

MANAGEMENT PLANNING BASED ON VISITORS' PROFILE: THE CASE OF ROMANIAN NATIONAL AND NATURAL PARKS

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Abstract

Practice has proved that efficient management actions occur only where decisions are taken based on relevant and reliable information about the respective protected area and the potential user groups. The last refers to the visitors of the protected areas, which express an increased interest in spending the leisure time in such areas and practicing different recreation activities. Thus, the profile of tourists is one of the main key elements in the decision processes regarding the management of tourism in the national and natural parks. This information is valuable for at least two reasons. First, this type of information should be considered when developing recreation facilities or maintaining attractive services for tourists because it may respond to their needs. Second, it is important for imposing use restrictions where necessary and if uncontrolled behavior is noticed. Data were collected during the summer of 2011 using an in-person questionnaire. Tourists were approached while they were recreating in the Romanian national and natural parks. The descriptive statistics analysis was conducted to create the profile of tourists. The trip characteristics were analyzed along with the socio-demographic characteristics, thus offering a detailed understanding of tourists' behavior during the recreation trips. Overall, results indicate that some characteristics differ among the groups of visitors. It remains the park managers' task to find solutions on how to adapt the recreation facilities and services to tourists' needs, definitely by imposing some restrictions that assure the preservation of the natural resources.

Key words: profile of tourists, management, recreation, national park, natural park

In the last decades, a special attention was given to the management and planning of tourism and recreation in national and natural parks due to the increased demand noticed worldwide. Under this condition, the sustainable use of natural resources becomes a challenging and even a difficult task for managers (IUCN, 1998, Eagles *et al.* 2004).

Eagles *et al.* (2004) points the fact that negative impacts occur regardless the level of recreational use. Leung *et al.* (2000) describe them as consequences of recreation that cannot be always avoided. Even so, the managers and other stakeholders should be aware of the potential impacts for at least the two reasons mentioned by Leung *et al.* (2000), the resource protection and the recreation provisions. Some of the impacts can be controlled through a well-planned management action. At the park administration level, any decisions regarding the management of tourism and recreation should be based on current, real and definitely accurate data.

The study focuses on two protected area IUCN (International Union for Conservation of Nature) categories: II - national park (corresponds to the national park in case of Romania) and V -

protected landscape/seascape (corresponds to the natural park in case of Romania). One of the main objectives established by IUCN for these two categories are „to support compatible economic development, mostly through recreation and tourism, that can contribute to local and national economies and in particular to local communities” (IInd IUCN category) and „to provide opportunities for enjoyment, well-being and socio-economic activity through recreation and tourism” (Vth IUCN category) (Dudley, 2008, pp.16 and pp.20). Thus, it is recognized the potential contribution of tourism to the society in general.

The main aim of this paper is to analyze the tourist profile visiting the Romanian national and natural parks. In addition, the study examines the potential user groups, which are defined here as visitors interesting in spending the leisure time in national or natural parks and practicing different recreation activities, among which one is the main activity.

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considered when developing recreation facilities or maintaining attractive services for tourists. Second, it is important for imposing use restrictions where necessary and if uncontrolled behavior is noticed.

MATERIAL AND METHOD

The research area is represented by the following Romanian national and natural parks: Bucegi Natural Park, Călimani National Park, Ceahlău National Park, Grădiștea Muncelului-Cioclovina Natural Park, Piatra Craiului National Park, Putna-Vrancea Natural Park and Rodna Mountains National Park.

An in-person survey was implemented during the summer of 2011. Respondents were approached during their trip, at the entrance of the parks or inside the parks and asked to fill a questionnaire (Dumitras *et al.*, 2011).

A total of 730 tourists took part in the survey, but only 709 questionnaires were available due to a high percentage of non-responses. Descriptive analyses were used to create the tourist profile and to identify the main user groups. The Pearson correlation coefficient was calculated between the socio-economic characteristics and several factors that may affect the trip. The Pearson Chi-Square test and the paired t-test were employed to test the significant differences between the main user groups (Greene, 2003). Therefore, a random

This process helps managers to understand the tourists' preferences and needs and to offer recreation facilities and services that will not result in harming the nature.

sample of 100 respondents was drawn from each main user group.

RESULTS AND DISCUSSIONS

The Romanian national and natural parks offer a wide variety of recreation opportunities for tourists; however, some of the activities can be performed only in some of the parks, as it is the case of climbing, cycling, fishing, horse riding, visiting caves and medical treatment (Table 1). Tourists were asked to state all recreation activities done during their trip and to identify the main activity. The most preferred recreation activities seem to be hiking, resting and relaxing, observing the nature and taking pictures. However, for the majority of tourists, the last two activities are considered as being additional to the main activities. Two main user groups were identified: tourists choosing hiking as main activity (53.88%) and those choosing rest and relaxation (27.36%). Hiking prevails among all recreation activities because there are many famous hiking trails, the majority being newly remarked.

Table 1

Recreational activities undertaken by respondents

No.	Recreational activity	Parks	All parks (%)	Main activity (%)
1	Hiking	BC, CA, CE, GR, PC, PV, RD	86.32	53.88
2	Climbing	BC, CA, GR, PC	2.82	-
3	Fishing	CA, GR	1.69	-
4	Cycling	BC, CA, GR, PC, RD	5.92	-
5	Horse riding	CA, GR, PC	3.67	-
6	Camping	BC, CA, CE, GR, PC, RD	8.89	-
7	Rest and relaxation	BC, CA, CE, GR, PC, PV, RD	67.14	27.36
8	Visiting caves	BC, GR, PC	4.23	-
9	Medical treatment	CA, GR, RD	4.65	-
10	Nature observation	BC, CA, CE, GR, PC, PV, RD	59.66	-
11	Picking berries/mushrooms	BC, CA, CE, GR, PC, PV, RD	14.53	-
12	Photographing	BC, CA, CE, GR, PC, PV, RD	58.25	-
13	Scientific activities	BC, CA, CE, GR, PC	5.78	-
14	Other activities, i.e. 'Let's do it Romania', seminary, training	BC, CA, CE, GR, PC, PV	11.85	-

Note: BC = PN Bucegi; CA = PN Călimani; CE = PN Ceahlău; GR = PN Grădiștea Muncelului-Cioclovina; PC = PN Piatra Craiului; PV = PN Putna-Vrancea; RD = PN Rodna Mountains

Table 2 and Table 3 provide an analysis of the socio-economic characteristics of the tourists and the characteristics of their trip to the parks, for all and separately for each main user group.

The proportion of male respondents is 48.38% and the average age of respondents is 34.34 years. There is slightly a higher percentage registered for tourist older than 50 years opting for resting and relaxing. About 40% of tourists are younger than 29 years. It is important to notice that the parks were visited by people of different ages

and that the park offers recreation opportunities regardless the age of visitors. A high percentage of tourists have at least a college/ university degree. As regard to the monthly income per household, a larger percentage was found in the last category of more than 4000 RON per household, especially among those who chose rest and relaxation. However, the majority of respondents indicated more than 1001 RON per household; a lower income was reported by a small group of people. A high percentage of respondents have visited for the

first time the park where they were asked to participate to the survey (63.61%). This implies that there is a continuous request to explore new places, and that there is a relatively high percentage of people (36.39%) that chose to revisit the park, half of them reporting that they have visited it more than once in the last four years.

The average trip length is 2.80 days, thus, the most preferred trips are those of maximum 3 days. Guesthouses seem to be the most preferred type of accommodation. Camping is also an option chosen especially by tourists visiting Ceahlau,

Piatra Craiului and Rodna, but, only part of them was camping in authorized places. Mountain refuges were chosen by those visiting Ceahlau and Piatra Craiului, where tourists took longer and high difficulty trails. Bucegi and Rodna appear to be proper also for one-day visits, as it was found by the respondents. The size of the group differs among tourists; however more than 60% prefers smaller groups. As regard to the distance traveled from home to the park, there are tourists who chose more remote places than other.

Table 2

Socio-economic characteristics of the respondents

Tourists' characteristics		All parks (%) n=709	Hiking (%) n=382	Rest and relaxation (%) n=194
Gender	Male	48.38	49.21	40.72
	Female	51.62	50.79	59.28
Age	18-29 years old	40.20	40.05	36.08
	30-39 years old	25.53	25.66	21.14
	40-49 years old	22.14	24.08	23.71
	>50 years old	12.13	10.21	19.07
Education	Less than 9 grades	0.85	0.00	3.09
	High school (12 years)	25.53	26.70	20.10
	College/University (3-6 years)	48.24	49.22	48.97
	Graduate school (Master, PhD)	24.82	24.08	26.80
	Non-response	0.56	0.00	1.03
Average monthly income per household	< 650 RON	3.10	3.14	5.15
	650-1000 RON	5.78	6.55	6.19
	1001-2000 RON	20.45	22.77	15.46
	2001-3000 RON	22.57	22.51	21.14
	3001-4000 RON	17.63	19.90	15.98
	>4000 RON	30.47	25.13	36.08

Note: September 2011 Exchange rate 1 EURO=4.2309 RON.

Table 3

Characteristics of the current recreation trips

Trip characteristics		All parks (%) n=709	Hiking (%) n=382	Rest and relaxation (%) n=194
First visit	Yes	63.61	57.85	70.10
Length of the trip	1-3 days	76.02	84.29	65.46
	More than 3 days	23.98	15.71	34.54
Accommodation types	Guesthouse	63.75	55.24	75.77
	Friend's cabin	5.92	9.42	2.06
	Tent in camping place	7.19	10.73	1.03
	Tent in other place	4.23	7.32	1.03
	Villagers' houses	1.97	0.52	5.15
	Mountain refuge	3.39	3.14	1.55
	No overnight staying	11.00	13.61	5.67
	Other (monastery, cottage)	5.64	4.19	9.79
Group size	1-5 people	64.92	68.85	66.49
	> 5 people	35.08	31.15	33.51
Distance traveled	< 150 km	24.82	28.27	14.43
	150-300 km	39.07	42.41	38.15
	>300 km	36.11	29.32	47.42

The proportion of male respondents (Pearson Chi-Square test, $\chi^2=0.905$, df 1, $p>0.05$) and the percentages of respondents within the classes of income (Pearson Chi-Square test, $\chi^2=21.093$, df 25, $p>0.05$), as well as the percentages of respondents within the classes of education level (Pearson Chi-Square test, $\chi^2=8.098$, df 6, $p>0.05$) do not differ between the two

samples of user groups (n=100). Instead, the average age differs between the tourists who chose hike as main activity and tourists who chose rest and relaxation ($t=-2.526$, $p<0.05$). The percentage of respondents visiting for the first time the park differs among the groups ($t=2.513$, $p<0.05$), being higher in the case of those visiting mainly for relaxing. Respondents visiting mainly for hiking

prefer to take trips up to 3 days ($t=-4.912$, $p<0.05$) more than those visiting mainly for relaxing.

Another question related several potential reasons to select the visited park, offering a scale

of importance from 1 (not important) to 5 (very important) (Table 4). There are different opinions about the distance from home to the park. It may be said that visitors like to visit new natural areas.

Table 4

Reasons to choose the trip

Reason	Not important	Less important	Somewhat important	Important	Very important
Close to home	26.80	19.41	23.11	22.14	8.54
Familiar with the park	48.15	19.21	10.88	19.21	2.55
Possibility to rent sport equipment	45.88	12.94	18.43	16.87	5.88
Silence at campsites	12.73	3.61	15.63	42.31	25.72
Cleanliness of campsites	7.68	0.99	9.90	31.68	49.75
Easy access to campsites	6.37	10.55	21.81	38.97	22.30
Lack of crowding	7.39	10.06	19.72	29.98	32.85
Opportunity to see wildlife	3.24	0.36	5.59	41.08	49.73
Cultural/historical features	4.29	2.04	15.92	44.08	33.67

Note: not all respondents have answered to this question

The silence and the cleanliness at campsites are very important to the majority of respondents, as well as the opportunity to see wildlife and to visit cultural and historical features. There are different opinions about the lack of crowding and easy access to the campsites. In the case of both user groups, there is a positive moderate but significant correlation between the income and the cleanliness at campsites ($r_{hike}=0.2653$, $r_{rest}=0.2429$, $p<0.05$), easy access to campsites ($r_{hike}=0.2526$, $r_{rest}=0.2595$, $p<0.05$), lack of crowding at campsites ($r_{hike}=0.2920$, $r_{rest}=0.3531$, $p<0.05$) and the opportunity to see wildlife ($r_{hike}=0.2512$, $r_{rest}=0.3180$, $p<0.05$). Thus, tourists with higher income better appreciate these factors that may affect their trip. In case of tourists visiting mainly for relaxing, more educated people ($r_{rest}=0.2376$, $p<0.05$) and with higher income ($r_{rest}=0.3701$, $p<0.05$) prefer to be familiar with the park and to have the possibility to rent sport equipment. The possibility to visit cultural and historical features seems to be more important for older tourists ($r_{rest}=0.2842$, $p<0.05$) and those with higher income ($r_{rest}=0.3290$, $p<0.05$).

CONCLUSIONS

This study provides the profile of tourists visiting the Romanian national and natural parks based on the socio-economic characteristics and their visit preferences. The analyses indicate that there are two major user groups that require special attention in the management planning process: tourists who chose hiking as main recreation activity and those who chose rest and relaxation. The last recreation activity seems to be a preferred one, even if a higher percentage of respondents (53.88%) indicated hiking as being the main recreation activity. Age variable is statistically different for the two user groups, as well as the

preferences for the length of the trips. Moreover, the percentage of people visiting for the first time the park is statistically higher in case of tourists visiting for relaxation. Preferences for accommodation differ among the tourists; however, the analysis indicates that tourists go camping in unassigned places, although the park administrations do inform people where the legal places are. Furthermore, the facilities and services provided by the park administration should be adapted to the preferences of the main user groups, definitely by imposing some restrictions that assure the preservation of the natural resources.

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