

PROTECTED AREAS PAST AND PRESENT

ARIILE NATURALE PROTEJATE TRECUT ȘI PREZENT

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Abstract: *Romania has a very diverse natural capital. This is partly due to the physical and geographical conditions that include mountains, plains, major river systems, wetlands and one of the most extensive delta systems in Europe (Danube delta).* **Rezumat:** *România are un capital natural deosebit de divers. Acest fapt se datorează în parte condițiilor fizico-geografice care includ munți, câmpii, rețele hidrografice majore, zone umede și unul din cele mai vaste sisteme de deltă ale Europei.*

Key words: *natural protected area, environment management*

INTRODUCTION

Although the first protected areas were established in Romania in 1932 and the first regulations in this field dates back to 1928 - Natural Monuments Commission Established in Romanian legislation and the emergence of the term natural monument protected area for the current period - however, management protected areas in Romania, is a new area which only recently began to develop, with the establishment by law in 1992 the Danube Delta Biosphere Reserve (DDBR). The National Network of Protected Areas (PA) 1035 amounts to protected areas, with a total area of 1,110,000 ha. Except DDBR, for no other protected area there are no administrative institutions to assure management.

NATURAL PROTECTED AREAS CONCEPT AND CLASSIFICATION

Forum which has proposed to resolve this difficult issue was the International Union for Conservation of Nature (IUCN - The World Conservation Union) that the mission should be competent to do so. Central principle behind the guidelines is that protected areas should be defined by their management objectives, not the title area and not the effectiveness of management in meeting those objectives. From a scientific natural protected area is the area of land, aquatic and / or groundwater, the perimeter having a legally established special care and conservation, there are species of wildlife, bio-geographical elements and formations, landscape, geological, paleontological, speleological or otherwise, the ecological value of particular scientific or cultural. 6 are used as categories for protected areas and involving a gradation of human intervention, ranging from zero human intervention own categories Ia / Ib, by human intervention of a higher level if the class V. Class VI alone was added later, so in terms of human intervention falls between categories III and IV. However, all are equally important and relevant to biodiversity conservation. Commission of Natural Monuments of the Romanian Academy has established categories of existing protected areas in our country, taking into account the IUCN classification, taking into account the regulations of UNESCO and FAO:

a. scientific reserves are protected natural areas are those whose purpose is the protection and conservation of natural habitats for terrestrial and / or water, including

representative elements of scientific interest in the issue flora, fauna, Geology, paleontological, pedological or otherwise.

b. national parks protected natural areas are those whose purpose is the protection and preservation of representative samples for national biogeographical area, including natural elements of particular value in the physical aspect of geography, flora, fauna, hydrological, geological, paleontological, caving, pedological or otherwise, providing the opportunity for visiting scientific, educational, recreational and tourist.

c. Natural monuments protected natural areas are those whose purpose is the protection and preservation of natural elements with value and ecological significance, scientific landscape.

d. nature reserves protected natural areas are those whose aim is the protection and preservation of important natural habitats and species as part flora, fauna, forestry, hydrology, Geology, paleontological, pedology

e. natural parks are those protected natural areas whose aim is the protection and preservation of assemblies landscape in which the interaction of human activities with nature over time has created an area distinct, with significant value landscape and / or culture, often with great biological diversity.

f. perfect biosphere reserves are protected natural areas are those whose purpose is the protection and preservation of natural habitat areas and biological diversity specific. Biosphere reserves are spread on large areas and include a complex of terrestrial ecosystems and / or water, lakes and rivers, wetlands with community biocenotic unique flora and fauna with natural and harmonious landscapes resulting from traditional spatial planning.

g. wetlands of international importance protected natural areas are those whose purpose is to ensure the protection and conservation of natural sites with specific biological diversity of wetlands. Natural sites of universal natural heritage protected natural areas are those whose purpose is the protection and preservation of natural habitat areas across which there natural elements whose value is recognized as of universal importance.

i. Special Areas of Conservation natural areas protected are those whose purpose is to conserve, preserve and, where appropriate, to restore a favorable conservation status of natural habitats and / or populations of species for the site is designated.

J. Bird special protection areas are those protected natural areas whose purpose is to conserve, preserve and, where appropriate, to restore a favorable conservation status of specific habitats, designated to protect species of wild migratory birds.

NATURAL PROTECTED AREAS IN THE WORLD.

Currently there are over 1388 titles in world designating protected areas, each of which is designated by national law. You can find such protected areas have different names but have the same goal: Bhutan strict nature reserve, nature reserve management in the Bahamas, a nature reserve in Ontario - Canada, the Czech national nature reserve, marine nature reserve in Indonesia; area Conservation in Japan and strict nature reserve in Sri Lanka- all of which are the same, namely, a strictly protected reserve - according to IUCN first category.

Name of National Park, which began to be frequently used when establishing Yellowstone National Park in 1872. Thus, while in many parts of the world (America, Africa, South Asia and South America, Australia and New Zealand) national parks are large natural areas in Europe are protected areas which is called the national park but human intervention is obvious, such as all 11 national parks in England and Wales, most national parks in Germany and France Cévennes National Park.

Distribution of protected areas according to their management objectives, based on IUCN categories

Table. 1

European IUCN categories

The IUCN management category	number (%)		surface. (km ²) (%)		surface. Average of AP (km ²)	(%) terrestrial surface
I-a	4.389	14%	978.698	7%	223	0.65%
I-b	809	3%	940.360	7%	1.162	0.63%
II	3.384	11%	4.001.605	30%	1.183	2.67%
III	2.122	(7%)	193.021	1%	91	0.13%
IV	11.171	37%	2.459.703	19%	220	1.64%
V	5.578	18%	1.057.448	8%	190	0.71%
VI	2.897	10%	3.601.440	27%	1.243	2.40%
TOTAL	30.350	100%	13.232.275	100%	436	8.83%

It is evident from the table that the entire spectrum of services provided by protected areas is well represented in the global network of protected areas. An exception is however IUCN Category III - Natural Monuments, which is less applied, which calls for reflection on the limited role that is assigned to specific natural features preservation. Biome representation sites (according to Udvardy's biogeography classification) in the global network of protected areas

Table.2

IUCN Category III - Natural Monuments

Biomuri (Udvardy, 1975)		Protected areas		% Biome protected
Name	Area (km ²)	Number	Area (km ²)	
1.Tropical humid forests	10.513.210	1.030	922.453	8,77%
2.Subtropical/temperate rain forests/woodlands	3.930.979	977	404.497	10,29%
3. Temperate needle-leaf forests/woodlands	15.682.817	1.492	897.375	5,72%
4.Tropical dry forests/woodlands	17.312.538	1.290	1.224.566	7,07%
5.Temperate broad-leaf forests	11.216.659	3.905	403.298	3,60%
6.Evergreen sclerophyllous forests	3.757.144	1.469	164.883	4,39%
7.Warm deserts/semi-deserts	24.279.843	605	1.173.025	4,83%
8.Cold-winter deserts	9.250.252	290	546.168	5,90%
9.Tundra communities	22.017.390	171	1.845.188	8,38%
10.Tropical grasslands/savanas	4.264.832	100	316.465	7,42%
11.Temperate grasslands	8.976.591	495	88.127	0,98%
12.Mixed mountain systems	10.633.145	2.766	967.130	9,10%
13.Mixed island systems	3.252.563	1.980	530.676	16,32%
14.Lake systems	517.695	66	5.814	1,12%
TOTAL	145.605.658	16.636	9.489.665	6,52%

Based on existing data set and acknowledging mistakes caused by lack of information of great importance (such as lack of information about the 75% of the total area of 30.350 protected areas known), the following conclusions can be drawn:

1. global network of protected areas occupy a relatively large area that continues to rise. Only in some regions (East Africa / South America, North America, Caribbean and Pacific).
2. number of marine protected areas is very limited compared to the number of terrestrial protected areas.
3. there is a predominance of small size protected areas over the sea surface which jeopardize their integrity.
4. a lack of implementing all the IUCN categories in some regions, limiting the benefits of each type of data protected area basis.
5. attainment of the objective of Biome representation of all sites within the global network of protected areas.
6. There are still a majority of countries have less than 10% of the territory declared as protected areas and 20% in countries with less than 1% of the land - protected areas.

Table.3

Global network of the protected areas

Region	Protected areas		
	Number	Area (km ²)	Average area (km ²)
Antarctica	99	3,788	38
Europe	9,325	603,601	65
Pacific Region	152	13,113	86
Caribbean Zone	579	108,637	188
Australia / New Zealand	5,882	1,109,024	189
Central America	384	86,049	224
South Asia	719	212,924	296
South-Eastern Asia	1,524	518,864	340
North America	6,711	4,083,806	609
East Asia	1,078	883,681	820
Northern Eurasia	648	657,935	1,015
South America	1,437	1,838,826	1,280
Africa (East / South)	927	1,318,615	1,422
Africa (North / Middle East)	542	1,037,576	1,914
Africa (West / Central)	343	755,836	2,204

PROTECTED AREAS IN ROMANIA

Romania has a very diverse natural capital. This is partly due to the physical and geographical conditions that include mountains, plains, major river systems, wetlands and one of the most extensive delta systems in Europe (Danube delta).

Historical analysis of measures to protect nature through protected areas reveals the following steps:

»1928-1944 - is a pioneering time for nature conservation and protected areas in Romania in 1928 in Cluj Emil Racoviță proposal was adopted a decision on drafting the law on nature protection in Romania. Thus, 1930 is Law. 213 for protection of natural monuments in Romania. On the basis of this law is established "Comisiunea natural monuments, and then declared by law (Official Council of Ministers) first natural monuments in 1931 (and lily edelweiss Spa) and first national park in 1935 (National Park Retezat).

»1944-1989 - after August 23, 1944 nature protection measures were based on institutional efforts made before the war were scientists as Al. Borza and Emil Racoviță. In 1972 the number of protected areas increased up to 190 targets totaling almost 100,000 hectares. In this period occurred and the first international recognition of the value of Romanian protected areas, while in 1979, and Pietrosul Retezatul Rodnei were recognized as biosphere reserves under the auspices of UNESCO program - Man and Biosphere (MAB).

»1990 - present-in 1990, so MAPPM Order no. 7 setting up a number 13 national parks including Retezat National Park was already established, order that causes some confusion because it refers only to areas of forest fund of the national parks but not in areas containing Alpine goals.

Another international recognition of the value of natural capital of Romania has been an appointment of the Danube Delta as a Ramsar site in 1991 as World Natural Heritage Site for 50% of its surface. The 1992 is recognized as a Biosphere Reserve. Delta is recognized as a Biosphere Reserve by HG 248 / 1994. Since 1994 began carrying out a project GEF (Global Environment) to set up the park administration and performance management plan.

BIOSPHERE RESERVES OF ROMANIA

Table 4.

Romanian National parks			
Nr. crt.	Name	Area (ha)	Location (county)
1.	Biosphere Reserve Danube Delta	576.216	TL, CT
2.	Retezat	38.138	HD, CS, GJ
3.	Rodna	46.399	BN, MM
TOTAL		660.831	

National parks and natural. National parks - are natural areas of national or international importance protected from human intervention or installation and where species of flora and fauna is the subject of great scientific interest, educational, recreational or aesthetic. National natural resource exploitation is prohibitive.

Natural parks. Natural parks - natural protected areas to conserve the landscape of combinations of human activities interact with a distinct area of great cultural landscape values and biological diversity often.

Outside national parks, natural parks and biosphere reserves are about 941 scientific reserves, natural monuments and nature reserves whose total area is approximately 316,012.6 hectares. Given the fact that many of these protected areas are included in large protected areas (national parks, natural parks and biosphere reserves) - 269,234 ha., The total area of protected natural areas in Romania covers 1,702,112 hectares, which representing 7.14% of land area of the country in late 2004.

Rodna Mountains National Park- is located in the center of Mountains Rodnei. The importance of this park is due to the geology and geomorphology of mountains, and the presence of numerous species of fauna and flora, endemic and glacial relicts. It was organized in 1990 when the Ministry of Waters, Forests and Environmental Protection has issued Order no. 7 setting up a number 13 national parks including the National Park Rodna. This order has caused some confusion because it refers only to substantive areas of national parks forest, not in alpine areas containing goals. The actual area is established in 2002 by the Ministry of Waters and Environment Protection. Of the total area of 46,399 ha of PNMR, 3.300 ha were declared a Biosphere Reserve in 1979.

Rodna Mountains National Park has some natural areas of particular interest: scientific reserve "Pietrosul Sea", 3300 ha - Take IUCN category, Bad Stone Natural Reserve, 50 ha, IUCN Category Ia, Joint Reserve "Blue Spring Cave and karst spring of Iza ", 100 ha,

IUCN Category III, botanical Glade Narcissus in Mount Saca, 5 ha, IUCN Category III, Reserve speologic Cobasel Cave, 1 ha, IUCN Category III, Joint Reserve" Ineu - Lala ", 2568 ha, IUCN Category III, Natural Reserve" Cave of the Spring Tăușoarelor "Natural Reserve Spring Bătrâna 0.5 ha, IUCN Category III, Joint Reserve Sources Mihăiesei, 50 ha, IUCN category III.

CONCLUSIONS:

Each country should have an effective law of protected areas, which should derive from a set of policies on protected areas. The law should give management objectives for each type of protected area and ensure that institutions will meet these objectives. This law should be part of this general framework of environmental law in the country. At the national level can be supported by international agreements on nature conservation and protected areas.

BIBLIOGRAPHY

1. BLONDEL J. 1995-*Biogeographica*, Ed Masson, Paris
 2. BORLEA FLORIAN GHEORGHE, 2004 - *Protection nature*, Eurobit
 3. SAMFIRA I.ȘI COLAB - *Zones Buffer protected areas County Timiș* contract between Foundation Pro Agro USAMVB Timișoara and CJ Timiș
- XXX.Law 137/1995, Law environmentally supplemented through L 159/1995; L 453/2001; OUG 91/2002; L 26/1996 - Code Silvic; L 107/1996 - Law Waters.
- XXX.Law nr.345/2006 amending and Ordinance Government Emergency on regime natural areas protected conservation natural habitats flora and wildlife OUG nr.236/2000 approved by Law nr.462/2001
- XXX,<http://www.britannica.com/bcom/eb/article/printable/4/0,5722,115114,00.html>
- XXX,<http://www.nhm.ac.uk/science/projects/worldmap/diversity/index.html>
- XXX,<http://www.nhm.ac.uk/science/projects/worldmap/diversity/genes.html>
- XXX,<http://www.nhm.ac.uk/science/projects/worldmap/diversity/species.html>
- XXX,<http://www.nhm.ac.uk/science/projects/worldmap/diversity/htaxa.html>
- XXX,<http://www.nhm.ac.uk/science/projects/worldmap/diversity/scale.html>