in 2012/2013, ten years after the first. Using a method called systematic sample plot inventory and combining remote sensing technology and traditional field assessment, 12 foresters visited and assessed 1 860 sample plots throughout the territory during a six months period. For the first time the entire forest area has been assessed. The purpose of NFI is to provide information for the government to helping develop the forest sector, to assess forest management sustainability and to fulfil potential international reporting obligations in the land use-, land use change- and forestry sectors.

Table 7. Standing volume in forests, main wood species (dbh >=7cm) (1000 m^3)[24]

Wood Specie	2002	2012
Qurcus cerris	5 170	4 282
Quercus petrea	4 276	3 669
Other species of Gj. Quercus	129	1 292
Fagus sp.	15 963	18 524
Other broad leaf	3 704	6 750
Undefined broadleaf	5 983	0
Abies alba	1 577	1 573
Picea abies	1 402	1 840
Pinus sp.	2 018	2 502
Other coniferous	233	77
Total	40 445	40 508

Forest area in Kosovo is fairly stable at approximately 481 000 ha (44.7% of total area).

The objectives of the second National Forest Inventory for Kosovo are:

- Providing valid forest statistics on land use and land use change
- Producing valid forest statistics on the status and change in growing stock,
- Wood increment, and carbon stocks for national planning and international reporting
- Maintaining and strengthening forest assessment know-how

Kosovo's forest area has increased to 5% (20,200 ha) in the period 2002-2012. In the same period, the agricultural area has tendencies to be decreased, which can be explained by the increase of forest area (the conversion of agricultural land to forestry).

24 MAFRD (2012) Kosovo National Forest Inventory

8.3. FORESTATION SURFACES

In Kosovo, 0.5% of the forests are regenerated by forestation or natural seeds. Approximately 85% of the forest area is regenerated with vegetative origin through stumps seedlings / cuttings.

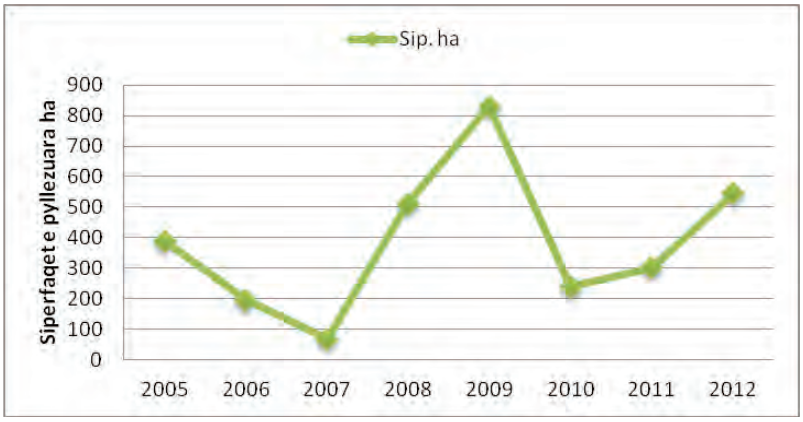


Fig. 8. Forestation surfaces 2005-2012

8.4. FIRES

The reports of Municipal Units verified by the staff of the Regional Coordination Departments indicate that in 2012 in some regions of Kosovo there were fire places of low intensity involving significantly forest areas.

The phenomenon of occurrence of fires has been intensified especially during August involving larger areas but also with quality culture coniferous forests.

Fires have occurred in all regions of Kosovo, but Dragash and Decani had better quality (economic) forests which are covered by fires.

According to reports on fires in the period January-August 2012 were covered 2,907.34 / ha in the state sector, 580.40 / ha in the private sector and in total are covered 3,487.74 / ha of which are not only forest but forests and pasture land. Regions of qualitative forest of Decani forests according to reports are about 200 / ha with high coniferous forests which are covered by fires.

Types of fires have been from the surface, low, high, but also combined types of fires low, high and surface. Sources of fires according to un-detailed unchecked reports were unknown. Fires according to opinion (doubts) should be accidental without accidental intentional as a result of negligence, throwing of cigarettes etc.. By the phenomenon of burning stubble fields which then cannot be controlled and spread into other parts, from burning in landfills but does not exclude the possibilities of putting up deliberate fire by irresponsible persons. The area covered by fires which affects lower forests up to ones of better quality, has not destroy all wood measures, therefore there are no devastated woods but with the possibility of natural regeneration since there are interior surfaces and future trees (seed) which have survived by the fire.



Photo 99. Fire in Sharr forests

Institucionet relevante kanë shfrytëzuar të gjitha kapacitetet e veta për t'iu dal në ndihmë Komunave në shuarjen e zjarreve duke bashkërenduar aktivitetet dhe kërkimet e ndihmës edhe nga institucione të tjera qendrore si Agjencionin për Menaxhimin e Emergjencave, Forca e Sigurisë së Kosovës, etj.

Table 8: Forest fires for the period 2010 - 2014[25]

Nr.	Viti	Sipërfaqet e djegur ha
1	2010	191.06
2	2011	2324.63
3	2012	5604.53
4	2013	365.48
5	2014	393.81
Gjithsej		8879.51

Siç shihet nga tabela dhe grafiku, periudha me kritike e shkaktimit te zjarreve ka qene viti 2011 dhe 2012, qe njihen si vitet me përudhë të madhe të thatësisë dhe temperaturave të larta gjatë gjithë vitit.

25 Source KFA



Photo 100. Volunteers during the extinction of fire

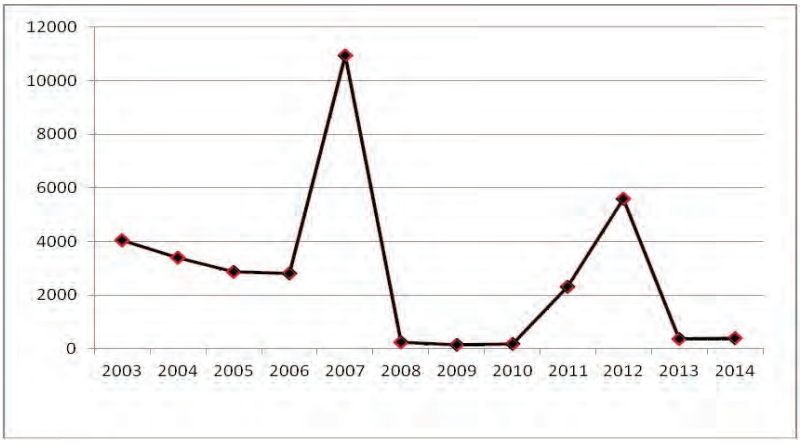


Table 8. Forest fires for the period 2010 - 2014[26]

As shown from the table and graph, the critical periods of causing fires has been in 2011 and 2012 that are known as the years of large drought period and high temperatures throughout the year.

26 Source: KFA

9 ECOTURISM

9.1. ECOTURISM OF PROTECTED AREAS

Tourism today is one of the most powerful industries in the world and as such, has a large impact on economic and social development of many countries, especially developing ones as one of the most important sources of income, employment opportunities, environmental protection and the promotion of inter-culture exchanges. In Kosovo, especially in recent years, investments are done in infrastructure regulation as one of the key elements in the promotion and development of ecotourism with special emphasis on protected areas. [27]

Ecotourism is a type of tourism that aims trips to untouched places, natural protected areas or other natural attractions and generally tries to minimize the impact of human factor on the environment. It also aims to promote environmental education, provide funding for nature conservation, help economic development, enforcement of local communities, and to increase the respect for different cultures.

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

Ecotourism of caves: For the general public it is popular the natural attraction of Gadime Cave, which at the same time is also among the largest tourist attractions in the country. However, Kosovo has also some other caves and improving their infrastructure will provide very good conditions for tourism development of caves. As such are for example: Gryka e Madhe Cave, Panorci Cave, Pjetërshtica Cave, Radavci Cave etc.

Mountain ecotourism and walking in nature: In remote mountainous areas of Kosovo there are many mountain trails which are used by farmers for their cattle which represent real opportunities for the development of walking in nature, biking in mountain, but also expeditions and camping. Besides Sharri and Bjeshket e Nemuna Mountains, this type of tourism can be developed in Bajgora e Shales Mountains, Berisha Mountains and Jezerc etc.

Summer and one-day Ecotourism: good climate, rich meadows of plant diversity, plentiful water resources, scenic landscapes are good prerequisite for the development of summer tourism and camping. Brezne Lake, Batllava Lake Mirusha Canyon, Rugova Valley are just some of the areas which during the summer can be a permanent destination of many tourists and nature lovers who want to spend a day in nature.

Recreational and Sport Ecotourism: In Sharr Mountains, Bjeshket e Nemuna, but also in other mountainous areas of Kosovo, are many suitable terrain for the development of skiing. 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 are many peaks which are very attractive for the development of climbing and mountaineering.

Rural tourism: In many rural areas of Kosovo, especially in mountainous areas, are still conserved many customs, traditions, games, songs, clothing and traditional foods. These extraordinary cultural wealth are a good opportunity for rural tourism development and promotion of these values. In particular, for these values are distinguished the mountain

27 Tourism Destinations in Kosovo, A. Berisha 2010

villages that lie in Sharr Mountains, especially those belonging to the municipality of Dragash.

Educational and scientific tourism: untouched mountain ecosystems, the presence of rare plants and animals, unexplored caves, canyons, multiple streams of water and underground resources of Kosovo have a potential for the development of educational and research activities with pupils, students and scientists from Kosovo, but also for foreign research expedition.

Despite these exceptional values and ideal opportunities for ecotourism development, lack of infrastructure, investment, plans and concrete projects have prohibited the development of eco-tourism capacity. A special problem is the approach of governmental institutions and Kosovo society has towards sustainable exploitation of this potential. Uncontrolled exploitation of natural resources, damage to ecosystems, illegal hunting and expansion of settlements are constant threat for these values. With a more professional promotion of eco-tourism areas, by increasing investment and the preparation of a national strategy for the development of ecotourism, Kosovo can be a very attractive eco-tourism.



Photo 101. Ecotourism in NP PK "Sharri"



Photo 102. Ecotourism in NP "Bjeshkët e Nemuna

10 REPORTING IN EIONET AND COOPERATION WITH EUROPEAN ENVIRONMENT AGENCY

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 on the state of protected areas and biodiversity the KINP for four years (2011-2014) has reported in EIONET for the indicator Common Database on Designated Areas (CDDA).

It should be mentioned that for these four years this report is estimated with maximal grade by the officials of EIONET.

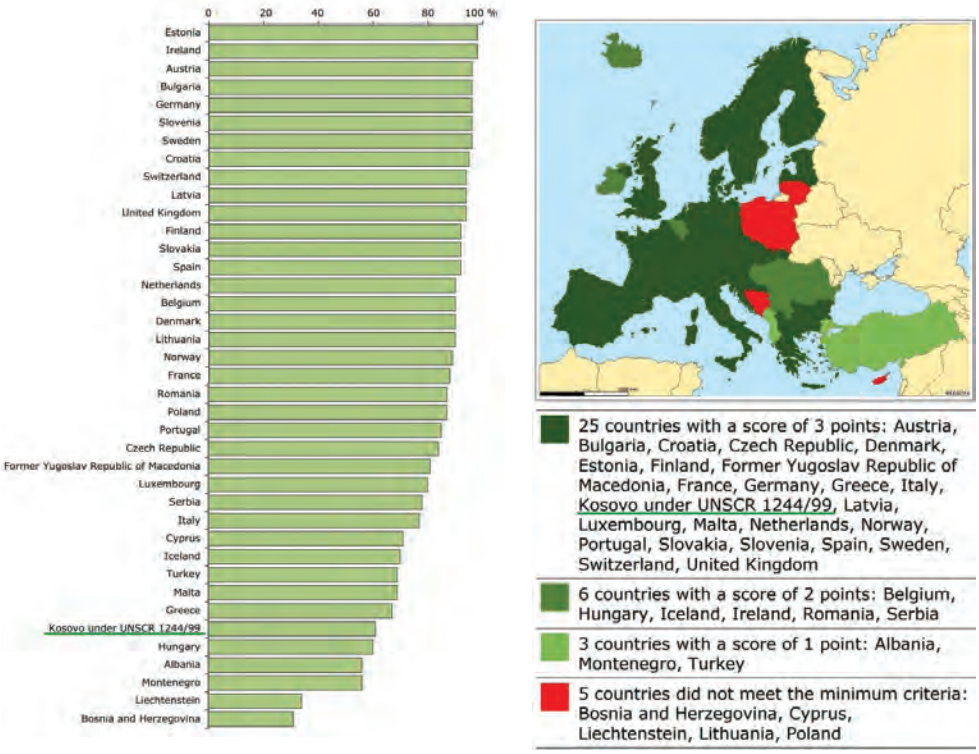


Fig. 10. And 11. General Performance of Countries (May 2013-April 2014)

11 MEASURES UNDERTAKEN FOR NATURE PROTECTION

11.1. NATIONAL PROJECTS AND THOSE FINANCED BY DONORS

Table 9. List of national projects and those financed by donors

No.	Project title	Donor
1	Dinaric Arc Park	Ministry of Foreign Affairs of Norway and Foundation MAVA
2	Red Book of Vascular Flora of the Republic of Kosovo	GIZ and MESP
3	Building of the shelter "PYLLI I ARINJVE" in Badovc	Foundation for animal protection VIER PFOTEN International
4	Toward the sustainable management of Gërmia Park	European Commission and the Municipality of Prishtina
5	Sustainable Management of Land and Conversation of Biodiversity in the Municipality of Dragashit	Finish Government and UNDP
6	Forestry National Inventory	Government of Norway and MAFRD
7	Zoning of NP "Bjeshkët e Nemuna"	UNDP And MMPH
8	ECRAN- Regional Network for access to environment ad Climate Change	European Commission
9	Feasibility Study on establishing Cross boarder Protected Areas "Sharr - Korab - Deshat"	ENVSEC - Environment & Security – UNEP
10	RENA Project (2010-2012) – capacity building for Working Groups on cross-border cooperation and multilateral environmental agreements of subgroup on Nature Protection;	
11	Regulation of electricity network within the cave.	French embassy and KEPA

11.1.1. The Red Book of Vascular Flora

With the support of German-GIZ and MESP during 2013 is prepared the Red Book of Vascular Flora of Kosovo. Preparation of this book has been planned by the Kosovo Institute for Nature Protection since the establishment of MESP, giving the fact that there was an imperative need to know the situation and threatens of a part of the flora of Kosovo, which is considered of special importance. With the finalization of this book, it is created a real picture about the state of important species of vascular flora of Kosovo, their level of risk factors and causes that have affected their risk. This book will serve as a guide not only for MESP, but also for all other scientific institutions, NGOs and researchers in general working to prevent negative impacts and other threats to disappear the Flora of Kosovo.



The Red Book of Vascular Flora of the Republic of Kosovo is important since it focuses the attention of all those who deal with nature on the threat posed to biodiversity, it detects those species that need protection measures and puts in place an information basis for further monitoring.

The Red Book has critical importance because it provides the information that helps in compiling the protection priorities at local level and enables a genuine cooperation with international organizations dealing with environment protection, such as the Convention on Biological Diversity and the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

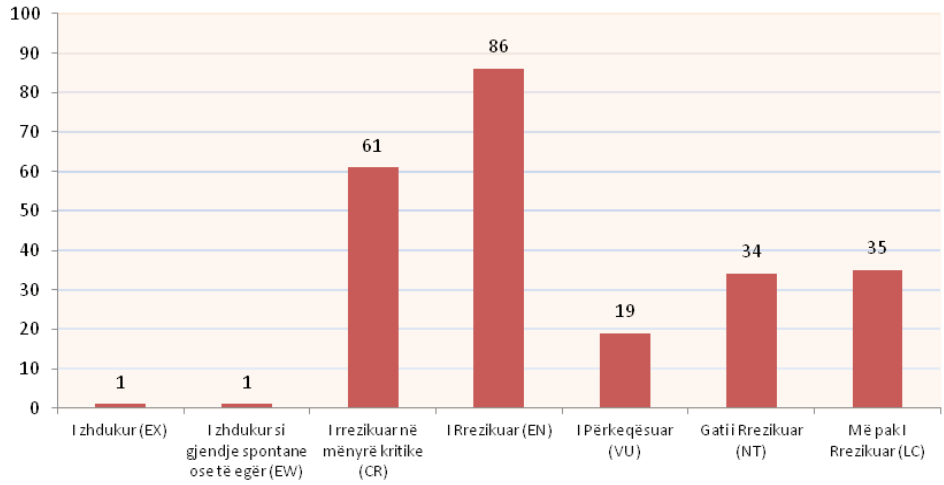


Fig.10. Presentation in graphs the number of plant species which depending on the different categories of threats

Below are some endangered species critically in the Red Book of Kosovo:



Photo 103. Achillea alexandri-regis



Photo 104. Dianthus barbatus



Photo 105. Helleborus purpurascens



Photo 106. Leontopodium alpinum



Photo 107. Micromeria cristata



Photo 108. Linaria alpine



Photo 109. Adonis microcarpa



Photo 110. Fritillaria graeca



Photo111. Laburnum alpinum

11.1.2. Bear Sanctuary

Bear Sanctuary Prishtina is a project of Foundation for protection of animals VIER PFOTEN Kosova in cooperation with MESP, Municipality of Prishtina and with the support of Foundation for animals' welfare VIER PFOTEN International, with headquarters in Vienna, Austria.

The idea of this project was to gather all 13 brown bears kept in restaurants in mini-zoos in various restaurants throughout Kosovo in very difficult conditions and keeping them in places that offer more natural conditions.

The first phase of the project has been completed and by the end of May 2013, all bears were brought to the park and continue to live the rest of their lives in much better conditions than before.

During 2014 by this organization are taken into care three other young bears around Peja who were being held illegally. Once the information was taken by the officials of NP "Bjeshket e Nemuna", together with the Kosovo Police is done their confiscation and with the experts of this organization were transferred to the shelter where by the staff of this organization have tried that these three bears to have proper care.





Fig. 112 and 113. Part of the Park and educational visit of a group of pupils

All bears are currently located in seven sectors with a total area of approximately 2ha and with a building of bear's management with all conditions and opportunities for their normal life. The emplacement of bears in these sectors is temporary and when bigger sectors are build the bears will be moved there.

The General state of the bears at the moment of their arrival in the park has been very difficult. They were stressed, and were difficult to be learned to use the freedom and the conditions that were offered to them.





Photo 114 and 115. Moments from promotion of bear sanctuary

Now their general situation has improved significantly, because of the following reasons:

- Have more surface in use,
- Have regular meals and controlled by experts,
- They have conditions for accommodation, caves, opportunity for games, water basins for refreshments , clean drinking water,
- Cleaning of sectors from excrements and water in basins,
- They have been trained by experts and employed staff to be more easily managed within the park and to somehow avoid the psychological problems with which these bears are facing,
- Have professional health care.

One of the main goals of the Foundation for the protection of animals VIER PFOTEN Kosovo is that through various activities in the Bear Sanctuary Pristina in cooperation with educational institutions and youth organizations to develop an educational program for students and young people for the protection of the environment and especially the wildlife as a very important link of our ecosystem.

Cooperation with schools has started and on organized visits to the park participated by pupils from different schools of the municipality of Prishtina.

11.1.3. Sustainable Management of Land Use and Conservation of Biodiversity in Dragash

During the period this project lasted has achieved satisfactory results in the field of biodiversity conservation and environmental protection in the municipality of Dragash. During the drafting of this project are prepared development and management plans, strategy, and support to small and medium enterprises, farmers and job opportunities.

Some key achievements are the following:

- Drafting the Management Plan for the National Park "Sharri" – under procedure,
- Drafting of a part of the Spatial Plan for the National Park "Sharri"
- Drafting the Financial Plan and Business Plan for the National Park
- Economic Evaluation of Ecosystem of the Municipality of Dragash,
- Investigation of biodiversity of the area of Dragash
- Expansion of the territory of the National Park Sharri in the territory of Dragash,
- Awareness of the population and the local community for conservation of biodiversity and the importance of protected areas through publications and campaigns, as well as expansion of cooperation between Sharri National Park, municipality of Dragash, NGOs, local communities, businesses, etc.

The project "Conservation of biodiversity and sustainable management of land use in Dragash" intended that through the biodiversity conservation, environmental and spatial planning, local economic development, sustainable energy strategy and capacity building to achieve the necessary framework for local sustainable development.

11.1.4. Germia Project

The Municipality of Prishtina during 2013 started with the implementation of the Project "Sustainable Management of Germia Park".

European Commission has allocated 360 thousand Euros, while the Municipality of Prishtina has participated in the project with 150 thousand Euros.

Beside others, this project foresees the regulation of pathways for pedestrians, pathways for bikes, resting places for citizens, functioning of ecological train and public lighting throughout the recreation area.

So far it is completed the upper pathway and is almost finalizing the regulation of the main part of the lower path with lighting also, garbage baskets, places for resting of citizens. In the meantime it is brought the "ecological" train which is still in the testing phase and is intended for the replacement of vehicles, which so far have been moving within the area.





Photo 116 and 117. "Ecologic" train to be installed in the park and lower pathway for pedestrians

Germia Park is under the management of the Municipality of Prishtina through the company "Hortikultura", while the professional supervision is under the Institute for Nature Protection, which operates under the Kosovo Environmental Protection Agency.

11.2. REGIONAL AND CROSS-BORDER PROJECTS

11.2.1. Dinaric Arc Parks

The Dinaric Arc is a region of South-Eastern Europe that covers some 100. 000 k m2 and more than 6. 000 km of coastline, stretching over the entire area oriented towards the Adriatic Sea from Trieste (Italy) to Tirana (Albania).

WWF started the project Dinaric Arc Parks in early 2012, with the aim to create an association of nature and national parks in the territory of Albania, Bosnia and Herzegovina, Croatia, Kosovo*, Macedonia, Montenegro, Serbia and Slovenia. This three-year project is funded by the Norwegian Ministry of Foreign Affairs and the MAVA Foundation.

Regional Network of Protected Areas

The first and main objective of this project is to create a network of protected areas by connecting all parks in the Dinaric Arc region. The planned five-day conferences of parks, which will be held at the end of each project year, will help managers and senior staff of individual parks to get to know their colleagues in the region, exchange management plans and examples of good practice and to plan potential collaboration.

The plan also includes study visits through the region, thus providing park employees with better insight into the situation of other parks in the region.

The most significant values of parks and protected areas within the network will be highlighted in promotional materials and at the website made for improved promotion of the Dinaric Arc parks.

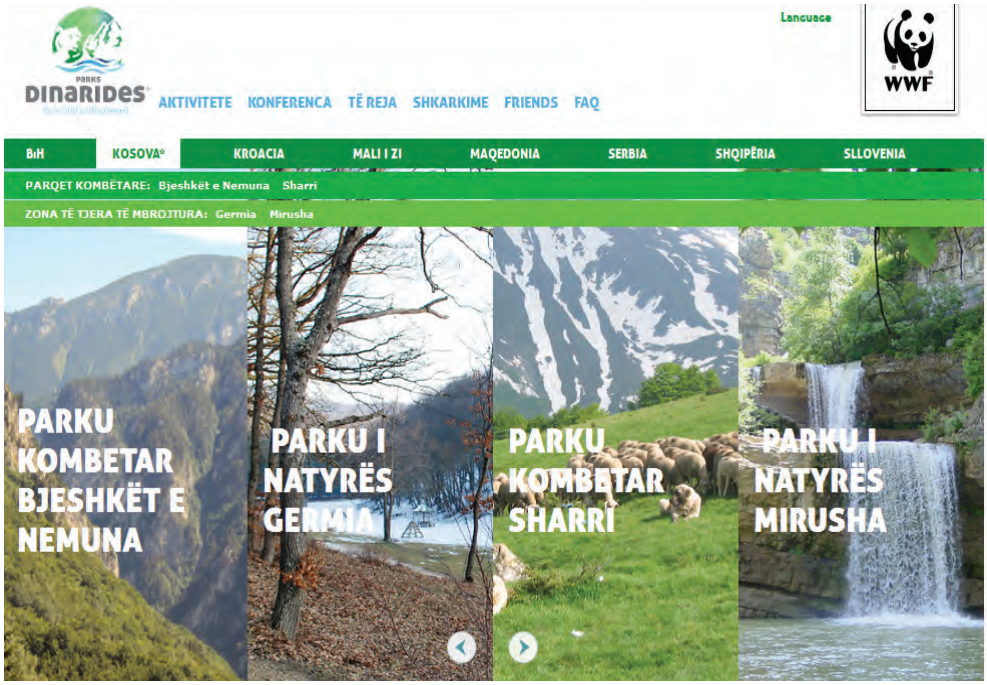


Photo 118. Part from the web page of the project where are presented the Kosovo's Parks

Capacity building for the network of parks

National and nature parks in all Dinaric Arc countries are mostly or entirely dependent on state funding. That is why a series of capacity building and trainings will be held within this project.

As all the countries participating in the project, if not already members, are close to becoming members of European Union (EU), we will organise a series of workshops and study visits about the Natura 2000 and the role and management of protected areas in EU.

The beauty, culture, geographical position and biological diversity of the Dinaric Arc countries are already a tourist attraction. However, it is expected that the Dinaric Arc parks will be yet another magnet for tour operators. We will ensure that employees of protected areas are introduced to the

European Charter for Sustainable Tourism of the EUROPARC Federation, as well as to its practical implementation in our region.

With its natural and cultural values, the Dinaric Arc stands even with the Carpathians, Alps or any other known eco-region in the world Through our website, brochures, various communication tools and, ultimately, an extensive advertising campaign, we shall strive to develop Dinaric Arc parks as a brand that will be recognised in the region and beyond by 2015. This is the reason of the creation of the brand Dinaric Parks, with the logo "Undiscovered World".





Photo 119 and 120. View from the activities within the implementation of the Project

11.2.2. Project on beech forest area

The Ministry of Environment and Spatial Planning respectively Kosovo Environmental Protection Agency has started cooperation with the German Federal Ministry for the Environment, Nature Conservation, Construction and Nuclear Safety - BMUB and the German Federal Agency for Nature Conservation - BFN, and Management Centre the ecosystem - CEEM in the University of Eberswald for Sustainable Development - HNEE, about the project: "Beech Forests - Common Natural Heritage of Europe".

The aim of this cooperation is to introduce the rich natural values of our country, especially the part of vegetation of old beech forests located within the National Park "Bjeshket e Nemuna".

Cooperation on this project started in 2013 to continue to participate in organized workshops and meetings. The project will continue until 2017 and the main aim is the continuous commitment in order that the aforementioned areas to take the advantage of designation and as soon as possible to be discussed at national level.



Photo 121. Visit in the territory of Bjeshkët e Nemuna



Photo. 122. Meeting of WG of the project

11.2.3. Trans-boundary protected Areas

In order to strengthen the nature protection at the regional level, Kosovo has been active part in several initiatives, projects and research in the Western Balkan region, or even part of cross-border initiatives with neighbouring countries Macedonia, Albania, Serbia and

Montenegro. Biodiversity protection and management of protected areas are some of these activities.

Within these regional activities are also designed two studies to declare the two trans-boundary protected areas:

Trans-boundary protected area "Bjeshket e Nemuna" – the proposed area for protection is expected to include Albania, Kosovo, Montenegro and Serbia.

Bjeshket e Nemuna includes the mountains and unique landscapes and is one of the most important areas for biodiversity conservation in the Balkans and throughout Europe. This region is considered to be among the mountain areas with wild flora, which is very rarely, not only in Balkan Peninsula but also in Europe[28].

Trans boundary Protected area "Sharr - Korab - Deshat" - This protected area is located in the border areas of Albania, Kosovo and the Former Yugoslav Republic of Macedonia and includes unique natural landscapes. This trilateral border region includes a significant number of natural habitats and endemic and relict flora and fauna including rare and threatened species of common European importance, as the Brown Bear and lynx of the Balkans[29]

11.2.4. The establishment of the European Green Belt Association

Under the organization of EURONATUR and BUND - the nature protection organizations and the support of the German Federal Agency for Nature Conservation (BFN) from 23-26 September 2014 in Slavonice of Czech Republic it was held the 8th Pan-European Green Belt Conference



Picture 123. European Green Belt Map



Photos 124 Participants in the Conference

The conference, which gathered more than 100 participants from 23 countries of Europe, marks a milestone for future cooperation of those countries that for years have been divided by the iron curtain. The European Green Belt, except 16 EU countries connects also countries like Kosovo, Albania, Montenegro, Serbia, Macedonia, Turkey, Russia and Norway.

About 150 governmental and non-governmental organizations from these countries are

28 http://www.unep.at/documents_unep/Balkan_Feasibility_Studies/Prokletije_25-10-2010.pdf

29 http://www.unep.at/documents_unep/Balkan_Feasibility_Studies/Sharr_25-10-2010.pdf

joined to the initiative of the European Green Belt which was initiated in 2003, at the beginning as various existing regional initiatives, to be merged into a European initiative.

Considering that Kosovo is part of this Initiative for years, also this time was invited as a member of this belt for Balkan region. The milestone of the conference has been the establishment of European Green Belt Association by 23 governmental and non-governmental organizations from 14 countries.

Before the establishment of this association, the cooperation has been a loose network, whereas now it is a legal body established institutionally and who represents the initiative and ensure coordination and information exchange among the European Green Belt community.

Kosovo henceforward will be represented in this Association by the Kosovo Institute for Nature Protection, that with the signing of the agreement henceforth is member in this important organization for nature conservation especially the cross border ones.

11.3. PROMOTION OF NATURE PROTECTION SIGN ON THE INTERNATIONAL DAY OF BIODIVERSITY 22 MAY 2013

With various manifestations in Kosovo was marked 22 May the International Day of Biodiversity. The central event the organizers had, the Ministry of Environment and Spatial Planning and the Ministry of Agriculture, Forestry and Rural Development, was held at the Hunting Reserve of Special Importance in Blinajë, Lipljan.

Representatives of MESP and MAFRD have spoken about the commitments of the relevant ministries on biodiversity conservation in particular, but also for the protection of forests and protected areas management. The International motto of this day was Water and Biodiversity. Also on this day it was promoted the sign of nature protection which is selected by open competition and on May 20, 2013 the Minister of MESP has signed the Administrative Instruction No. 07/2013 of the Sign of Nature Protection. The purpose of issuing the sign for nature protection is to promote the nature conservation and identification of officials in the process of monitoring and taking measures for nature protection.

11.4. DESIGNATION OF PROTECTED SPECIES

During 2014, as part of activities for nature protection with the initiative of the Institute for Nature Protection, among others, were taken under legal protection two native domesticated species of fauna: the Dog Race Deltari Ilir and the Race of Kosovo Logcrower Rooster (Kosovarian Rooster).

The main purpose of issuing these decisions has been the protection of these species

according to the law and definition of the protection conditions.

The aim of these decisions is to protect these species from the risk of genetic mixing with foreign races and by the risk of these races to be extracted abroad with the aim of intersection with other races.

According to these decisions both these native species are registered in the nature protected register which is under the maintenance of the Kosovo Institute for Nature Protection.

The decision contains the rationality for making under protection of these species as well as a description of their basic characteristics.

Drafting of rationality for autochthon race Deltari Ilir was done in cooperation with the Kosovo Cineological Association, while for the race Logcrower Rooster in coordination with the Protection and Cultivation of Poultry Association.



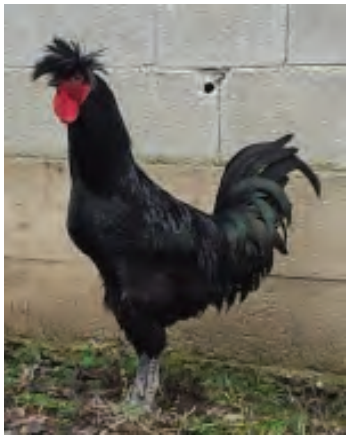


Photo 125 and 126. Dog Race Deltari Ilir and Logcrower rooster (Kosovarian Rooster).

12 CONCUSIONS AND RECOMMENDATIONS

The state of natural heritage in Kosovo is partly satisfactory as a result of the negative impacts of biotic factors (human, insects and diseases) and abiotic (fire, natural disasters, wind, snow, etc.). The reasons for unsatisfactory condition are:

- Unsatisfactory implementation of the existing laws;
- Lack of adequate institutions for the protection of nature;
- Lack of management bodies for protected areas;
- Lack of spatial and management plans for protected areas;
- 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;

Recommendations:

To improve the state of nature in Kosovo is needed to be undertaken g numerous measures, such as:

- Research and inventory of species, habitats and geo-heritage;
- Drafting the Red List of Kosovo fauna;
- Implementation of cross-border projects for nature protection;
- Drafting the Spatial and Management Plan of the National Park "Bjeshket e Nemuna"
- Approval of the Management Plan for the National Park "Sharri";
- Measures to prevent illegal logging in protected areas;
- Placing under management of MESP (DANPK) the NP territory of "Sharri" in the municipality of Sherpca and stopping of illegal administration;
- 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;
- 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 Caves and Mirusha Waterfalls) and SPZ (Henc wetlands - Radeves);
- Capacity building of employees in protected areas;
- Marking and digitization of protected natural areas;
- Harmonization and categorization of protected areas under the Law on Nature Protection;
- Increasing the staff and providing premises for the needs of KINP;
- Strengthening cooperation with local and international organizations in the field of nature protection.

13 REFERENCES

1. B. Berisha, F. Millaku, F. Rexhepi, Xh. Malaj (2012) Atlas of Kosova Flora, K.K. Suhareke
2. B. Durmishaj, S. Hyseni, F. Shala (2011) Atlas of Trepça Minerals, Mitrovicë.
3. Bajraktari F., Behrami S., Abazi Sh., (2010) Protected and proposed geomonumets in Kosovo 2005-2009, 1st International GEO-CONSERVATION symposium and Southeastern Europe Countries ProGEO Grup Meetimg, Firat University, Stetember 15-19, ELAZIG/TURKEY.
4. Bajraktari F., Behrami S., Protected Areas of Kosovo (2013) kërkime gjeografike, nr: 15 Fakulteti i Shkencave Matematikore - Natyrore, Departamenti i Gjeografisë, Prishtinë.
5. Bajraktari F., Behrami S., Zogaj N., (2009), Hidrological heritage of river basin Mirusha, Konferencë shkencore ndërkombëtare, organizuar nga UT.& UGJ. Gjirokastër 20-22 nëntor, Studime Albanologjike, IV, Gjeografia, 2009/4, Viti XIV.
6. Bajraktari F., Dollma M., Behrami S., Krasniqi E., Monuments of Nature of Mirusha River Basin, (2012) Buletini i Shkencave Gjeologjike, (numër special), viti 31(48) i botimit, Konferenca Jubilare "90 vjet Gjeologjia Shqiptare", Tirane, Shqipëri, 26-28, tetor, Abstracts Volume.
7. Bajraktari F., Sherifi Y., Berisha A., Behrami S., Maxhuni Q., (2010), Monumentet hidrike të mbrojtura dhe të propozuara në Kosovë 2002-2008, "Bolwois", Ohër.
8. Bajraktari, F. & Maxhuni, Q. (2007): Caves - value and their protection in Kosova, 13th International Cave Bear Symposium 20-24 September, Brno, Czech Republic.
9. Bank, P, Bemmerlein-Lux, F., Hajdari, A., Hajredini, E., Ibrahimi, H., Mustafa, B. (2012) PROJEKTI "SHKUKZA" GJAKOVË, Plani i peizazhit për "Parkun e Shkukzës, UNDP
10. Decision for division of Nature Protection Section ("KOG". 42/74)
11. Decision of Government No. 01/178 date 18. 03. 2014 on proclamation of wetland of Henci - Radeves – Special Birds Protected Area.
12. Decision of Government No. 04/57 date 13. 03.2009 for putting under protection of the Nature Monument of Special Importance "Shpella e Gadimes-Gadime Cave", Gadime e ultë, MA Lypjan.
13. Decision of Government No. 04/57 date 13. 03.2009 for putting under protection of the Nature Monument of Special Importance "Shpella e Gadimes-Gadime Cave", Gadime e ultë, MA Lypjan.
14. Decision of Government No. 06/75 date 23. 05. 2012 for proclamation of the Nature Monument of Special Importance "Ujëvarat e Mirushes-Mirusha Waterfalls".
15. Decision of Minister No. 03/2013 date 11. 02. 2013 on establishing the Directorate for the Administration of National Park "Sharri", with Headquarter in Prizren.
16. Decision of Minister No. 04/2013 date 11. 02. 2013 on establishing the Directorate for the Administration of National Park "Bjeshkët e Nemuna" with Headquarter in Pejë.
17. Decision of Minister No. 5034/14 date 15. 10. 2014 for proclamation under protection of the race Kosova Logcrower rooster national domesticated specie.
18. Decision of Minister No. 5035/14 date 15. 10. 2014 for proclamation of the race of the dog Deltari Ilir national domesticated specie.

19. Decision of the Assembly of Kosovo No. 3023/3 – 2013 date 18.03. 2014 for the adoption of the Spatial Plan of NMSI "Ujëvarat e Mirushës-Mirusha waterfalls".
20. Draft of Spatial Plan for National Park "Bjeshjket e nemuna";
21. EKMN (1975): Kosovo Nature, Publication for Bjeshket e Nemuna
22. EKMN- (1975-1986): Nature of Kosovo. EKMN. Prishtinë.
23. EKMN (1982): Social study on declaring part of Sharr Mountains as national park, Prishtine
24. Establishment of MESP (Reg. 2001/19 and 2002/5).
25. Forest Strategy 2010-2020;
26. Group of autors (2009): Report on Zoning the NP "Mali Sharr". MMPH, Prishtinë.
27. Group of autors (2014) Report on Zoning the NP "Bjeshkët e Nemuna", No. Prot. 777/14, 21.02.2014
28. Guideline for the Management Plans of National Parks in Kosovo, (02. May. 2012);
29. http://banka-ideve.com/newweb/?fq=brenda&m=shfaqart&gj=gj1&aid=4002.
30. http://www.discoverdinarides.com/sq.
31. Kadriu, K. (2014): "Blinaja" Ekosistemi i bashkëjetesës së florës e faunës, rezervati më i madh shqiptar i gjahut, artikull në Revistën Mjedisi Sot, 30.05.2014.
32. KEPA/KINP, (2008) State of nature report 2006-2007, Prishtine.
33. KEPA/KINP, (2008) State of nature report 2008-2009, Prishtine.
34. KEPA/KINP, (2013) Profesional proposal for declaration of Wetland Hence- Special protection area, Prishtinë.
35. KINP (1985): Study on declaring part of Bjeshket e Nemuna Mountains as National Park, Prishtin.
36. KINP (2003): Report from recognizing and evidencing of nature values in territory of Malishevo.
37. KINP (2003): Report from recognizing and evidencing of nature values in territory of Gjakovo.
38. KINP (2003): Report from recognizing and evidencing of nature values in territory of Skenderaj.
39. KINP (2003): Report from recognizing and evidencing of nature values in territory of Gjilan.
40. KINP (2003): Report from recognizing and evidencing of nature values in territory of Rahovec.
41. KINP (2003): Report from recognizing and evidencing of nature values in territory of Klina.
42. KINP (2003): Study on declaring part of Bjeshket e Nemuna Mountains as National Park, Prishtin.
43. KINP (2004): Report from recognizing and evidencing of nature values in territory of Drenas.
44. KINP (2004): Report from recognizing and evidencing of nature values in territory of Istog.
45. KINP (2004): Report from recognizing and evidencing of nature values in territory of Podujevo.
46. KINP (2004): Report from recognizing and evidencing of nature values in territory of e Mitrovica.

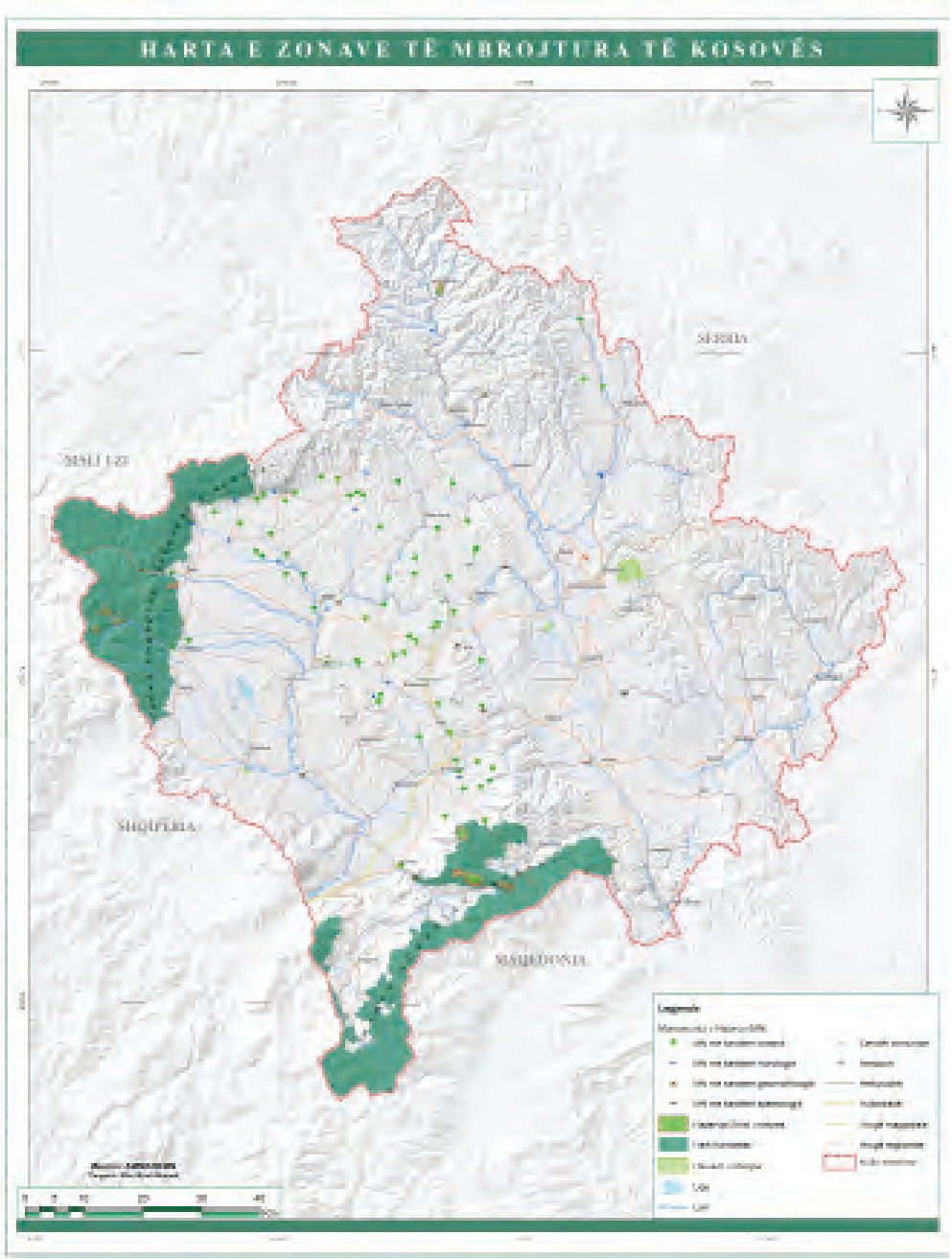
47. KINP (2005): Kosovo nature heritage values.
48. KINP (2005): Report from recognizing and evidencing of nature values in territory of Vitia.
49. KINP (2005): Report from recognizing and evidencing of nature values in territory of Obiliq.
50. KINP (2005): Report from recognizing and evidencing of nature values in territory of Vushtrri.
51. KINP (2005): Study on nature values of specific areas with potential to be declared as protected areas in the territory of Istog.
52. KINP (2006): Report from recognizing and evidencing of nature values in territory of Lipjan.
53. KINP (2006): Report from recognizing and evidencing of nature values in territory of Fushë Kosovë.
54. KINP (2006): Study on nature values of specific areas with potential to be declared as protected areas in the territory of Podujevo.
55. KINP (2006): Study on nature values of specific areas with potential to be declared as protected areas in the territory of Obiliq.
56. KINP (2006): Study on nature values of specific areas with potential to be declared as protected areas in the territory of Klina.
57. KINP (2006): Study on nature values of specific areas with potential to be declared as protected areas in the territory of Skenderaj.
58. KINP (2007): Report from recognizing and evidencing of nature values in territory of Shtime.
59. KINP Archives (2004): Raports, documents, and decisions for protected areas.
60. Kosovo Institute for Nature and Environmental Protection: No. of provisional registry of the business entity 80156359, date 14.08.00)
61. Krasniqi, F., Ruci, B., Vangjeli, J., Susuri, L., Mullaj, A., Pajazitaj, Q. (2003): Fjalor i emrave të bimëve (Latinisht, Shqip, Anglisht, Gjermanisht, Frëngjisht), ASHSH-Instituti kërkimeve Biologjike (Tiranë), ASHAK-Seksioni i Shkencave të Natyrës (Prishtinë).
62. Law on Kosovo Office for Nature and Environmental Protection ("KOG" No. 38/89)
63. Law on Nature Protection No. 03/L-233
64. Law on Protection and Development of Natural Values and Values created by the Work of Human Environment ("KOG" 39/88)
65. Law on the Establishment of Provincial Office for Nature Protection ("KOG". 15/81)
66. Law No. 03/L-233 on Nature Protection KOG No. 85/09 (November 2010);
67. Law No. 04/L-086 on National Park "Bjeshkët e Nemuna" KOG No. 2/21 (January 2013);
68. Law No. 04/L-087 on National Park "Sharri" KOG No. 2/21 (January 2013);
69. MAFRD (2012) Kosovo National Forest Inventory
70. Management Plan of NP "Sharri", MESP 2015
71. Maxhuni, Q. (2009): Some aspects of birds fauna in Kosovo, International Wader Study Group Conference, 18 – 21 September 2009, Texel, Netherland.
72. Maxhuni, Q. (2009): Uticaj ekoloških faktora na dinamiku populacija riba rijeke Drenice, magistarski rad, US – PMF, Sarajevo.

73. Maxhuni, Q. (2010): The influence of ecological factors on fish population dynamics in river Drenica, The Fourth International Scientific Conference BALWOIS 2010, Ohrid, Republic of Macedonia.
74. Maxhuni, Q., Dana, H, Bislimi, K., Ferizi, Rr., Hashani, Z. (2013): National Park "SHARRI", The 2nd Dinaric Arc Parks International Conference, 2 Decembar 2013, Budva, Montenegro.
75. Maxhuni, Q., Ibrahimi, H. (2013): Overview of the invasive alien species in Kosovo, country report.
76. Maxhuni, Q., Morina, I., Morina, R., Ferizi, Rr., Hashani, Z. (2013) Biodiversity and protected areas in Kosovo, The 3rd International Conference of Ecosystems (ICE 2013), Tirana, Albania, May 31-June 05, 2013.
77. MESP (2013): Red book of vascular flora of the Republic of Kosovo
78. MESP/ KEPA (2013): The state of Environment Report 2011-2012, Prishtinë.
79. Mustafa B, Georgev K, Hajdari A, Hajredini E. (2009): Identifikimi Paraprak i Zonave të Natura 2000 në Kosovë, Pikat kyqe të biodiversitetit. Sustainable Forest Management. European Union. Prishtinë.
80. Progress Report of Kosovo 15, May 2011- March 2012/ 7 Year
81. Regulation. No. 2001/19 dhe 2002/5 for establishment of MESP.
82. Rexhepi, F. (1986): Flora e maleve të larta të Kosovës. ETMMK. Prishtinë.
83. Rexhepi, F. (1994): Vegjetacioni i Kosovës (1), UP, FSHMN, Prishtinë.
84. Spatial Plan for National Park "Sharri".
85. Spatial Plan for Nature Monument of Special Importance "Ujëvarat e Mirushes-Mirusha Waterfalls";
86. Strategy and Action Plan on Biodiversity 2011 - 2020, approved by the Assembly of Kosovo, date 07 October 2011;
87. Technical Report on preliminary identification of the areas of NATURA 2000 in Kosovo, 30. 06. 2008.
88. The national strategy for the sector of non-wood forest products (NWFP) 2014-2020;
89. The Strategy on Climate Protection for the Forestry Sector in Kosovo (December 2012)
90. UNDP, Project "Conservation of biodiversity and sustanaible use and management of land in Dragash" TM3-2012 Progres Report Part I-II.
91. UNEP (2010): Fisibility Study on establishing a transboundary protected area Prokletije/Bjeshkët e Nemuna Mountains. UNEP Vienna-Interim Secretariat of the Carpathian Convention (ISCC). Vienna.
92. UNEP Vienna ISCC, 2010, Feasibility Study on establishing a transboundary protected area Prokletije/Bjeshkët e Nemuna Mountains.
93. UNEP Vienna ISCC, 2010, Feasibility Study on establishing a transboundary protected area Sharr/Šar Planina – Korab – Dešat.
94. Veselaj, Z. (2010): Bjeshkët e Nemuna- perla natyrore e Kosovë. REC & KFOS. Prishtinë.
95. Working Plan for selection of the Areas of NATURA 2000 with indicators for required data, responsibilities, deadlines and budget.
96. Strategjia e Pyjeve 2010-2020.
97. Strategjia kombëtare për sektorin e produkteve pyjore jo drunore (PPJ) 2014-2020.

98. Udhëzuesi për Planet e Menaxhimit të Parqeve Kombëtare në Kosovë, (02. Maj. 2012).
99. UNDP, Projekti "Konservimi i biodiversitetit dhe menaxhimi i shfrytëzimit te qëndrueshëm te tokës ne Dragash" TM3-2012 Raporti i progresit pjesa I-II.
100. UNEP (2010): Fisibility Study on establishing a transboundary protected area Prokletije/Bjeshkët e Nemuna Mountains. UNEP Vienna-Interim Secretariat of the Carpathian Convention (ISCC). Vienna.
101. UNEP Vienna ISCC, 2010, Feasibility Study on establishing a transboundary protected area Prokletije/Bjeshkët e Nemuna Mountains.
102. UNEP Vienna ISCC, 2010, Feasibility Study on establishing a transboundary protected area Sharr/Šar Planina – Korab – Dešat.
103. Vendimi i Ministrit Nr. 03/2013 mbi themelimin e Drejtorisë për administrimin e Parkut Kombëtar "Sharri" me seli në Prizren.
104. Vendimi i Ministrit Nr. 04/2013 mbi themelimin e Drejtorisë për administrimin e Parkut Kombëtar "Bjeshkët e Nemuna" me seli në Pejë.
105. Vendimi i Ministrit Nr. 32/2013 për dhënien e lejes për mbajtjen e arinjve të murrmë në internim në strehimoren "Pylli i Arinjve".
106. Vendimi i Qeverisë Nr. 04/57 për vënien nën mbrojtje të Monumentit të Natyrës me Rëndësi të Veçantë "Shpella e Gadimes", Gadime e ultë KK Lypjan.
107. Vendimi i Qeverisë Nr. 06/75 për Shpalljen e Monumentit të Natyrës me rëndësi të veçantë "Ujëvarat e Mirushes".
108. Vendimin nr. 011 (2011) për mbrojtjen e përkohshme të zonës potenciale për shpalljen e saj Zonë e Rëndësishme e Zogjve (Important Bird Area), MMPH.
109. Veselaj, Z. (2010): Bjeshkët e Nemuna- perla natyrore e Kosovë. REC & KFOS. Prishtinë.

14 ANNEX I

Map of protected areas



15 ANNEX II

Table of protected areas 2014

Code	Name of protected area	Municipality	Area/ ha	IUCN Category	Year of protection	Short description of nature values
NATURE RESERVES (847 ha)						
RN_001	Gazimestani	Prishtinë	12	Ib	1953	Plant nature reserve of Scarlet paeony (Paenonia decora Anders)
RN_002	Maja e Ropsit	Deqan	20	Ia	1955	Plant nature reserve of molika, firtree, pine, and beech
RN_003	Kozhnjeri	Deqan	150	Ia	1955	Animal nature reserve of Wild goat (Rupicapra rupicapra L.)
RN_004	Rusenica	Suharekë	300	Ia	1955	R Animal nature reserve of Lynx (Lynx lynx L.)
RN_005	Gubavci	Pejë	38	Ia	1959	Plant nature reserve of endemo-relikt Forsythia europeae
RN_006	Maja e Arnenit	Prizren	30	Ia	1960	Plant nature reserve of Bosnian Pine (Pinus heldreichii)
RN_007	Oshlaku	Prizren	20	Ia	1960	Plant nature reserve of Bosnian Pine (Pinus heldreichii) and other endemic species
RN_008	Pisha e Madhe	Prizren	35	Ia	1960	Plant nature reserve of Bosnian Pine (Pinus heldreichii) and some species of birds
RN_009	Prilepi mountains	Deqan	1	Ia	1963	Plant nature reserve of Balkan Maple (Acer heildreichii)
RN_010	Bifurcationi of Nerodime river	Ferizaj	13	Ib	1979	Special nature reserve. A unique phenomena in Europe. High educative, scientific and tourist values
RN_011	Kamilja	Leposaviq	228	Ib	1988	Special nature reserve Calrareous hill "Kamilja" with paleontological features
NATIONAL PARK (115.957 ha)						
PK_001	National Park "Sharri"	Prizren Suharekë Kaçanik Shtërpcë, Dragash	53.469	II	(1986), 2012	Characterized with many relict and endemic species of flora and fauna and with high geomorfological heritage, hidrological, speleological, cultural, education and tourist values

PK_002	National Park "Bjeshkët Nemuna"	Pejë, Deçan, Istog, Junik, Gjakovë	62.488	II	2012	Characterized with many relict and endemic species of flora and fauna and with high geomorfological heritage, hidrological, speleological, cultural, educativ and tourist values.
NATURE MONUMENTS (5972 ha)						
MN_001	Mani Sham (Morus sp.)	Pejë	0.03	III	1957	Nature monument with botanic values
MN_002	Oriental Plane (Platanus orientalis) in Marash	Prizren	0.05	III	1959	Nature monument with botanic values
MN_003	Aspen (Populus tremula) në Bajçinë	Podujevë	0.05	III	1959	Nature monument with botanic values
MN_004	Lime (Tilia argentea) in Isniq	Deçan	0.02	III	1968	Nature monument with botanic values
MN_005	Lime's trees (Tilia argentea) in Isniq	Deçan	0.05	III	1968	Nature monument with botanic values
MN_006	Cave in Gadime	Lypjan	39	III	1969	Nature geo-monument with speleological
MN_007	Minerals– crystals	Mitrovicë	0.05	III	1970	hydrological values
MN_008	Water flow of river	Suharekë Klinë Malishevë	12	III	1983	Nature monument with geological and geo-morphologic values
MN_009	Mirusha	Prizren	200	III	1976	Nature monument with hydrological values
MN_010	Canyon in River	Pejë	90	III	1983	Nature monument with geo-morphologic speleological, botanic and hydrological values
MN_011	Bistrica	Pejë	4301	III	1985	Nature monument with geo-morphologic speleological, tourist and hydrological values
MN_012	Spring of Drini i	Klinë	0.07	III	1985	Nature monument with geo-morphologic speleological, landscape, tourist and hydrological values
MN_013	Bardhë river together	Klinë	205	III	1985	Nature monument with hydrological values
MN_014	with the cave and	Malishevë	0.05	III	1985	Nature monument with geo-morphologic speleological, botanic and hydrological values
MN_015	waterfall in Radavc	Klinë	0.05	III	1985	Nature monument with botanic values

MN_016	Rugova Canyon	Gjakovë Rahovec	198	III	1986	Nature monument with botanic values
MN_017	The spring of mineral	Drenas	0.11	III	1987	Nature monument with geo-morphologic hydrological and tourist values
MN_018	water in Dresnik	Drenas	0.5	III	1987	Nature monument with geo-morphologic and speleological values
MN_019	Canyon on river Klina	Leposaviq	16.6	III	1988	Nature monument with geo-morphologic and speleological values
MN_020	Oak trees in Lozicë	Podujevë	0.31	III	1988	Nature monument with hydrological values
MN_021	(Quercus sp.)	Podujevë	1.41	III	1988	Nature monument with hydrological values
MN_022	Oak tree in Zllakuçan	Podujevë	0.44	III	1988	Nature monument with hydrological values
MN_023	(Quercus cerris)	Podujevë	0.07	III	1988	Nature monument with botanic values
MN_024	Canyon of Drini	Drenas	0.05	III	2006	Nature monument with botanic values
MN_025	i Bardhë river nex to Fshajt's bridge	Drenas	0.05	III	2006	Nature monument with botanic values
MN_026	Cave in Baicë	Drenas	0.05	III	2006	Nature monument with botanic values
MN_027	Cave in Gllanasellës	Drenas	2	III	2006	Nature monument with botanic values
MN_028	The spring of termomineral	Drenas	0.05	III	2006	Nature geo-monument with speleological
MN_029	water in Vuqë	Drenas	2	III	2006	hydrological values
MN_030	Mineral water spring	Drenas	0.05	III	2006	Nature monument with botanic values
MN_031	in Sallabajë	Drenas	0.05	III	2006	Nature monument with geo-morphologic values
MN_032	Spring in Shakovicë	Drenas	0.05	III	2006	Nature monument with hydrological values
MN_033	Turkish Oak tree (Quercus cerris) in Pollatë	Drenas	0.05	III	2006	Nature monument with botanic and historic values
MN_034	Oak tree (Quercus cerris) in Dobratin	Drenas	0.05	III	2006	Nature monument with botanic values
MN_035	Common oak trees (Quercus robër) in Nekovc	Skenderaj	0.05	III	2007	Nature monument with botanic values
MN_036	Complex of Common oak trees (Quercus robur) in Negroc	Skenderaj	0.05	III	2007	Nature monument with geo-morphologic values

MN_037	Hungarian oak Trungjet e shpardhit in Negroc	Skenderaj	0.05	III	2007	Nature monument with botanic values
MN_038	Cave in Kishnarekë	Skenderaj	0.1	III	2007	Nature monument with botanic values
MN_039	Turkish oak tree (Quercus cerris) in Krajkovë	Skenderaj	0.05	III	2007	Nature monument with botanic values
MN_040	Rock in Gradinë	Skenderaj	0.02	III	2007	Nature monument with hydrological values
MN_041	(Llapushnikë)	Skenderaj	0.1	III	2007	Nature monument with botanic values
MN_042	Spring of mineral	Skenderaj	0.05	III	2007	Nature monument with botanic values
MN_043	water (Poklekë)	Skenderaj	0.05	III	2007	Nature monument with botanic values
MN_044	Oak trees, six trees	Skenderaj	0.05	III	2007	Nature monument with botanic values
MN_045	(Likoshanë)	Skenderaj	0.05	III	2007	Nature monument with botanic values
MN_046	Oak trees (Quercus sp.) Tërstenik	Skenderaj	0.05	III	2007	Nature monument with botanic values
MN_047	Pubescens willd.) Klladernicë	Skenderaj	0.05	III	2007	Nature monument with botanic values
MN_048	Turkish oak tree	Klinë	0.03	III	2007	Nature monument with hydrological values
MN_049	(Quercus cerris L.) in Kotorr	Klinë	0.28	III	2007	Nature monument with botanic values
MN_050	Turkish oak tree	Klinë	0.12	III	2007	Nature monument with botanic values
MN_051	(Quercus cerris L.) in Padalishtë	Klinë	0.07	III	2007	Nature monument with botanic values
MN_052	White oak tree (Quercus pubescens	Klinë	0.2	III	2008	Nature monument with botanic values
MN_053	Willd.) in Çitak	Suharekë	0.05	III	2007	Nature monument with hydrological values
MN_054	Turkish oak tree	Suharekë	0.15	III	2007	Nature monument with botanic values
MN_055	(Quercus cerris L.) in Runik	Suharekë	0.05	III	2007	Nature monument with botanic values
MN_056	Spring of salty water in Leqinë	Suharekë	0.15	III	2007	Nature monument with botanic values
MN_057	Oak tree in Lubovec	Suharekë	0.05	III	2007	Nature monument with botanic values
MN_058	Common oak trees (Quercus robur) Deiq	Suharekë	0.1	III	2007	Nature monument with botanic values

MN_059	Complex of Common oak trees (Quercus robur) Gllarevë	Suharekë	0.15	III	2007	Nature monument with botanic values
MN_060	Turkish oak tree (Quercus cerris) Nagllavkë	Suharekë	0.05	III	2007	Nature monument with hydrological values
MN_061	Spring of mineral water in Rudicë	Suharekë	0.15	III	2007	Nature monument with botanic values
MN_062	White oak trees (Quercus pubescens) Ujëmir	Suharekë	0.1	III	2007	Nature monument with botanic values
MN_063	Oak tree (Quercus sp.) Vraniq	Suharekë	0.05	III	2007	Nature monument with botanic values
MN_064	Macedonian oak tree (Quercus trojana) Biraqë	Suharekë	0.1	III	2007	Nature monument with botanic values
MN_065	Complex of oak trees (Quercus sp.) në Luzhnicë	Suharekë	0.15	III	2007	Nature monument with botanic values
MN_066	Guri i Xhamisë (eng. Mosque Rock) Luzhnicë	Suharekë	0.15	III	2007	Nature monument with botanic values
MN_067	Black mulberry trees (Morus nigra L.) Cerrcë	Istog	0.11	III	2008	Nature monument with botanic values
MN_068	Silver lime tree (Tilia tomentosa Moench) Lubozhdë	Istog	0.1	III	2008	Nature monument with geo-morphologic values
MN_069	Red lime tree (Tilia sp.) Istog i Poshtëm	Istog	0.05	III	2008	Nature monument with botanic values
MN_070	White Oak tree (Quercus pubescens Willd) Sinaj	Istog	0.17	III	2008	Nature monument with botanic values
MN_071	Silver lime tree (Tilia tomentosa Moench.) Shushicë të Epërme	Istog	0.05	III	2008	Nature monument with botanic values
MN_072	Spring natural water in Istog	Istog	3.88	III	2008	Nature monument with botanic values
MN_073	Service tree (Sorbus domestica L.) Uçë	Istog	0.07	III	2008	Nature monument with botanic values
MN_074	Silver lime tree (Tilia tomentosa Moench) Kaliqan	Istog	0.05	III	2008	Nature monument with hydrological values

MN_075	Spring of termal water in Banjë	Istog	0.85	III	2008	Nature monument with botanic values
MN_076	Red lime tree (Tilia sp.) në Lubovë	Istog	0.07	III	2008	Nature monument with botanic values
MN_077	Common oak tree (Quercus robur L.) Zallq - Zabllaq	Istog	0.11	III	2008	Nature monument with hydrological values
MN_078	Common oak tree (Quercus robur L.) në Trubuhovc	Istog	0.07	III	2008	Nature monument with botanic values
MN_079	Common oak tree (Quercus robur L.) Saradran	Istog	0.05	III	2008	Nature monument with botanic values
MN_080	Common oak tree (Quercus robur) Gurrakoc	Istog	0.01	III	2008	Nature monument with botanic values
MN_081	Spring of natural water in Vrellë	Istog	0.26	III	2008	Nature monument with botanic values
NN_082	Mirusha Waterfalls	Malishevë Klinë Rahovec	598.4	III	2012	Nature monument with botanic values
NM_083	Turksih oak tree (Quercus ceris L.) Lladrovc	Malishevë	0.08	III	2014	Nature monument with hydrological values
NM_84	Cave in Temeqina	Malishevë	0.69	III	2014	A rare nature phenomena with series of
NM_85	Oak tree (Quercus ceris L.) Carravranë	Malishevë	0.08	III	2014	waterfalls, specific landscapes with scientific,culture and tourist values
NM_86	White oak tree (Quercus pubesens Willd) LLozicë	Malishevë	0.08	III	2014	Nature monument with botanic values
NM_87	White oak tree (Quercus pubesens Willd) LLozicë	Malishevë	0.07	III	2014	Nature monument with geo-morphologic and speleological values
NM_88	Bozhuri Cave in Damanek	Malishevë	2 ha	III	2014	Nature monument with botanic values
NM_89	Cave in Lladroviqi	Malishevë	2ha	III	2014	Nature monument with botanic values
NM_90	White oak tree (Quercus pubesens Willd)	Malishevë	0.05	III	2014	Nature monument with botanic values
NM_91	Turksih oak tree (Quercus cerris L.) Drenovc	Malishevë	1.25	III	2014	Nature monument with geo-morphologic and speleological values

NM_92	Turkish oak tree (Quercus cerris L.) ne Bubël	Malishevë	0.8	III	2014	Nature monument with geo-morphologic and speleological values
NM_93	Turkish Oak tree (Quercus cerris L.) Bubël	Malishevë	0.8	III	2014	Nature monument with botanic values
NM_94	Turkish oak tree (Quercus cerris L.) Bellanicë	Malishevë	0.8	III	2014	Nature monument with botanic values
NM_95	Narrow-leafed ash tree (Fraxinus angustifolia Vahl) Javiq	Malishevë	0.8	III	2014	Nature monument with botanic values
NM_96	Compleex of oak trees in Vermicë	Malishevë	0.7	III	2014	Nature monument with botanic values
NM_97	Trees and spring natural water in Javiq	Malishevë	0.51	III	2014	Nature monument with botanic values
NM_98	Spring water in Carravranë	Malishevë	9.76	III	2014	Nature monument with botanic values
NM_99	Cave in Panorc	Malishevë	279	III	2014	Nature monument with botanic values
ZONË E VEÇANTË E MBROJTUR E ZOGJËVE (109 ha)						
ZVM_001	Wetland of Henci-Radeve	F. Kosove, Graqanice, Lipjan	109	V	2014	Area with specific nature characteristics: ornithological, ihtiological, hydrological, botanic and landscape
REGIONAL NATURE PARK (1126 ha)						
PN_001	Gërmia Park	Prishtinë	1126	V	1987	Nature park with scientific, educative, culture and tourist values
PROTECTED LANDSACAPE (85 ha)						
PM_001	Shkugza	Gjakovë	70		2011	Area with botanic, educative and tourist values
PM_002	Pishat e Deçanit (eng. Deçans Pines)	Deçan	15		1969	Area with botanic, educative, culture and tourist values

STATE OF NATURE
REPORT
2010- 2014

EDITOR:
Ministry of Environement and Spatial Planning
Kosovo Environmental Protection Agency
Kosovo Institute for Nature Protection

The report State of nature 2011-2014
Prepared by Kosovo environmental Protection Agency

This report is prepared by experts of Kosovo Environmental Protection Agency, in cooperation with experts of Environment Department of the Ministry of Environment and Spatial Planning, and other experts from other relevant institutions.

This report is distributed for free.
Electronic version of this report may be downloaded at www.ammk-rks.net

Editor team:

MSc. Fadil Bajraktari, director of KINP/ KEPA

Mr. sc. Qenan Maxhuni, official for biodiversity – KINP/ KEPA

Dr.sc. Sami Behrami, official for protected areas – KINP/ KEPA

MSc. Afrimi Berisha, head of Environmental reporting division – KEPA

MSc. Valmira Gashi, senior officer for sustainable use of naturala resourses MESP

Mr. sc. Nail Kryeziu, head of forestry sector - NP "Sharri"/KEPA

Ndriçim Mustafa, official for projects and cooperation – KEPA

Cover page: Copyright Fatos Katallozi

® Kosovo Environmental Protection Agency

Katalogimi në botim – **(CIP)**
Biblioteka Kombëtare e Kosovës "Pjetër Bogdani"

504.06(496.51) "2010/2014"

Raport për gjendjen e natyrës në Republikën e Kosovës : 2010-2014 / Agjencia për Mbrojtjen e Mjedisit të Kosovës, 2015. – Prishtinë : Agjencia për Mbrojtjen e Mjedisit të Kosovës : Instituti i Kosovës për Mbrojtjën e Natyrës. – 121 f. : ilustr. me ngjyra ; 24 cm.

ISBN 978-9951-638-06-7



ISBN 978-9951-638-06-7