Romanian Economic and Business Review – Vol. 4, No. 2

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THE MANAGEMENT OF THE NATURAL PROTECTED AREAS AT A NATIONAL LEVEL

Andreea Băltărețu and Marian Busuioc^{*}

Abstract

The habitats from Romania are characterized by a certain composition of flora and fauna, components of biogenesis and there are influenced by different climacteric and natural factors. The climacteric influences of the arid areas from the Easter part to the oceanic ones from the Western part of the country and also the climacteric influences between plain and mountain imposed by the altitude of the relief have determined the appearance of a high number of habitats. Another factor which determines the great variety of habitats in Romania is represented by the chemical compositions of the rocks above (ground, underground). From an administrative point of view most of the natural areas protected belong to the National Forest Authority-ROMSILVA, fact that has negative implications on the biodiversity of these areas. It can be remarked that there is a proper legislative background that covers the complex issues of the protected areas. Also, there are many provisions according to the European requests or which are the result of a series of agreements, treaties and international conventions that Romania joined.

Keywords: protected area, biodiversity, legislation, reservation of the biosphere, national park, natural park

JEL Classification: Q26, Q57, Q58

1. Introduction

Romania is characterized by a high level of biodiversity which manifests both intra-specific and inter-specific, both from the species number and habitats point of view and also the ecosystems which it forms. The natural and semi-natural ecosystems from Romania represent approximately 47% from the total surface of the country. The Romanian territory includes, in a relative equal proportion the three geographic units – plain, hill and mountain, with a great variety of pedo-climatic and hydrologic conditions which separate a number of approximately 52 eco-regions with a variety of terrestrial and aquatic eco-systems – specific to the coast and Black Sea areas, steppe, forest-steppe, hill, mountain, lakes, water courses and their shores, arid or humid areas, including the ones specific to Danube Delta. Our country has a unique natural patrimony, which includes the Carpathians Mountains (65% from the

^{*} Andreea Băltărețu is Associate Professor at the "Dimitrie Cantemir" Christian University in Bucharest. E-mail: <u>baltaretuandreea@yahoo.com</u>

Marian Busuioc is Associate Professor at the Romanian American University in Bucharest. E-mail: mf_busuioc@yahoo.com

Carpathian eco-region), and also one of the most important humid area from Europe, the Danube Delta (second in Europe as size). We must mention that Romania owns 30% from the carnivore species from Europe and also approximately 300 000 ha of untouched forests.

2. The global aspects concerning the national system development of the protected areas

As a result of the studies made by the Program CORINE Biotops, there was identified and characterized a number of 783 types of habitats (13 habitats of coast, 89 humid areas, 196 meadows, 206 forest, 54 slough, 90 rock/sand and 135 agricultural) in 261 analyzed areas from the total territory of the country. There have also been identified 44 areas with important species of birds, with a total surface of 6 557 km², which represents 3% from the surface of the country. The high level of diversity also reflects a variety of flora and fauna species. On the Romanian territory there have been identified 3 700 species of plants, among which 23 are declared in present monuments of nature, 74 are extinct¹, 39 in danger, 171 vulnerable and 1 253 rare. A significant proportion (appreciatively 60 %) is represented by the typical species of alpine and sub-alpine meadows, mountain pastures and hay fields. There are also a number of 600 species of alga and over 700 species of sea plants and coast plants. The endemic species represent 4%. Concerning the fauna, there have been identified 33 792 species, from which 33 085 invertebrate and 707 vertebrate (191 species of fish, 20 species of amphibian, 30 species of reptile, 364 species of birds and 102 species of mammals). Among these, 55 are in danger (11 species of fish, 3 species of amphibian, 4 species of reptile, 18 species of birds and 19 species of mammals), 69 are vulnerable (16 species of fish, 9 species of amphibian, one specie of reptile, 17 species of birds and 26 species of mammals) and 24 are rare (11 species of fish and 13 species of mammals).² As a result of the inventories, there are approximately 5 600 brown bears (60% from the European population of brown bears - Ursus arctos), approximately 3 000 wolves (40% from the European population of wolves - Canis lupus) and 1 500 lynxes (40% from the European population of lynxes - Lynx lynx), these species being a symbol of the wild life and of the natural habitats, which can be used to repopulate other areas from Europe that have registered a regress of these species. The aurochs, a rare animal, protected by law has disappeared from our forests one century ago and now it lives only in reservations.

Concerning the natural protected areas, between the member states of European Union, Romania has the highest bio-geographic diversity (five bio-geographic regions from the 11th European regions, among which: alpine, continental, Pannonia, steppe and the Black Sea's), most of it in a favorable state of

¹ There is no resonable suspision that the last sample of the species is dead

² The First Consultative Document for the National Plan of Development 2007-2013, The Romanian Government, The Ministry of Public Finances, Octomber 2004, page 151

preservation. Also because of the geographic position of Romania, the flora and fauna present Asiatic influences from the North, Mediterranean from the South and European-continental components from the North-West.

The total surface of the protected areas is of 1 858 301 ha and covers approximately 7, 80 % from the surface of the country. Till the end of 2013, this percentage will grow to 15%.

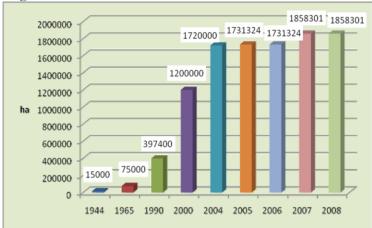


Figure no. 1. The evolution of the surface of the natural protected areas from Romania during 1944-2008

If we analyze the surface of the natural protected areas from our country we can observe that the highest increase was registered in the decade 1990-2000, respective an increase with 802 600 ha in 2000 compared to 1990. However, starting with 2004 and till present, the evolution is not significant because of the low interest of competent authorities in this field and the existing surface of only 138 301 ha in present.

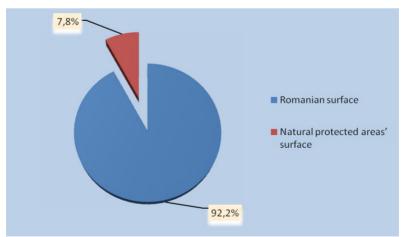


Figure no. 2. The total percentage of the natural protected areas' surface from Romania

Romania has the most diversified and valuable natural patrimony from Europe, however the total surface of the protected areas is still below the medium level of the European Union -7, 8%, compared to 15, 0%. Also, this number is below the value met in other European countries such as Hungary and Poland where the surface of the protected areas represent approximately 23% from the total. There are included here:

◆ The reservation of the biosphere "Danube Delta" – 576 216 ha (31% from the total surface of Romanian protected areas);

 \bigstar 13 national parks – 316 468 ha (17% ha from the total surface of Romanian protected areas);

 \bigstar 14 natural parks – 760 757 ha (41% ha from the total surface of Romanian protected areas);

 \diamond 993 natural reservations – 183 808 ha (10% from the total surface of Romanian protected areas);

 \bigstar 28 special areas of protected birds – 21 052 ha (1% from the total surface of Romanian protected areas).

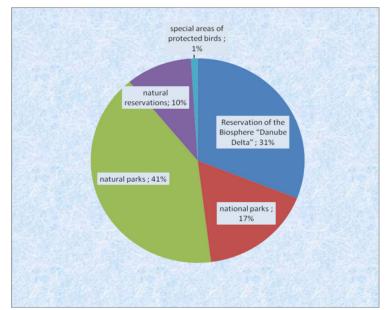


Figure no. 3. The distribution in percentage of the natural protected areas' surface from Romania

According to the occupied surface of the natural protected areas, the natural parks register the highest percentage (41%), followed by the Reservation of the Biosphere Danube Delta (31%), national parks (17%), natural reservations (10%) and special areas of protected birds (1%).

3. Presentation of the main categories of natural protected areas in Romania

In Romania we find the following categories of natural protected areas:

a. The Reservations of the Biosphere: Danube Delta – 576 216 ha (1990)- in the direct administration of the Ministry of Environment; Retezat-38 138 ha (1979) and Pietrosul Mare (Rodnei) - 47304 ha (1979). The last two are considered because of their surface and they are also included in the category of national parks. We also need to mention the fact that for Rodney and Retezat the surface of the national park coincides with the reservation of the biosphere;

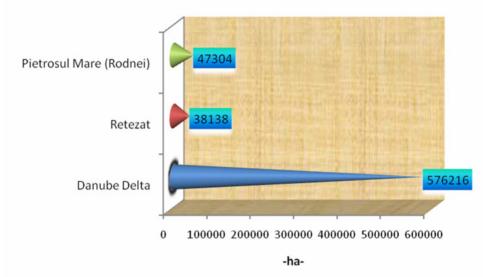


Figure no. 4. The surface of the Reservations of the Biosphere in Romania

If we analyze the territory occupied by the Reservations of the Biosphere from our country we can tell that the Danube Delta has the biggest surface compared to Rodna and Retezat.

b. There are 13 national parks in Romania with a surface of 318 116 ha. The national parks correspond to the category of management II IUCN - "National park: protected area, mainly administrated for the protection of the ecosystems and for the recreation.

The national parks from Romania

				Table no	. 1		
No. crt.	National Park's Name	District	Surface		Administration	Proclamation Year	% from the total surface of the country
			(ha)	% from the total surface of the national parks			
1.	Domogled- Valea Cernei	Caraş- Severin, Mehedinți, Gorj	61211	19,34	Romsilva	1990	0,26
2.	Cheile Nerei- Beușnița	Caraş- Severin	36758	11,62	Romsilva	1990	0,15
3.	Semenic- Cheile Caraşului	Caraş- Severin	36364	11,49	Romsilva	1990	0,15
4.	Ceahlău	Neamț	7742	2,45	The District Council of Neamț	1955	0,03
5.	Cozia	Vâlcea	17100	5,40	Romsilva	1981	0,07
6.	Călimani	Suceava, Bistrița- Năsăud, Mureş, Harghita	24041	7,60	Romsilva	1990	0,10
7.	Piatra- Craiului	Braşov, Argeş	14773	4,67	Romsilva	1990	0,06
8.	Cheile Bicazului- Hăşmaş	Harghita, Neamț	6575	2,08	Romsilva	1990	0,03
9.	Rodna	Maramureş- Bistrița- Năsăud	47304	14,95	Romsilva	1990	0,20
10.	Retezat	Hunedoara, Gorj, Caraş- Severin	38138	12,05	Romsilva	1935	0,16
11.	Măcin Mountains	Tulcea	11149	3,52	Romsilva	2000	0,05
12.	Buila- Vânturarița	Vâlcea	4186	1,32	Romsilva	2004	0,02
13.	Defile of Jiu	Hunedoara, Gorj	11127	3,51	Romsilva	2005	0,05
	TOTAL		316 468	100			

Source: briefing according the Management Plans and the official web sites of the national parks from Romania

If we analyze the table from above we can observe that from the 13th national parks, Domogled-Cerna Valley has the biggest percentage (19,34%) from the total occupied surface, followed by Rodney Mountains (14,95%) and Retezat (12,05%). The lowest percentage belongs to the National Park Buila-Vânturarița (1,32%). Romsilva administrated 12 from the 13th national parks.

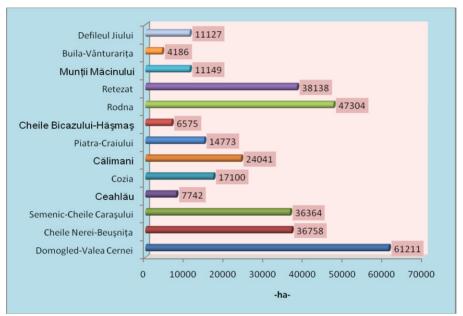


Figure no. 5. The surface occupied by the national parks of Romania

The national parks Domogled- Cerna Valley and Buila-Vânturarița are at different poles according to their size, respective 61211ha and 4186 ha.

c. There are 14 natural parks and their surface is of 760 757 ha. They correspond to the V IUCN category – "Protected landscape: protected area, mainly administrated to preserve the landscape and the recreation".

The natural parks from Romania

Table no. 2											
No. crt.	National park's name	District	Surface		Administration	Proclamation year	% from the total surface of the country				
			(ha)	% from the total surface of the natural parks							
1.	Bucegi	Prahova, Brașov, Dâmbovița	35700	4,69	Romsilva	1990	0,15				
2.	Porțile de Fier	Caraș- Severin, Mehedinți	115665	15,21	Romsilva	2000	0,49				
3.	Apuseni	Cluj, Bihor, Alba	76064	10,00	Romsilva	1990	0,32				
4.	Grădiștea Muncelului- Cioclovina	Hunedoara	38184	5,02	Romsilva	2000	0,16				
5.	Balta Mică a Brăilei	Brăila, Constanța, Ialomița	24555	3,24	Romsilva	1979	0,10				
6.	Lunca Mureșului	Arad, Timiş	17455	2,29	Romsilva	2004	0,07				
7.	Lunca Joasă a Prutului Inferior	Galați	8247	1,08	The Environment Protection Agency of Galati	2004	0,03				
8.	Comana	Giurgiu	24963	3,28	Romsilva	2004	0,10				
9.	The Maramureş Mountains	Maramureş	133354	17,53	Romsilva	2004	0,56				
10.	Putna- Vrancea	Vrancea, Bacău	38204	5,02	Romsilva	2004	0,16				
11.	Vânători- Neamț	Neamț, Suceava	30818	4,05	Romsilva	2003	0,13				
12.	The Superior Mureş Defile	Mureş	9156	1,20	Romsilva	2007	0,04				
13.	The Geopark of Dinosaurs from Haţeg Land	Hunedoara	102392	13,46	The University of Bucharest	2004	0,43				
14.	The geopark Mehedinți Plateau	Mehedinți, Gorj	106000	13,93	The District Council of Mehedinți	2004	0,44				
	TOTAL		760757	100	(D) 1.1						

Table no. 2

Source: briefing according the Management Plans and the official web sites of the natural parks from Romania

From the 14th natural parks declared on the Romanian territory, the Maramureş Mountains has the biggest percentage (17,53%) from the occupied surface, followed by Porțile de Fier (15,21%) and the Geo-park Mehedinți Plateau(13,93%). 11 natural parks from 14th are administrated by Romsilva.



Figure no. 6. The surface occupied by the natural parks from Romania

It can be considered that the facts presented above confirm the appreciations concerning the existence of a valuable potential and some phases in the process of creating an integrate and unitary system of the protected areas.

At the same time, the analyzes made in detail have confirmed that, in many situations, there is a superficiality in the administration of these areas meaning that they are either not approved and therefore the management plans are not operational or the administration of the respective areas doesn't have the capacity (human, organizational, financial etc.) of implementing the management plans, their control and permanent adaptation.

4. The legal and institutional environment in the natural protected areas field

As a result of Romania's participation to the Summit from Rio in 1992, with a high level delegation, the issue of the environment in our country reached new dimensions and important steps were made in order to align the global effort to solve the important issues of mankind. In order to harmonize the Romanian legislation with the international one from the field, a series of international and regional conventions has been made according to the documents adopted at Rio. In this context, Agenda 21 with the Action Plan for the environment protection represented a constant prooccupation. In the last 19 years, Romania has joined most of the international directives and agreements from the environment protection field and all the directives from the nature preservation field, their stipulations being applied as internal norms according to the constitutional provisions.

Our country has tried in a short period to recover the lost time and to align almost all the international agreements and conventions concerning any field of environment protection and therefore we remark a political will of alignment to the specific European legislation. The number of the normative acts approved is high compared to the time allocated, fact that shows that the Romanian authorities wish to respect the international legislation in this field.

However, there is a series of deficiencies in applying the normative acts mentioned before, a violation of these acts and also their wrong interpretation. More than that, there aren't sums allocated for the protection of the environment in any budget of incomes and expenses, at any level. We observe from the presentation above that there is a series of national plans and strategies to protect the environment and its different components, with a series of objectives and measures whose effects are still waited.

From an institutional point of view, the activity fields are varied and there are many organizations based on caves , mountain tourism, ecotourism, ONG s that activate for ecology, animal protection and others. It is proven in this way that there is in our country a strong interest for the environment and protected areas, however there is a lack of coordination and cooperation between the parts involved.

Other preoccupations in the field of natural protected areas belong to various non-governmental organizations who has the purpose to protect the environment and some tourism clubs and which have numerous initiatives of organizing and informing the population concerning the preservation of natural resources. Unfortunately, these actions need volunteers and this "volunteer" institution is unknown and not liked by Romanian people.

We can appreciate in the end that in our country there are preoccupations concerning the foundation, administration, preservation and protection of the reservations, national and natural parks, however insufficient or one step behind the evolution of the degradation processes, trespassing the law being "a quality" of Romanian people.

The efficiency of applying and creating a legal frame is determined by the existence of a proper institutional system. And from this point of view we can consider that there are created good conditions to achieve the strategic objectives concerning the development of protected areas.

5. Conclusions

One of the competitive advantages of our country, compared to the established destinations is the protection of the of the natural environment, untouched by human, Therefore, inside the natural reservations there are many species of plants and animals declared endemic or monuments of nature. Also, Romania is still keeping in the untouched natural environment specimen of flora and fauna which are extinct in other countries or cannot be seen just in captivity. Because of the poor valuation of these resources till present, there have been made the premises of future development of tourism in the protected areas, fact which impose our country to

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become an important destination for this form of vacation.

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