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ANALYSIS OF GENERAL AND SPECIFIC CHARACTERISTICS OF ROMANIAN NATIONAL AND NATURAL PARKS

ANALIZA CARACTERISTICILOR GENERALE ŞI SPECIFICE ALE PARCURILOR NAŢIONALE ŞI NATURALE DIN ROMÂNIA

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Abstract: *Efficient management planning of protected areas depends in a great manner on the quality of data based on which analyses are conducted. This study examines the characteristics of national and natural parks in Romania from a perspective that helps the researcher to conduct further analysis on developing efficient management plans for the areas. A comparative situation is analyzed among the 27 Romanian parks. Results emphasize that some features should be in the attention of park administration in organizing management activities. This is, for instance, the case of information points and visitor centers, which are missing in nine parks.*

Key words: *national and natural parks, Romania, management plan*

INTRODUCTION

Decision processes regarding the management of national and natural parks greatly depend on information about the factors that influence economic, social, cultural and environmental impacts. Management plans of such areas should be developed following the recommendations of the International Union for Conservation and Natural Resources, by including the economic values in the decision processes, stage that leads to a sustainable development of the areas (IUCN, 2003)

In the case of Romania, this is an ongoing and complex process, to be found in an early stage. A conceptual management framework was especially developed for using Romanian national and natural parks' economic values into the process of developing and/or improving the management plans (Dumitras, 2010). The efficiency of this model depends on the manner of completing all steps, starting from the identification of the

research area and data collection and ending with the evaluation of the impact of using the economic values in the management plans.

This paper intends to accomplish the first steps of the conceptual management framework. Knowing and understanding the characteristics of the parks represent probably the most important step of the conceptual framework since the quality of results depends on the quality of the information based on which the estimation of the economic values will be performed. The link between the number of visits to the parks and the characteristics of the parks has been proven by many studies (McCormack *et al*., 2010, Neuvonen *et al*., 2010). The demand for recreation in such areas depends not only on the socio-demographic characteristics of potential tourists, but on the characteristics of the areas to be visited as well.

MATERIAL AND METHOD

Data were collected after a careful analysis of the parks' management plans and information given by the parks administrations. For further analysis of the demand for tourism in such areas, it is important to gather and organize data in a consistent way. Thus, data were grouped to separately reveal the general and specific characteristics of the parks. The same attributes were selected among all parks to be able to conduct a comparison analysis.

General characteristics were considered attributes that describe the park, such as area, number of natural reservations within the park, flora and fauna. Specific characteristics were considered attributes that refer to the tourism and recreation part of the parks, such as visiting centers and information points, hiking, thematic and ski trails, caves, entrance fee and number of visitors. Table 1 and Table 2 present a comparative situation of the 27 Romanian national and natural parks. The parks are ordered by the year of their designation as national or natural park.

RESULTS AND DISCUSSIONS

The comparative situation indicates that all parks are rich in biodiversity, have an impressive number of plant and animal species, among which many are endangered or protected by law. The altitude of the majority of parks is higher than 1600 m, but there are some with very low

altitude, such as Balta Mica a Brailei, Lunca Joasa a Prutului Inferior, Lunca Mureşului and Comana.

Table 1

General and specific characteristics of Romanian national parks

Characte-ristics/ park	General characteristics						Specific characteristics							
	Area (ha)	Natural reserva-tions (IV IUCN)	Max.altitude (m)	Plants (no.)	Superior plants in the red list	Animals (no.)	Visitor centers	Info. points	No. visitors*	Hiking trails	Thematic trails	Caves	Ski trails	Access fee
Călimani[a]	24041	3	2102	813	NR	568	0	0	1000	6	2	-	Yes	No
Ceahlău[a]	8396	2	1907	>1500	69	1286	1	2	30000	8	2	-	-	Yes
Cheile Bicaz-Hăşmaş[a]	6575	7	1792	1147	NR	NR	0	1	30000	18	1	-	Yes	NR
Cheile Nerei-Beuşniţa[a]	37100	6	1159	1086	NR	728	0	0	7000	10	-	Yes	-	NR
Cozia[a]	17100	NR	1668	1604	NR	>200	0	1	100000	9	-	Yes	Yes	NR
Domogled-Valea Cernei[a]	60100	11	2255	1110	NR	>2000	1	1	12000	35	-	Yes	-	NR
Munţii Măcinului[a]	11321	NR	465	>1770	72	1682	0	0	3000	6	1	Yes	-	Yes
Piatra Craiului[a]	14800	4	2238	1170	181	>600	1	0	80000	30	1	65	Yes	NR
Retezat[a]	38047	15	2453	1190	130	NR	2	2	12000	48	3	Yes	Yes	Yes
Rodna[a]	46399	9	2303	1123	255	1977	0	4	10000	18	10	79	Yes	No
Semenic-Cheile Caraşului[a]	36665	NR	1447	1277	30	672	0	1	13000	9	-	11	Yes	Yes
Buila – Vânturăriţa[b]	4186	NR	1885	NR	NR	NR	0	0	1000	5	-	Yes	-	No
Defileul Jiului[c]	11127	33	1621	701	43	441	0	0	1000	3	-	Yes	-	No

Note: [a] designated by Law 5/2000; [b] designated by GD 2151/2004; [c] designated by GD 1581/2005; [d] designated by GD 1134/2007; NR = data not reported; *Estimated according to MPDTN 2007-2026 (data from Romsilva and National Tourism Agency from Romania)
Source: Data collected by analyzing parks' management plans and information given by the parks administrations

Table 2

General and specific characteristics of Romanian natural parks

Characte-ristics/ park	General characteristics						Specific characteristics							
	Area (ha)	Natural reserva-tions (IV IUCN)	Max.altitude (m)	Plants (no.)	Superior plants in the red list	Animals (no.)	Visitor centers	Info. points	No. visitors*	Hiking trails	Thematic trails	Caves	Ski trails	Access fee
Balta Mică Brăila [a]	17529	1	30	221	99	623	0	0	1000	15	-	-	-	Yes
Bucegi [a]	32663	14	2505	>3500	120	>1900	0	3	1000000	40	-	34	14	No
Grădiştea Muncelului Cioclovina [a]	10000	6	1730	543	5	166	0	0	6000	5	-	Yes	Yes	No
Muntii Apuseni [a]	75784	NR	1785	1552	NR	1282	5	4	300000	36	1	37	8	Yes
Porţile de Fier [a]	115656	18	968	3692	36	5205	4	4	10000	16	-	8	-	Yes
Vânători Neamţ [a]	30818	4	1231	1698	50	293	1	1	200000	10	-	-	-	NR
Comana [b]	24963	3	95	1300	NR	247	0	1	5000	10	-	-	-	Yes
Geoparc Dinozaur Ţara Haţeg [b]	102392	NR	2500	NR	>30	>300	1	0	8000	1	-	-	-	NR
Geoparc Platoul Mehedinţi [b]	106000	17	1010	NR	NR	NR	0	0	5000	13	-	Yes	-	NR
Lunca Joasă a Prutului Inferior [b]	8247	4	209	834	NR	239	0	1	300	0	-	-	-	NR
Lunca Mureşului [b]	17166	4	132	>1000	NR	>250	1	2	2500	6	-	-	-	NR
Munţii Maramureş [b]	148850	3	1850	NR	NR	>240	1	1	6000	7	-	-	-	NR
Putna-Vrancea [b]	38204	NR	NR	1590	650	294	0	0	24000	7	-	-	Yes	NR
Defile Mureş Superior [d]	9156	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

Note: [a] designated by Law 5/2000; [b] designated by GD 2151/2004; [c] designated by GD 1581/2005; [d] designated by GD 1134/2007; NR = data not reported; *Estimated according to MPDTN 2007-2026 (data from Romsilva and National Tourism Agency from Romania)
Source: Data collected by analyzing parks' management plans and information given by the parks administrations

Visitor centers and information points are to be found only in some parks. There is no information point or visitor center in 5 national parks and 4 natural parks. Such reality definitely raises the simple question 'Why?', especially when education is management objective for both protected areas categories (IUCN, 2004). The lack of information about the opportunities to recreate in the parks represents an important issue that requires an urgent solution. The recreational use should be done under restricted rules that assure a sustainable use of the natural resources. However, it is not enough to create rules; these should be offered to tourists as well, fact that may be done in an organized manner through information points and visitor centers.

The number of tourists visiting the parks is not reported by any governmental organization. Data given by the National Institute of Statistics from Romania do not refer to the national and natural parks. Tourists are grouped based on the visited area (sea, mountain, balneal, Danube Delta, other areas). This estimation does not help park administrations to organize management activities for tourism in the national and natural parks. The National Master Plan for Tourism Development 2007-2026 estimates the number of tourists, but omits to reveal the method of estimation. However, some park administrations have monitored the flow of tourists, as it is the case of Rodna Mountains and Bucegi.

Hiking is probably the most common recreation activity in all parks. Eight parks offer the possibility to hike on thematic trails and/or to participate on educational hikes, which contribute to a sustainable tourism. Visiting caves is another popular activity. Some caves are open to the public (entrance fee 8-10 RON), other being open only for scientific use.

The access in parks is free of charge in most of the parks. Some parks require an access fee (4-10 RON) or a camping fee (8-10 RON/ person or tent). These fees have been arbitrary established and indicate only part of their true value. Fees should be established based on careful analysis of the costs of preservation of natural resources on one side and on the value people are setting for the use of such areas, process that may be accomplished using the methodology proposed by Champ *et al.* (2003).

Recreational activities allowed to be performed inside the parks are established by each park administrations, under restrictive uses specified in the park's regulation. The analyses indicate that parks offer various recreation opportunities, but unfortunately some are not offered to the public.

CONCLUSIONS

The comparative analysis of the parks' characteristics suggests that parks offer recreation opportunities that need continuous management actions. This implies a well-organized process developed based on real and solid information. In this sense, the analyses revealed valuable information, necessary to all actors involved in this process. This paper provides a useful tool to the next steps of the conceptual management framework intended to be implemented on the national and natural parks.

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