

Characterization of visitors to natural areas in the southeast of Spain

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Abstract

The management of natural areas requires a knowledge of what tourists demand in order that these resources can be optimized. A survey was carried out in an area in the southeast of Spain, which contains three protected natural spaces, with the aim of finding out the types and characteristics of visitors. The data were treated using an agglomerative multivariate classification technique. The results allowed differentiation of two main types of visitors: generalists and specialists. Both showed a high interest in contemplation of the landscape and contact with nature. The generalist tourists place a low value on the wildlife and rural properties of the landscape, with their motives for visiting being related to leisure activities. The specialist tourists are highly interested in nature and wildlife, observation of birds and other fauna; they know the emblematic species of the area and appreciate the rural culture. Within this specialist tourist group, three subtypes can be identified: the rural specialist – who likes and knows about the agricultural landscape, such as the matorral, rivers, springs and the mountain landscape; the cultural specialist – who values the historical monuments, the local folklore and fiestas; and the adventure specialist – who typically undertakes sporting activities in the fields and open land.

Keywords: natural areas, visitor typology, cultural tourism, cultural landscape.

1 Introduction

In response to the demands of a new and growing cultural tourism, new forms of tourism have emerged based on the environmental resources of the landscape: the attraction of various ecological features in themselves, or the quality of the



fauna or vegetation, etc., the natural landscape, the integration of the rural population within the environment – the cultural landscape, etc. This type of tourism does not provide an alternative to mass tourism, rather it is complementary to it and could, conceivably, soon become as important. In any of its guises, the greatest potential environmental risk of this tourism is its dependence on the quality of the natural environment, and the active search for places endowed with outstanding ecological characteristics.

Cultural tourism, considered as a recreational use, could represent the best use of natural resources for certain areas that are protected, or are especially sensitive from an ecological point of view. Moreover, it represents a means by which the money generated from tourism can be reinvested in the management and protection of the habitats and of the biological diversity, which are being affected by intensification of agriculture, abandonment of rural areas and the expansion of tourism.

In terms of managing this new type of cultural tourism, it is necessary to know the environmental characteristics of the landscape that form the principal ‘attractors’ for tourists, and the relationship these have with the number of visitors of various types. Knowing the profile of visitors is important in terms of being able to optimize resources for use by these visitors. In other words, management of the recreational use can be done according to the characteristics of the site and the possibility of developing a particular type of activities, according to the carrying capacity of the territory. In addition, in the case of protected natural spaces, one of the objectives that must be considered is to satisfy the needs and expectations of potential visitors.

Studies about visitors to natural spaces are a relatively recent idea –in the eighties, social parameters were related to environmental characteristics (Gómez Limón et al. [1]). Hammit and Cole [2] wrote a comprehensive review of these studies. In Spain, one of the pioneering studies was done by De Lucio and Múgica [3]. The relationship between recreational use and environmental perception has been carefully analyzed (Múgica [4]). These studies establish an experimental method that allows typology of visitors according to the activities they undertook during their visit, and the environmental attitudes and expectations they demonstrate. Such a typology could be related to the perception of landscape as a useful tool when establishing management strategies for the territory.

In this study the various types of visitor to natural areas in the southeast of Spain are characterized.

2 Study area

The survey of visitor types was done over an area of 1,987 km², covering 33 municipalities in the province of Almería. The area spanned the valleys of the Rivers Andarax and Nacimiento and the Desert of Tabernas (Figure 1). Three Protected Natural Spaces have been declared within this zone: the National Park of Sierra Nevada, the Natural Park of Sierra Nevada and the Natural Space of the Desert of Tabernas.



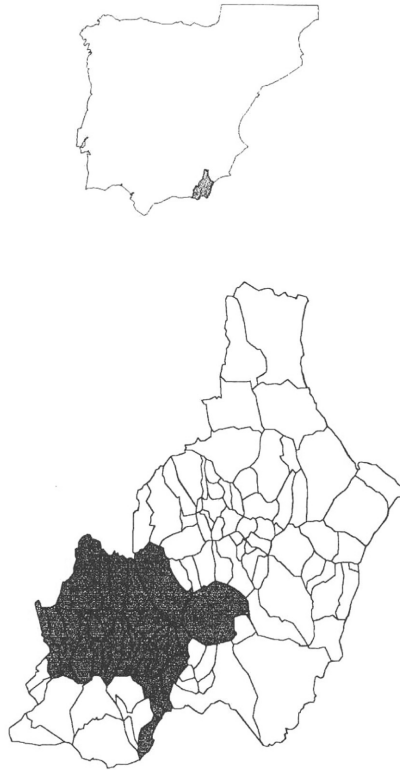


Figure 1: Study area.

This area is an example of Mediterranean territory with highly contrasting situations, where there is heterogeneous behaviour over both space and time and where abandonment of the rural areas is clearly visible. In addition to this abandonment the rarity of the natural landscape must also be considered, and the speed with which the rural world is developing new ways to use the land.

Within the study area there is a wide variety of agrarian land uses: non-irrigated crops, traditional vines on the hill slopes, citrus orchards, as well as wild areas on the steeper, higher slopes. The Desert of Tabernas is a unique space due to its particular combination of climate, geomorphology, biological diversity and human use. The coastal strip, contained within the municipality of Roquetas de Mar, has been highly modified by “sun and beach” type tourism, which is so common along the Spanish coastline. This municipality, with its mass tourism, provides a contrast with the land within the study area.

New land uses are exemplified by a new, highly lucrative method of intensive greenhouse agriculture, which is seen all over the municipality of Roquetas de Mar and which extends into other municipalities within the study area.



3 Methods

Surveys were undertaken to classify the different types of tourists and determine their specific preferences. The surveys were based on a series of questions that dealt with expectations of visitors to the area, their sociological and cultural profile (Gómez Limón & De Lucio [5], Múgica and De Lucio [6]). Each questionnaire included 28 questions, divided into three groups according to the variables that: i) identified the tourists sociologically, ii) described their territorial preferences, and iii) identified various aspects of the landscape.

The survey was done using direct and indirect methods. Direct sampling involved asking visitors face to face, while indirect sampling was achieved by leaving questionnaires in information centres, hotels and hostels, rural accommodation and restaurants in the study zone. Direct interviews were carried out in accessible sites and also in steep areas with difficult access, such as the mountain refuges, recreational areas and camping zones. 430 questionnaires were filled in all, 74.2% from direct sampling and the remainder received by post.

Selection of the people interviewed was done at random for the direct surveys, either using a method of walking a route within the selected area, or by waiting for visitors to pass a particular survey post. No more than two people from the same group were interviewed, so as to avoid redundancy in the replies given. The surveys took place over a holiday period during 1998. Two days were spent at each sampling site. The people undertaking the survey were previously trained in order to obtain unity of criteria.

The questionnaires were used to construct a matrix of qualitative data, composed of 430 observations and 99 variables. Some sociological variables were used as external variables to help identify the different groups of visitors and so these were not included in the matrix. Classification of the visitors was done using a multivariate agglomerative classification, using the *UPGMA* algorithm. In the raw matrix, the similarity between pairs of observations was calculated using the Kulcinsky index, whose 'robustness' is suited to the type of data collected in this study (PATN [7]).

4 Results and discussion

The classification obtained allowed two groups of tourist to be distinguished, at a level of the similarity index of 1.20. These groups are denominated 'generalist' and 'specialist'. The two groups share some common indicators, namely a high level of interest in contemplation of the landscape (mountain, desert, river valley, wooded areas and pine or holm oak forests), and contact with nature. They are looking for recreation and leisure within the study area and like to undertake photographic itineraries during their visit. On the other hand, each visitor has his own perception of the landscape.

4.1 'Generalist' visitors

This group makes up 54.9% of the people interviewed. They typically put a low value on the variables representing the natural and rural resources of the area and



its cultural activities. Their motive for visiting the area is principally for leisure and, to a lesser extent, to visit family or for professional reasons (Table 1).

Sociologically, 63.4% of the ‘generalists’ visitors fall into the 25 to 39 year-old age class (Figure 2), 56% have studied to university level (Figure 3) and 60% are visiting the area for the first time. They do not travel alone, they stay in hotels, and plan to spend two or three nights in the area. The car is the main means of transport, and their level of satisfaction with their visit was high.

Table 1: Discriminant variables for the ‘generalist’ group of visitors. The constancy value is given for each variable. The selection criteria for the variables is based on a constancy of $\geq 30\%$. In brackets it is indicated the medium (M) or low (B) evaluation given for these variables.

<i>Variable</i>	<i>Constancy (%)</i>
Visit to family or friends (B)	68
Professional reasons (B)	85
Climate in the area (B)	42
Rural landscape (B); (M)	33; 37
Sights and monuments (B)	41
Cultural activities (B); (M)	32; 58
Sports activities (B)	61
Health and treatments (B)	83
Attendance of courses (B)	95
Festivals and folk activities (B)	55
Craft works (B)	62
Gastronomy (B); (M)	33; 36
Proximity to place of residence (B)	62
Price (B); (M)	36; 41
Routes and footpaths	32

4.2 ‘Specialist’ visitors

The second group in the classification (comprising 45.1% of the visitors) show a high level of interest in a specific group of nature and wildlife-related variables. The reasons for their visits include wildlife observation, particularly of birds. The rural landscape (field terraces, dry-stone walls, fences and hedges) is highly appreciated by these tourists, who know the emblematic species of the areas (Table 2).

This group is dominated by people aged 25 to 39 (Figure 2). Nearly 40% have studied to university level and 30% have primary education (Figure 3). They are not visiting the area for the first time and 34.2% would not stay the night in the area. Those who do stay overnight opt for hotels and camping areas.



They travel by car and, to a lesser extent, on foot. Their level of satisfaction of their visit is high.

Table 2: Discriminant variables of the ‘specialist’ group of visitors. Constancy values are given for each variable. The selection criteria for the variables is based on a constancy of $\geq 30\%$.

<i>Variable</i>	<i>Constancy (%)</i>
Rural landscape	30
Birds	30
Wildlife	30
Emblematic species	30

This specialist visitor group has a lower index of similarity in the classification (1.06), and so it was subdivided into three subtypes for which the indicator variables are more specific: i) ‘rural specialist’, ii) ‘cultural specialist’, and iii) ‘adventure specialist’. The generalist visitor group could not be split at this new level of the similarity index.

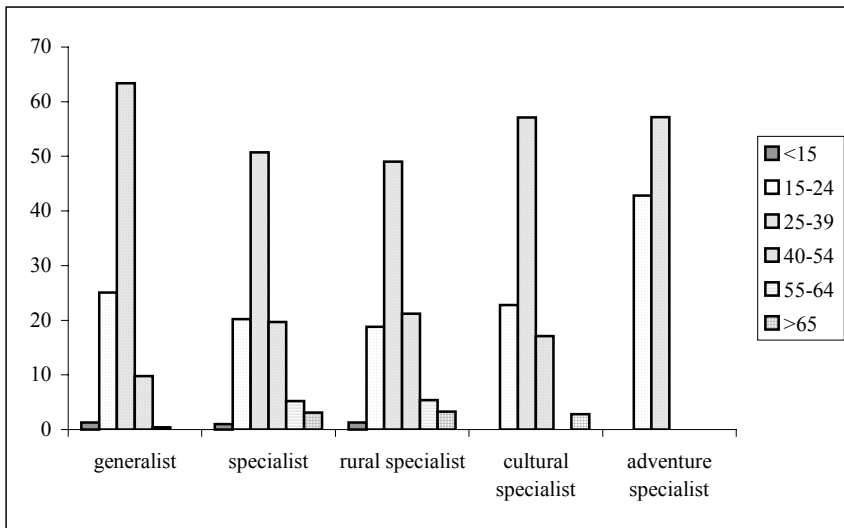


Figure 2: Age distribution of various visitor types. Values expressed as percentages.

4.2.1 ‘Rural specialist’

This type of tourist appreciates the gastronomy, contact with wildlife and the rural scene in general. They are particularly attracted by the agricultural landscape, matorral, pine forests, birds, wild animals, rivers and springs,



mountain scenery, the valleys and the field terracing. This type of landscape is typical of the mountainous part of the study area called the Alpujarra. The principal activity was walking.

The 'rural specialists' mainly come from Andalusia, they are between 25 and 39 years old (Figure 2). 42% have studied at university and 29% have primary education (Figure 3). Half of them had visited the area more than three times, and come to the area on foot (the other half come by car). They do not usually stay the night, but those who do spend more than one day mainly stay in hotels. The level of satisfaction is high.

4.2.2 'Cultural specialist'

The second subtype of specialists comprises 8% of the people interviewed. They are attracted by contact with nature and wildlife, are interested in the sights of the area (churches, farmsteads, etc.) and by festivals and folklore. During their visit they watch birds and undertake aquatic activities. 70% of this group are men. 34% have university degrees, 29% primary education and 23% secondary (Figure 3). 65% have visited the area more than three times. They usually stay with family or in hotels. They arrive, basically, by car, and the level of satisfaction with their visit is high.

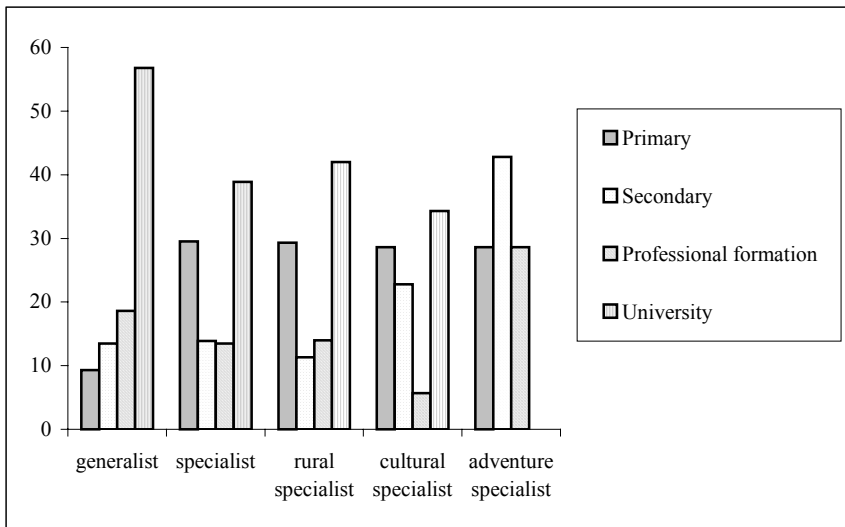


Figure 3: Educational profile of various visitor types. Values expressed as percentages.

4.2.3 'Adventure specialist'

The third subtype is made up of only 2% of the people interviewed. They like the grassland and open spaces in the study area and the main activity undertaken is adventure sport. The age of this type of visitors ranges from the 15 to 24 year age group, though the 25 to 39 year old group form the majority (Figure 2). They

have not studied to university level (Figure 3). 60% are not visiting the area for the first time. They camp in the open air, getting about mainly on foot. In contrast to the other people interviewed, they chose the area on the recommendation of family or friends. Their level of satisfaction is high.

5 Conclusions

The analysis results show that the visitors of the study area behave in a tourism stereotype way: there were generalist and specialist tourists. All of them reveal a great interest for the nature and express a high level of satisfaction about their visit to the study area.

We can recognize three types of specialist visitors: with 'rural' motivations—determined by the agrarian landscape—, 'cultural' specialists, attracted by the culture and the traditional landscapes, and, 'adventure' specialists, with preferences on nature and wildlife.

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