

Available online at www.sciencedirect.com



Procedia Social and Behavioral Sciences 19 (2011) 651-654



The 2nd International Geography Symposium GEOMED2010

Management status of protected areas in Kosovo

Behxhet Mustafa^a*, Zeqir Veselaj^b, Avni Hajdari^a, Zenel Krasniqi^b

^aUniversity of Prishtina, Republic of Kosovo. St. Mother Teresa, 10000 Prishtinë, Kosovo. ^b Faculty of Education University of Prishtina, Republic of Kosovo. St. Mother Teresa, no nr., 10000 Prishtinë, Kosovo.

Abstract

This paper presents the situation of protected areas network in Kosovo, main problems with their management and protection. Kosovo covers an area of 10,887 square kilometers in the central part of Balkan Peninsula. Territory of Kosovo is under different elevations and impacted by mixed Continental and Mediterranean climate states. 47, 842, 34 ha or 4.39 % of territory of Kosovo is protected. Protected areas network in Kosovo consist of: one national park, 11 nature reserves, two protected landscapes and 82 natural monuments with different natural characteristics: botanical, geographical, geomorphologic, hydrological etc. The history of protected areas starts in 1953, when the first nature reserves were designated for legal protection, with permanent increase of number and size of other protected areas. The biggest step until now in the protection of natural sites is made in 1986 with declaration of Sharri national park (39,000 ha), because of very rich biodiversity.

The network of legally protected areas is quite heavily damaged during and after the last war in Kosovo (1998-99). Degradation of ecosystems, overexploitation, fires and other negative activities have being part of protected areas during last decade. The new law on nature conservation is partly regulating this situation, although the protection and management measures face many implementation challenges.

© 2011 Published by Elsevier Ltd. Open access under CC BY-NC-ND license. Selection and/or peer-review under responsibility of The 2nd International Geography Symposium-Mediterranean Environment

Keywords: Management status; protected areas; Kosovo

1. Introduction

Kosovo is small country and 2, 3 % of Balkan's territory. Despite its small territory, due to interlacement of three climates (continental, submeridian, and alpine), relief, geomorphologic, hydrologic aspect as well as historical factor Kosovo is still enriched with 2500 species of vascular plants and 139 plant associations [1].

In the recent decades, populations of many species in Kosovo are dramatic decline. This mainly happens due to destruction of natural habitats by humans, with or without being aware of it, for their own survival. Intensification of human activities as a result of growth of industry, energy, transport, agriculture, forestry, tourism, etc, still continues to impact on natural habitats by fragmenting them, leaving but small areas for wild flora and fauna.

^{*} Corresponding author. Tel.: +381 38249873: E-mail address: behxhetm@yahoo.com.

Certain laws have been adopted by the Kosovo Parliament in order to properly deal with the natural heritage, which enable implementation of nature conservation policies in Kosovo, such as: Law on Environmental Protection (2009); Law on Nature Protection (2006) whereas Law and Strategy on Biodiversity, Law on Herbs and Aromatic Plants etc. are still unavailable.

Institutional conservation of nature values in Kosovo has begun in 1953 with designation of natural reserves of Peonia decora in Gazimestan nearby Prishtina- the capital of Kosovo [2].

The purpose of this research was to assess the number, value and the real state of the protected zones in Kosovo, respectively management status of these zones.

2. Methods of Work

In order to achieve results, necessary researches have been conducted in the field especially in the zones endangered potentially by human factor. These researches have been mainly conducted based on the project "Identification of Potential Zones of Kosovo for the Ecological Network, Nature 2000" [3]. Researches were conducted during the 2007-2009. Apart from the work in the field, certain data were used from [4]; Report on the State of Kosovo Nature 2006 and 2008 prepared by the Kosovo Agency for Environmental and data collection based on the relevant scientific literature.

3. Results and Discussions

Based on the results achieved by the researches, conducted so far it is ascertained that the number of nature protected areas in Kosovo is 97, and cover an area of 47.842,34 square kilometers or 4.39 % of Kosovo's territory. These zones include: 11 Reserves of nature (reserves of *Peonia decora*, Bifurcation of the river Nerodime, The Peak of Arnen, The Rops Peak, Rusenica, Gubavci, Kozhnjeri etc.), 1 National Park ("Sharr Mountain"). There are 82 Natural Monuments (The Spring of the Drini i Bardhë River, The Cave of Gadime, The Rugova gorge, Ura e Fshajte) and lots of other natural monument. Two Regional Natural Parks (protected landscapes) are Gërmia and Mirusha, and 1 Forest Park ("Pishat e Decanit- the Pines of Decane").

Among the protected areas, the largest area is covered by "Mali Sharr" Natural Park with 39,000 ha or 84 % of Kosovo's protected area, and the smallest area is covered by the Forest Park (Pishat e Deçanit) with an area of 15 ha (Tab. 1).

Table 1. P	Protected areas	and their number	in Kosovo [6]
------------	-----------------	------------------	---------------

Category	Name	Nr:	Area /ha
I	Reserves of Nature	11	846.92
	Vegetative reserves of Nature natyrore bimore	6	
	Natural reserves of animals	2	
	Special reserves of Nature	3	
II	National Park	1	39.000
III	Natural Monuments	82	6.296,93
	Natural-Speleological Monuments	4	
	Natural-Hydrological Monuments	15	
	Natural-Geomorphologic Monuments	7	
	Botanic-Natural Monuments	55	
	Memorial-Natural Monuments	1	
V	Protected Landscapes	2	1. 683,49
	Forest Park	1	15
	Total	97	47.842,34

The national park Malet e Sharrit (Sharri Mountains) is an important centre of biodiversity, and due to its values of flora and fauna, in 2002 it was proposed to be included in the List of World Heritage, whereas during the field research on identification of potential zones of Natura 2000 in Kosovo, Malet e Sharrit and Bjeshkët e Nemuna (The Albanian Alps) were classified as Reserves of the Biosphere, Important Plant Area,

Primary Butterflies Areas, Important Bird Area as well as habitats for a variety of endemic and endemic-relict species. From the results of research it was concluded that besides Malet e Sharrit and Bjeshket e Nemuna, other areas like: Koritnik, Pashtrik, Koznik, Gërmia Bjeshket e Kopaonikut and Mirusha are also a center for diversity of flora, fauna and ecosystems of Kosovo, thus being classified as potential zones for the Ecologic Network, Nature 2000 (Figure 1). During these researches conducted mainly on the protected zones 41 species of birds have been identified, from the Annex I of Birds Directive. In Kosovo are present 17 species from the IUCN Red List according to the version 3.1 [10] (Ampedus aethiops, Ampedus quadrisignatus, Apodemus mystacinus, Ceruchus chrysomelinus, Clytus lama, Clytus tropicus, Cucujus cinnaberinus, Microtus guentheri, Microtus levis, Monochamus sartor, Osmoderma barnabita, Purpuricenus globulicollis, Ropalopus femoratus, Ropalopus insubricus, Ropalopus ungaricus, Spermophilus citellus, Talpa stankovici). In these areas 19 local endemic plant species and 138 endemic species from Balkan have been identified. Researches have identified 68 more relict plant species [5].

Unfortunately, the values of nature are not being destroyed only outside of the protected areas but inside them as well. Even strictly protected zones of nature are being destroyed.

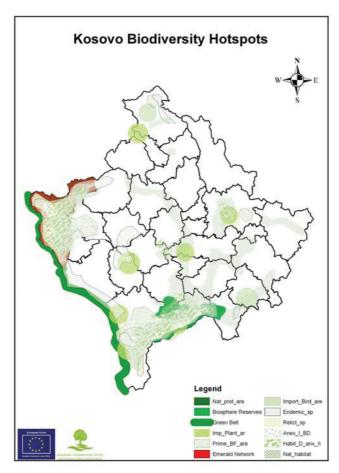


Fig. 1. Potential Zones for Ecological Network, Nature 2000 in Kosovo [3].

In 1998 and 2007 Mustafa et al. [7,9] concludes that the values of biodiversity are endangered not only outside of protected zones but as well as inside them. In 2008 [8], also concludes that some of the strictly protected reserves of nature are to be assessed and its surface is to be determined, because in many of these natural reserves such as: "Maja e Arnenit", "Rusenica", "Kozhnjeri", species are endangered with extinction and their habitats are being reduced, due to irresponsible activities of human factor.

The facts in the field shows that if necessary steps on implementation of legislation are not undertaken on the awareness raising of the public, in few years the highly valued zones of nature in Kosovo will lose their values as a result of conversion of land for agricultural purposes, development of infrastructure (unplanned and uncontrolled constructions), fragmentation of habitats (especially by streets and quarries), unsustainable exploitation of forest ecosystems, herbs, certain animals, etc.

4. Conclusion

To date, 97 areas of Kosovo have been announced as protected areas of nature, which cover an area of 47.842,34 ha or 4.39 % of Kosovo's territory. These includes include: 11 Nature Reserves, 1 National Park, 82 Natural Monuments, 2 Regional Parks of Nature and 1 Sylvan Park.

Malet e Sharrit, Bjeshkët e Nemuna, Koritniku, Pashtriku, Kozniku, Gërmia, Bjeshkët e Kopaonikut, Mirusha have been classified as diversity centers of: flora, fauna and ecosystems in Kosovo thus being classified as potential areas for the Ecologic Network, Nature 2000.

On these areas 41 species of birds have been identified, which were later included in the Annex I of the Directive on Birds. According to the version 3.1 of the IUCN Red List there are 17 species in Kosovo. In these zones 19 local endemic plant species and 138 endemic species from Balkan and 68 more plant relict species have been identified.

Besides the Law on Environmental Protection, 2003; Law on Nature Protection, 2006, which are now applicable in Kosovo, Law and Strategy on Biodiversity as well as Law on Herbs and Aromatic Plants should also be adopted. Curricula of all education levels (pre-university and university) as well as environment-related subjects must be given a due importance.

References

- [1] Krasniqi F. Veçoritë e florës dhe vegjetacionit të Kosovës dhe problemi i mbrojtjes së tyre. Kërkime, 6, Akademia e Shkencave dhe Arteve të Kosovës, Prishtinë. 1998.
- [2] Institut for Nature and Environment Protection (INEP), Vlerat e Trashëgimisë Natyrore, MMPH, Prishtinë. 2005.
- [3] Mustafa B, Georgev K, Hajdari A, Hajredini E. Identifikimi Paraprak i Zonave të Natura 2000 në Kosovë, Pikat kyqe të Biodiversitetit. Sustainable Forest Management. European Union. Prishtinë. 2009.
- [4] ARD-BIOFOR AQC. Kosovo biodiversity assessment, USAID, Burlington Vermont, USA. 2003.
- [5] Mustafa B. Basic Caracteristics of Flora and Vegetation of Kosovo and the Danger of Disappirance. *Albanian Journal of Natural and Technical Science* 1998, 5.
- [6] Agjencioni i Kosovës për Mbrojtjen e Mjedisit, Raport i gjendjes së Natyrës së Kosovës, MMPH, Prishtinë. 2010.
- [7] Mustafa B. First sudy on potencial areas for Natura 2000. IUCN South-Eastern European e-Bulletin, 2008, 18.
- [8] Veselaj Z, Mustafa B, Hajdari A, Sherifi Z, Disa aspekte të kërcnimit të biodiversitetit në rezervatet strate të Natyrës në Kosovë, Educologia. Universiteti i Prishtinës, Prishtinës. 2008.
- [9] Mustafa M, Hoxha E, Veselaj Z, Hajdari, A. Biodiversitetit i Kosovës, vlerat, rreziqet që e kërcënojnë dhe masat për mbrojtjen dhe ripërtëritjen e tij. The environment of Kosova Recourses and Human Factor. Academy of Science and Arts of Kosova Kerkime-Botim i veçantë. ASHAK. Prishtinë, 2007.
- [10] www.iucnredlist.org/apps/redlist