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**Article**

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## DEMAND FOR VACATIONS /TRAVEL IN PROTECTED AREAS – DIMENSION OF TOURISTS' ECOLOGICAL BEHAVIOR

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### Abstract

Tourism, in itself, is one of the main users of the environment and, implicitly, an important contributor to its deterioration. Intensification of tourist travel will naturally generate an increase of the negative environmental impacts and, in the long term, a decline in tourism development opportunities.

In this context, more and more emphasis is placed on finding and promoting low environmental impact forms of travel, including eco-tourism, rural tourism, tourism in protected areas, cultural tourism, adventure tourism, etc., at the same time on encouraging, inciting potential tourists to consume these categories of products (holidays).

Globally conducted studies have revealed a good understanding of and an increasing receptivity to sustainable forms of travel among tourists. Nevertheless, the place they hold in the structure of tourist circulation is still modest, mainly due to the insufficient supply, in its turn determined by ignorance of the demand and by the additional requirements the consumer of such holidays has to meet, especially in regard to behavior.

In line with these developments and trends, this study aimed to identify the behavior of tourists in protected areas and its determinants, to encourage a responsible attitude towards the environment and its quality. For this purpose, desk and field researches were made to allow the characterization of holiday request in protected areas and to formulate proposals regarding tourists' education.

**Keywords:** tourist demand, protected areas, ecological behavior, ecotourism, sustainable tourism development, eco(logical) tourism products

**JEL Classification:** Q26, Q27, Q56

### Introduction

Sustainable development is undoubtedly one of the major challenges of contemporary evolution. To achieve it, one will need to identify the causes of environmental degradation and to assess its size, as well as find realistic, viable solutions to counteract it and reduce its negative impacts on economic and social life.

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Tourism, it is well known, is an important user of natural resources and therefore has a significant contribution to the deterioration of the natural and human environment, and an intensification of travel will enhance its negative impacts (Vanhove, 2005). At the same time, tourism also has the necessary means to counteract such effects, firstly, in point of tourism development of areas within the limits of their optimum bearing/support capacity and the practice of area-specific management methods (Smaranda, 2008); also, the promotion of its sustainable forms, including: ecotourism, rural tourism, agri-tourism, adventure tourism, cultural tourism and, not least, tourism in protected areas, and encouraging tourists to ensure the mitigation of their negative consequences (Hornoiu, 2009).

The conducted studies have shown that the literature circumscribed to sustainable tourism development turned mainly to the identification, analysis and promotion of sustainable forms of travel.

In these circumstances, the present article, by focusing on behavior problems of tourists in protected areas - defining elements, visitor typology, demand dimensions tourists responsiveness to the demands of travel in protected areas etc. - covers an area little discussed in the literature. Also, by formulating recommendations for informing and educating tourists, the material has an important practical contribution.

### **1. Tourist ecological behavior as an expression of awareness of the need and opportunity to protect the environment**

Concerns for nature conservation, materialized in both the creation of ecotourism products and in responsabilizing the tourists, have a rich history that appears to have started at the time the first natural parks were created (1870 and, in our country, 1900, with the proposal to designate Bucegi Mountains National Park made by Mihai Haret). Over time, they have been reflected in a broad range of actions covering a diversity of issues: development of specific regulations, establishment of protected areas, of the management bodies thereof, design of complex management systems, etc. (Smaranda, 2008).

Nowadays, we can talk about a strengthening of such concerns, based, on the one hand, on the worsening of environmental problems and, on the other hand, on the understanding, by the responsible factors, of the importance of maintaining the quality of the environment for the future of human society.

As for the tourists themselves, a rising interest in nature holidays has been noted, due to the benefits they provide: a clean, quiet, less crowded environment, the possibility to practice different sports or exploration, learning, knowledge enhancement activities. At the same time, one needs to note that modern tourism is raising more and more awareness of the need to protect the environment, by adopting a responsible attitude.

In this context, deciding factors in buying a holiday include, besides the traditional criteria of price, service quality, facilities, etc., an increasing concern for the quality of the environment (Swarbrooke, 2009).

Starting from the defining elements of tourist behavior, in the case of ecological holidays, we need to consider not only the determinants of the buying decision but also the effects/results of consumption. Therefore, the tourist profile, personal characteristics,

including: age, occupation, level of income, living conditions, social category, level of education, residential environment, attitude, system of values, etc., will be reflected in the motivation to travel. At the same time, the features of the destination, including diversity and quality of attractions, distance, price, facilities, quality of service, will define a certain image thereof. Harmonization of the two categories of features, the motivation and the destination image with the expectations of the tourist will result in the latter's option for a certain product, i.e. destination, followed by purchase and consumption – the actual spending of a holiday (figure no. 1).

From the perspective of modern tourism, apart from these defining elements of consumer behavior, an increasing role is played by the results, the experience gained at the visited location (Bowen and Clarke, 2009). This experience is appreciated on three levels:

- personal satisfaction, the extent to which the tourist's expectations were met
- the needs of the host communities understood in their complexity, i.e. growth and economic prosperity, preservation of customs and traditions
- the quality of the environment.

This points to an increasing responsibility of the tourists in parallel with that of suppliers of holidays and of host communities, who have to monitor not only the economic outcome but also the preservation of an unaltered natural environment, traditions and customs, and cultural values.

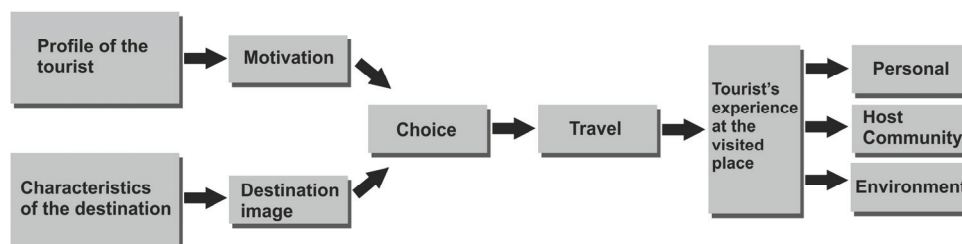


Figure no. 1: Conceptual scheme of the modern tourist's behavior

Source: adaptation after Pearce, 2005

With these in mind, at both the EU and the national level, policies have been developed aiming to harmonize the objectives of development with those of environmental protection. Of note among them are those focused on monitoring the frequency of tourist circulation and the promotion of sustainable forms, visitor information, tourist awareness raising and sensitization for environmental problems.

## 2. Demand for holidays in protected areas

Tourism has always been, even at times of global crisis, one of the fastest growing sectors in the world. In this regard, WTO statistics noted a 6.6% increase in international tourist arrivals for 2010 compared to 2009, a trend that continued in the first 7 months of 2011 (UNWTO, 2011).

An ever increasing number of people are working fewer hours and have shorter, but planned, holidays, which has led to an increase of the demand for specialist forms of tourism, such as walks in nature and wildlife watching. Such alternative forms of tourism are growing three times faster than classic forms (Comisia Europeană, 2009).

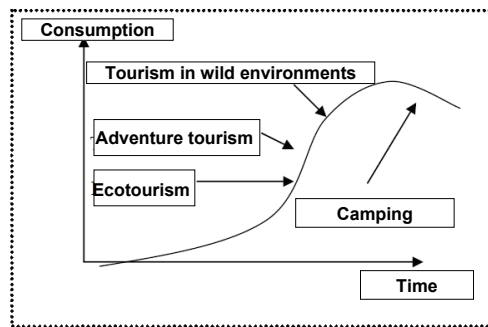
Growing demand for holidays in nature, irrespective of the form they take, is a concrete expression of a change in tourist behavior, of an awareness of the need to protect the environment.

**2.1 General issues**

Tourism in protected areas is essentially motivated by the wish to spend leisure time in nature and embark on a range of specific, more or less complex experiences, including: mountain hiking or rock climbing, nature photography, bird and animal watching, knowledge, learning, adventure, etc. Specialists estimate that about 10 % of the tourists travelling beyond the borders of their country of residence wish to purchase holidays that include trips to natural sites and visits to the cultural heritage sites, this segment having shown the fastest growth in the global tourism sector. Domestic tourism is also intensively practiced at many of these sites (Tudorache et al., 2009). Nature tourism is recognized by most specialists as a factor of environmental conservation that needs to be encouraged and promoted. Nature tourism has a complex content and a broad range of guises, including cultural, adventure tourism, tourism in protected areas, ecotourism, etc.

Irrespective of their inter-relationships (inclusion or circumscription) these forms of tourism are more and more on demand, due to the benefits they provide to both the tourists and the holiday suppliers (Ceballos-Lacurain, 1996). In many countries, they have developed as a sub-industry of the tourism and travel industry; e.g., in the American state of Texas, about 1/3 of the number of visitors are motivated by mature tourism, in Nepal, the proportion is up to 60% of all the foreign visitors, etc.

Indeed, not all the forms of nature tourism have reached the same level of maturity or have recorded the same rates of development. In this respect, they have come up to different levels of the lifecycle (Figure no. 2).



**Figure no. 2: Lifecycle of the ecotourism product compared to other specialist products of nature tourism**

Source: Eagles et al. , 2002

As a result, inciting nature travel as a way of developing sustainable, ecological tourism, involves determining the level of the lifecycle and the most suitable forms of tourism for each country and tourist destination.

## **2.2 Tourist profiles**

If, from an economic and social perspective, this interest in tourism to protected areas is beneficial, from an ecological point of view, tourism can turn into a negative factor, destructive of the protected natural heritage. This will largely depend on the profiles of tourists visiting the protected area, as well as on the management of that area.

In the specialized literature several ways of structuring the visitors of protected areas can be found. One of them, having as classification criterion *the main motivation of nature holidays* operates with categories such as: hard-core nature tourists, nature dedicated tourists, mainstream nature tourists, casual nature tourists (Burton, 2005).

Another more complex classification, through the issues that it considers (motivation, behavior of tourists requirements), identifies the following categories:

- *An Explorer tourist* will be individualistic, solitary, requiring no special facilities.
- *A Backpacker* is a long-term traveler on a limited budget. A holiday could be qualified as a travelling experience rather than an in depth knowledge of the local culture.
- *A Backpacker Plus* is an experienced traveler, belonging in the category of well paid professionals. They really wish to learn about the local nature and culture and ask for professional information.
- *High Volume tourists* are often lacking travelling experience, prefer to travel in large groups and may have incomes above the average. They enjoy the superficial aspects of local culture and the natural landscapes and wildlife, if these are readily accessible.
- *General interest tourists* can travel as individual tourists, based on itineraries designed with the help of a specialist tourist agent, but, more often than not, will prefer the security and company of a group of tourists. They may be relatively rich, interested in culture, with a passion for nature/wildlife, whenever these are not too inaccessible.
- *A Special interest tourist* is rather adventurous, dedicated, with a hobby for nature tourism, can travel alone or in groups, may have less interest to the local culture. He requires special facilities and services (equipment for adventure tourism, specialized guides) and accepts a lower comfort, may have an active involvement in research projects on the topic of environment and prefer small groups (Tapper and Cochrane, 2005).

Each of those categories of tourists and others alike, regardless of used classification criteria, meets a number of characteristics that are reflected in their behavior and which must be taken into account in management activities, in promoting programs of protected areas, in developing standards in order to ensure sustainable development of tourism.

### 2.3 Dimensions of tourist circulation in protected areas

As it is defined by its nature conservation and local community support objectives, ecotourism is difficult to quantify. After 1990, ecotourism underwent a spectacular growth worldwide, with an average annual growth rate of 24-30%, while tourism in protected areas is growing at an annual rate of 10-12% on the tourist market. An estimate shows that international arrivals of eco-tourists reached 7% of the tourist market in 2010 (Tudorache et al., 2009).

Unfortunately, there are no centralized data available on the number of tourists in protected areas even in developed countries – with real concerns for environmental protection. In Germany, for example, the Western Pomerania Lagoon National Park in the Mecklenburg-Vorpommern region had 2.5 million tourists in 2002, while in 2008 they had reached three million visitors. Also in Germany, the Saxon Switzerland National Park in Saxony received 2.15 million tourists in 2002, while in 2008 they had 2.9 million visitors.

Another noteworthy example is Costa Rica. Ever since 1980, the country has been known as one of the most sought after destinations for nature tourism. With a well organised system of protected areas covering 23.4% of the surface area of the country, which ranks it third worldwide in this respect, it is estimated that it holds 5% of the global biodiversity. While, in 2006, of the 1.725 million tourists, 54% visited national parks and protected areas, the specialists estimate that of the 1.923 million foreign tourists visiting the country in 2009 (2.089 million in 2008 and 2.098 million in 2010), 46% were engaged in ecotourism activities.

A last example, also conclusive for tourism in protected areas, refers to Kenya. According to the data provided by Kenya Wildlife Service, 70% of the 625.205 thousand foreign tourists visiting Kenya in 2010 were motivated by nature tourism. Also, 62% of the domestic tourists (citizens and residents) had the same motivation.

The protected areas of Romania have always represented an important travel motivation for many Romanian and foreign tourists, primarily from Central-European countries. Although for many of the parks the systems of taxation exist, they do not operate continuously, efficiently, the information is not centralized and, therefore, there is no rigorous, complete evidence of the number of visitors. According to the estimates provided by specialists and the administrators of protected areas, such sites currently attract 2,300,000 visitors (table no. 1). Of note among these are the natural parks: Bucegi (about 1,000,000 visitors), Vânători Neamț (400,000), Apuseni (300,000), the Danube Delta Biosphere Reserve (nearly 100,000 tourists accommodated in 2008 and 74356 tourists accommodated in 2010), Poștile de Fier (60,000), Putna-Vrancea (40,000) and the National Parks: Piatra Craiului (80,000), Semenic - Cheile Carașului (60,000), Cozia (50,000), Ceahlău (33,000).

Although the estimated number of visitors of natural and national parks is rather large, we need to consider the fact that only a small part thereof have been motivated by ecotourism practice (WTO and Ministry of Small and Medium sized Enterprises, Commerce, Tourism and Liberal Professions, 2007). Largely, this is due to the existence of a limited number of ecotourism programs, the low number of parks, poor specific infrastructure (visitor centres, information points, educational routes, animal watching hides, etc.) and to poor promotion. Other categories of tourists that visit national and natural parks in Romania include: weekend tourists (in most parks, but especially in those close to large cities), religious

tourism practitioners (Vânători Neamț, Cozia, Comana), fly fishing tourists (the Danube Delta, Porțile de Fier, Lunca Mureșului), mountain tourists (hiking, mountain climbing, alpinism, winter sports – in national and natural parks located in mountain areas) adventure tourists, researchers, pupils, students (scientific tourism), cycle tourists, etc.

**Table no. 1: Estimated number of visitors of major protected areas**

Category	Estimated number of visitors
Biosphere Reserve	
- the Danube Delta	96.090
National Parks	284.000
Natural Parks	1.867.000
Total visitors of major protected areas in Romania	2.247.090

Source: RNP Romsilva, 2007; WTO and Ministry of Small and Medium sized Enterprises, Commerce, Tourism and Liberal Professions, 2007; National Institute of Statistics, 2010

It is important to emphasize that the use of efficient management and a suitable infrastructure might help protected areas (with some exceptions – such as Bucegi Natural Park) receive more visitors without a significant negative environmental impact, and so allow the generation of more revenue from tourism and the improvement of the current precarious situation of funding for protected areas (Tudorache, 2009).

Tourism in protected areas has shown a positive trend, with a recorded increase of interest in this kind of travel. Quantitative developments will be accompanied by a range of qualitative mutations, the more important of which will include (Smaranda, 2008):

- higher demand for tourism in protected areas, especially motivated by an increase of their role in conserving the natural ecosystems in most countries of the world and taking into account a growth rate of 10-12%
- supply diversification, in that protected areas now offer many opportunities for spending holidays, in answer to more and more diverse tourist needs;
- improving services provided in protected areas has become a goal that many tourism organizers in such areas wish to meet, due to the ever higher requirements of their tourists;
- active participation is one of the significant trends in tourism to protected areas, motivated by the tourists' feeling the need to get actively involved in the areas' conservation, awareness raising and promotion processes;
- promotion of ecotourism as the main tourist activity undertaken in protected areas – their managers and tourism organizers worldwide see in ecotourism organization the main tourist activity conducted, on the one hand, with low, almost minimal environmental impact and, on the other hand, with an educational role.

In the following years, the quality of the environment, cleanliness and local population attitudes will be much more important to the potential tourists than the diversity of recreational and shopping opportunities. Although interested in unique experiences, most potential tourists will wish to be able to continue a healthy lifestyle while travelling. Facilities for sports, food and access to information will remain important motivational issues.



### 3. Field research regarding tourism in natural areas

Designation of protected areas is a first and most important step in our opinion, in the process of biodiversity conservation and sustainable development. (Minciu et al., 2010). Tourism in protected areas is also conducted according to well defined rules, including: it is less intensive compared to other areas, low environmental impact forms are practiced, visitor behavior is carefully monitored, development (constructions) is limited to the outer edges of the protected areas and largely operate in compliance with ecological requirements (low energy and water consumption, lower quantities of waste, reusable materials, non-polluting technologies, etc.). In this context, field research has aimed to identify ways to argue for the need of educating the tourists in regard to behavior in protected areas, and of means by which such education might be undertaken.

#### 3.1 Methodological aspects

The research was conducted under the Project *Dynamics of the Implementation of Community Policies in Capitalisation Protected Areas in Romania through Tourism and the Design of an Integrated Management Architecture Thereof*, the methodology underpinning investigations among tourists is compliant with the standards for field research and aimed to determine quantitative and qualitative trends regarding the evolution of tourism demand in protected areas and to identify the means by which tourists can be educated in regard to behavior in protected areas, and presentation of its results will be relevant for our topic. Some of its *Objectives* related to: the need to have a management plan for the protected areas and ranking of ways in which tourists may be educated in regard to their behavior in protected areas.

In regard to the information *collection approach*, we selected structured communication in the form of a 15 question questionnaire, while recording of responses was conducted using the interview operator technique, with the time for filling out the questionnaire about 10 minutes. We should add that selection of respondents was random, in keeping with the requirements of probability principles. Moreover, the design of information collection considered the fact that the *researched collectivity* was the population of Bucharest and the *survey unit* – the tourists taking part in the spring event of the 2011 Tourism Fair, with an investigated population of 769 people. Therefore, it may be estimated that the sample is 95% representative, with a  $\pm 5\%$  margin of error for the investigated population. Under these circumstances, the results may be extrapolated to the entire population without reserve.

#### 3.2 Results of information processing and interpretation

The questions aimed to find out, *inter alia*, the level of tourism practised in protected areas, the need to have a management plan for the protected areas and a ranking of ways in which tourists may be educated in regard to their behavior in protected areas. Taking into account the relatively small size and the theme of this study, only the most representative questions were selected and processed (5 regarding tourism and the identification of subjects).

The question “In your travels, have you also visited protected areas (natural protected areas)?” was answered by 765 people out of 769, with 306 (40% of the responses and 40%

of the total respondents) mentioning that they visited protected areas, while 459 (60% of the total responses and 60% of the total respondents) indicated that they also visited natural protected areas.

The question “Do you think management of protected areas is necessary? If so, what should it consist of, in your opinion? (indicate the order of importance)” was answered by 769 people, of which 759 (98.70% of the total responses and 98.70% of the total respondents) mentioned that management of protected areas is necessary, while 10 (1.30% of the total responses and 1.30% of the total respondents) indicated that such management is not necessary.

In regard to the tourists’ opinion on the ways in which management of protected areas might be achieved – management plans (8.1), security, barriers, strict definition of the areas, warning billboards (8.2), internal development/roads, camping sites (8.3), entrance fees (8.4) – it appears that they are important (the highest average of the answers was obtained for *management plans* 4.430 and the lowest average *entrance fees* 3.816) with responses being rather evenly distributed, and standard deviations ranging from 0.79 to 1.06. (Table no. 2)

**Table no. 2: Indicators of the distribution of the degree of importance in the ways of providing management of protected areas**

Variables	Answers to question 8						
	Valid N	Average	Median	Mode	Frequency	Std. Dev.	Standard error
8.1	759	4.430830	5.000	5.000	439	0.795865	0.028888
8.2	759	4.416337	5.000	5.000	428	0.794471	0.028837
8.3	759	4.047431	4.000	5.000	310	1.060376	0.038489
8.4	759	3.816864	4.000	4.000	295	1.067352	0.038742

In the order of opinions regarding the importance of ways to provide management of protected areas *management plans* rank first (average 4.430) followed by *security, barriers, strict definition of the areas, warning billboards* (average 4.416) *internal development/roads, camping sites* (average 4.047) and *entrance fees* (average 3.816). For the *management plans* and *security, barriers, strict definition of the areas, warning billboards* the most frequent response was very high importance (the mode is 5.000), with frequencies ranging between 428-431 of the valid number of responses; while for other ways of providing management in protected areas, the most frequent response is important (mode 4.000), with frequencies of 295-310 of the valid number of responses. In point of response homogeneity, *management plans* rank first (std. dev. 0.7627), which means that, in general, the respondents appreciated the importance of this way of providing protected area management, primarily scoring it 5 (very important). At the opposite end is the entrance fees (std. dev. 1.0765), but we note an average of 3.816 and a median of 4,000 that reflect the fact that the respondents appreciate the degree of importance of this way in different degrees, however, it ranks rather high (4 – important). For all the ways of providing protected area management, a high degree of statistical significance of the averages was noted, as the ratio between the average and the standard error is greater than 2 (the result is 95% significant).

The question “Do you think it necessary to educate tourist behavior in protected areas? If so, suggest means, indicating the order of importance” was answered by 769 people, of

which 38 (4.94% of the total responses and 4.94% of the total respondents) mentioned that tourist education for behavior in protected areas is not necessary, while 731 (95.06% of the total responses and 95.06% of the total respondents) indicated that such tourist education is necessary.

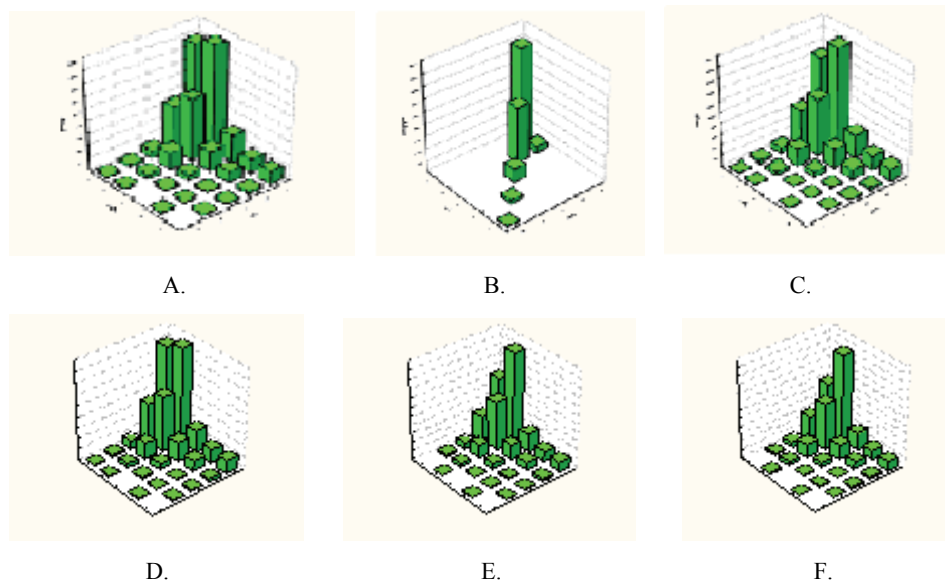
In ranking the opinions on the importance of the means to educate tourist behavior in protected areas top scores were given to adequate development of *visitor centres and information points*, (9.1) (average 4.508) followed by *development of an educational program in schools* (9.2) (average 4.433) *implementation of educational and information billboards in the field* (9.3) (average 4.417), *actions providing opportunities for the tourists to participate in cleanup activities, planting, etc.* (9.4) (average 3.976), *production of educational and information materials* (9.5) (average 3,954), *organization of events such as the Ecologist Tourist Day in protected areas, with specific activities* (9.6) (average 3.915), *the production and updating of a website on protected area-related issues* (9.7) (average 3.900) and *the production of a regular information newsletter and scientific journal* (9.8) (average 3.760). (Table no. 3)

**Table no. 3: Indicators of the distribution of the degree of importance in the ways of educating tourist behavior in protected areas**

Variables	Answers to question 9						
	Valid N	Average	Median	Mode	Frequency	Std. Dev.	Standard error
9.1	731	4.508892	5.000	5.000	468	0.762739	0.028211
9.2	731	4.417237	5.000	5.000	401	0.758281	0.028046
9.3	731	3.954856	4.000	4.000	325	1.043906	0.038610
9.4	731	4.433653	5.000	5.000	413	0.759896	0.028106
9.5	731	3.760602	4.000	4.000	316	1.044952	0.038649
9.6	731	3.900137	4.000	4.000	365	1.013410	0.037482
9.7	731	3.976744	4.000	4.000	309	1.055063	0.039023
9.8	731	3.915185	4.000	4.000	354	1.022180	0.037807

For the means of *adequate development of visitor centres and information points, the development of an educational program in schools and the implementation of educational and information billboards in the field* the most frequent response was very high importance (the mode is 5.000), with frequencies ranging between 401-468 of the valid number of responses; while for other benefits, the most frequent response was important (mode 4.000000), with frequencies of 309-365 of the number of valid responses. In point of response homogeneity, the development of an educational program in schools ranked first (std. dev. 0.758), which means that, in general, the respondents appreciated the importance of this benefit, primarily scoring it 5 (very important). At the other end of the scale we found actions giving the tourists the opportunity to participate in cleanup activities, planting, etc. (std. dev. 1.055), but we note an average of 3.976 and a median of 4,000 that reflect the fact that the respondents appreciate the degree of importance of this benefit relatively differently, however, it ranks rather high (4 – important). For all the ways of providing protected area management, a high degree of statistical significance of the averages was noted, as the ratio between the average and the standard error is greater than 2 (the result is 95% significant).

We correlated the responses related to the importance of management plans as a way to provide protected area management with the importance of the means of educating the tourists in regard to behavior in protected areas as follows: 420 (54.62% of the respondents) think that protected area management plans and adequate development of visitor centres and tourist information points as a means of educating tourist behavior are very important, while 188 (24.45% of the respondents) appreciate them as important, and only 3(0.39% of the respondents) assess them as unimportant (figure no. 3A). Also, 392 (50.98% of the respondents) think it is very important and 277 (36.02% of the respondents) think it is important to implement educational and information billboards in the field, as a way to educate tourists included in the protected area management plans (figure no. 3B). The production of educational and information materials as an action included in the protected areas management plans (figure no. 3C) is considered very important and important by a total 503 (65.41% of the respondents). Actions providing the tourists opportunities to participate in cleanup activities, planting, etc are considered very important and important for protected area management plans (figure no. 3D) by 501 (65.15% of the respondents). As a specific activity in the management plan, organization of the Ecologist Tourist Day event is appreciated as important and very important (figure no. 3E) by a total 489 (64.34% of the respondents). The production and updating of a website dedicated to the protected area issues as an objective of the management plans is considered very important by 120 (15.60% of the total respondents) and important by 113 (14.69% of the respondents) (figure no. 3F).



**Figure no. 3: Correlation of the importance of the management plans with the means to influence tourists' behavior**

**A - arranging visitation centers; B - location of info boards;  
 C - publication of information materials; D - Participation in various activities;  
 E – organization of specific events, F – creating a web site.**

#### **4. Aspects of the protected area visitor information and education policy**

Tourism activity in protected areas will take different, specific and complex forms, as shown above, raising issues related to both ecosystem protection and conservation and to the implementation of facilities for access, stay and recreation in such areas. This is why tourism development in protected areas is provided under certain conditions, including:

- strict compliance with the provisions of general and specific regulations in a global and integrative way,
- striking the right balance between capitalization and compliance with the support capacity, by monitoring tourist circulation, promoting low environmental impact activities;
- broadening the cooperation with the authorities and the local population in regard to protected areas and developing a partnership between them and the administrations of protected areas
- development and implementation of norms, visitor conduct rules for protected areas

Under these circumstances, an important role in the protected area management process is played by visitor information and education in view of minimizing the negative impacts that tourist activity might generate (Țigu and Țuclea, 2008).

In regard to visitor information, where the size and importance of a protected area justifies it, there will be a need for a Visitor Centre with multiple functions, the most important of which being to inform and guide the tourists.

Another aspect related to tourist information relates to the management of tourist routes, especially in the case of mountain hiking. This includes activities related to route maintenance, developments, markings and tourist information, sometimes aiming to direct the visitor flows toward the public areas and avoid the sensitive areas.

Not least, information actions must focus on the safety and security of the visitors. Thus, warning billboards should be set up along the tourist routes wherever there might be a danger, and the information brochures and fliers should aim to show the visitors the visitation rules, allowed access areas, routes and their respective difficulty, necessary equipment and risks to which they are exposed.

American specialists have studied the efficiency of information programs used in protected areas in changing visitor behavior, and the results were, in most cases, inconclusive or even contradictory. Human behavior is complex, and creates, for each particular situation, a multitude of variables and influences, thus determining whether a management technique, including in information management, is effective. These variables include (Vander Stoep and Roggenbuck, 1996):

- Precursor / predecessor variables, related to each individual, such as: the values, beliefs, attitudes, knowledge of the area, personal objectives and rules of conduct
- Context variables: the social group to which the individual belongs, demographics, etc.
- External factors: the presence or possibility to engage in subsidiary behaviors, the presence of infrastructure that facilitates adoption of preferred behaviors.

Another objective of protected area management is ecological education already practiced with tradition internationally. Important target groups are the local communities and the visitors, especially the youth, and educational or interpretation programs are gaining an ever larger scope.

Ecological education aims to raise awareness and understand the relationships with nature in order to strike a harmonious balance between the present requirements and the future needs. Internationally, ecological education primarily takes place in schools, colleges and universities, and the concept of "bringing the park to school" is very actual, visits of the staff of a protected area in schools being undertaken so as to ensure valuable education.

Furthermore, the universities can play an important role in relevant research for protected areas and habitat management, offering unlimited possibilities to attract the academic environment in an active exchange of ideas along these two directions. Beside natural sciences, disciplines such as planning and architecture, sociology, engineering and economics may participate with a variety of topics related to the planning and management of protected areas. Examples include traffic management, structural design in specific locations and the monitoring of visitor impacts.

A review of the experience and tradition of European countries in matters of ecological education identified the following recommendations/ trends:

- the use of protected areas as open air classrooms - this activity involving the participation of the available park staff for the reception of educational groups;
- bringing parks to the schools – based on the assumption that there are constraints to the protected areas being visited by school groups; for this, the managers of protected areas should consider the development of study materials for use in school and the initiative to develop a miniature protected area
- building ecological education into the school curriculum – development of school curricula by the educational authorities nationally should rather give priority to ecological education based on individual discovery/ experience.
- university support for protected areas – both by extending university subjects and by including the protected areas into academic research activities.

Informing and educating tourists, seen as essential elements in determining the ecological behavior of tourists, are among the major objectives of European policies in the field (Comisia Europeană, 2009). They also have an important contribution to increase sensitivity to natural and human heritage, to promote a responsible attitude and active involvement of tourists regarding environmental protection.

## **Conclusions**

Taking in consideration the synthesis of the analysis and correlating the results with those of other studies in the field, it can be said that tourism in protected areas has an important contribution to environmental protection, biodiversity conservation and prevention or mitigation of climate change. These assessments can be supported by:

- the content and nature tourism features, of all its forms such as ecotourism, rural tourism, cultural tourism, tourism in protected areas, etc.;

- the main objectives of the establishment of protected areas (conservation and heritage protection for the people);
- the responsible behavior of tourists, it's change of attitude and active involvement in environmental protection;
- the controlled development of tourism and the implementation of proper management, this requires appropriate policies, facilities for tourists, visitors, etc. information and education measures that must be reflected in national development strategies, in local programs.

The analyses undertaken for our country have shown a tendency to increase the number of visitors in protected areas doubled by a diversification of the forms of tourism. At the same time, one can speak of an increase of tourists' responsibility, the manifestation of greater attention to the values of natural and anthropogenic patrimony. Intensification of these journeys, in the future, requires a change of attitude, of the holidays' tenderers and especially of the - general or local – management, by:

- adopting and implementing of various rules of behavior,
- establishing a monitoring system of the activities,
- initiating information and education programs for tourists.

Achieving these goals requires the adoption and implementation of economic policy measures designed to encourage both bidders and consumers in the practice of ecological tourism, but also by taking behavior "eco" with other forms of tourism.

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