Characteristics of divers at a Spanish resort

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Received 23 November 1999; accepted 14 August 2000

Abstract

This article studies scuba diving around the Medes Islands, situated opposite the tourist resort of L’Estartit, on the Catalan Mediterranean coast. Information on the profile of divers and an assessment of their stay in L’Estartit was obtained by a survey. The results show that scuba divers who visit the Medes Islands are, on average, middle-aged, male Europeans of medium or high socio-economic level, who return to L’Estartit attracted by the rich marine life of the area. The survey also shows high levels of satisfaction associated with their stay. © 2001 Elsevier Science Ltd. All rights reserved.

Keywords: Diving; Survey; Protected area; Medes Islands; Mediterranean

1. Introduction

The purpose of this paper is to present findings as to the socio-demographics of divers, their assessment of the dive experience, and the accommodation they use. The study is specific to L’Estartit and is atheoretical in that there is no attempt at this stage to model the dive experience. While there is an emergent literature on diving from perspectives that include the experiential and issues of structure and organisation, little has been done in an European context and even less in a specific Spanish setting. Inasmuch as theory development requires an Initial description based on observation and data collection, this paper can be located in a preliminary positivistic stage wherein raw data are collected and collated.

The Medes Islands constitute a small archipelago (spread over an area of 21.5 ha) comprising seven islets and several reefs. They are situated about 1 mile from the tourist resort of L’Estartit (in the municipality of Torroella de Montgrí) on the Western Mediterranean Sea coast, in the northeast of Spain, within the Autonomous Region of Catalonia (Figs. 1 & 2).

The islands are thus situated in the centre of the Costa Brava, the most visited tourist area in Catalonia, which received 19,023,000 tourists in 1999 (Generalitat de Catalunya, 2000) and also one of the most important areas in the whole of Spain. The archipelago has become one of the major scuba diving destinations in the Western Mediterranean (Jenner & Smith, 1992, p. 62). This protected area is visited annually by 20,000 scuba divers who between them carry out an average of 60,000 underwater dives. This figure represents 90 per cent of the total number of underwater dives made in Catalonia (Mundet, 1998, p. 290).

This state-owned locality is administered by the Pla d’Espais d’Interès Natural (PEIN), the legal instrument that protects outstanding natural areas in Catalonia. According to PEIN (Generalitat de Catalunya, 1992, p. 184) the Medes Islands are of exceptional richness and diversity both in terms of surface and sub-surface landscapes. The protected area includes not only the landmass but also the maritime area, covering a total of 40 ha. The land communities, and in particular the large bird colonies, are of significant zoological interest. The outstanding feature of the Medes Islands for diving lies in the rich diversity of the submerged marine communities. The wide variety of environments and species present a large biomass output that is explained by the convergence of a series of factors. These include the supply of organic matter from several rivers that flow into the Mediterranean Sea (mainly the Ter and the Rhône), a variety of depths of the sea bed where both sandy and rocky compositions are alternately found and their karst origin that have given rise to a large number of tunnels and cavities.

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More than 1345 marine taxa, both vegetal and animal, have been identified in the Medes Islands.

L’Estartit is the operating base for all the scuba diving centres in the area around the islands. The town of L’Estartit had a population of 1824 inhabitants in 1996 (INE, 1997). In that same year, according to the Tourist Board of the Generalitat de Catalunya (Catalan Autonomous Government), this locality included accommodation for 31,851 tourists (7 per cent in hotels, 39 per cent in camp sites and 54 per cent in apartments) which enabled a total of 215,000 tourists to be accommodated in the town that year. In the 1960s, L’Estartit fully emerged onto the tourist market offering a basic, undifferentiated sun/sand/sea product. In the mid-1980s this tourism model went through a crisis (Vicente, 1996) influenced, among other factors, by the appreciation of the peseta against the pound sterling and by an excessive dependence on the British tourist market that is characterised by its unpredictability. Faced with this situation, the tourist sector was obliged to seek alternative products/attractions for visitors to the area. Scuba diving emerged as a possible way to stop the town’s declining...
tourist industry (Priestley & Mundet, 1998, p. 97). In December 1990, this new tourist strategy received a definitive boost with the passing of the 19/1990 law that regulated the conservation of the flora and fauna of the Medes Islands seabed. This produced a double effect: firstly the marine life was notably regenerated and secondly the area was brought to public attention. A video showing a grouper being hand fed by a diver was circulated around all the European scuba diving clubs. The image of L’Estartit was undoubtedly improved when it was associated with the Medes Islands and the inherent attraction of the submerged seascape.

It is estimated that 20,000 divers visit L’Estartit every year and that this figure represents 9.3 per cent of the total number of tourists coming to this locality. However, it should also be added that during the months of April, May and October, when sun and sand tourism is at a low, divers can amount to 90 per cent of the total number of tourists. Thus, by attracting visitors beyond the July and August peak, the tourist season was lengthened from 3 to 7 months, from April to October.

The favourable reception of this new tourist offer can be seen in the exponential increase in scuba diving, which reached a maximum figure of 3000 dives per day in the summer at the beginning of the 1990s. It is estimated that in 1990 over 100,000 dives were made in the area (Zabala, 1999, p. 58). This fact in itself endangered the ecological balance of the islands. As has been illustrated in other studies (Davis, 1997; Shackley, 1998), recreational scuba diving is shown to be one of the most rapidly growing tourism activities in the world, and concerns about overcrowding and environmental damage at dive sites arise. Management strategies to mitigate such impacts need to be devised and implemented.

The same phenomenon occurred in Mallorca with the appearance of the first laws regulating the environment: the fact that a natural area is legally protected but not correctly managed attracts attention but at the same time leaves the area defenceless against situations of over-use, which lead to the impoverishment of the environment and the decrease in its value as a tourist attraction (Blázquez, 1996, p. 4). Since the passing of the 19/1990 law, divers must obtain a specific permit, be in possession of an intermediate level diver’s certificate and pay a fee of US$ 2.2, and yet these measures proved insufficient to conserve the marine ecosystem of the islands. This situation gave rise to the enactment of new protective measures. An example is the August 1, 1995 Catalan Government Order that approved the limitation of the number of dives to a maximum of 450 per day, in the Medes Islands protected area.

After an initial period of rejection, the scuba diving clubs soon realised that they would have to adapt to the new diving restrictions. Their response was characterised by two different types of strategy. On the one hand, the clubs modified their price policy, increasing prices in high season in order to increment their revenue and decreasing in low season in order to attract new customers and thereby extend the season. On the other hand, the clubs diversified their offer with beginners’ and advanced courses being held outside the protected area. This latter strategy enabled them to exceed the restrictions of 450 daily dives within this area.

The aim of this article is to contribute to the study of the tourist phenomenon of scuba diving off the Medes Islands. To this end, the authors first sketch a profile of the average scuba diver that chooses to come to the Medes and second analyse how these divers assess their stay in L’Estartit and their diving experience.

The Medes Islands Advisory Council was set up in order to manage the Medes Islands protected area and is made up of representatives from different public and private bodies. Among the former are representatives from the Torroella de Montgrí-L’Estartit Town Council,
the Baix Empordà County Council, the Girona Provincial Council, different departments of the Generalitat de Catalunya and the Environmental Studies Department of Girona University. The private sector has representatives from the scuba diving clubs, the sailing club at L’Estartit and the passenger boats that take tourists to the islands. The Department of Geography, History and Art History in Girona University was asked to carry out a survey, as a means of gaining insights into the scuba diving phenomenon and its links with the tourist industry in L’Estartit.

The only existing survey on scuba diving in the Medes Islands was the study submitted by Jenner and Smith to the monograph *The Tourism Industry and the Environment* published in February 1992 by The Economist Intelligence Unit. Over a 3-day period in September–October 1990, the authors asked 40 divers to complete a questionnaire. The resulting study included aspects such as the socio-economic profile of the divers, the length of their sojourn in L’Estartit, the type of accommodation used, the nationality of the divers and the reasons for their visit. These same elements, together with others, appear in the present survey, the results of which form the central focus of this article.

2. Study method

A survey was taken of a sample of 500 divers over the period of 1 year, from July 1998 to June 1999. The time distribution was defined on the basis of the number of dives made in the Medes Islands protected area during each month of 1997. Thus, if 20 per cent of the total dives per annum were carried out in one particular month, the number of questionnaires given out for that month was approximately 20 per cent of the total of 500, as can be seen in Fig. 3.

The questionnaires were grouped into four seasons: high (July and August), middle (September and June), low (October–March) and Easter (April and May), which correspond to the four well-differentiated vacation periods throughout the year. The survey team was made up of five persons who sought a random sample of divers in L’Estartit harbour, on the boats that were ferrying them to the Medes Islands, in the tourist office, in the different bars, restaurants, hotels and streets of the resort. The survey, which was carried out on a sample of 500 out of a estimated population of 20,000, has a 91 per cent reliability coefficient with a 3 per cent margin of error and an indeterminacy level of $p = q = 0.5$.

The questionnaire (printed in five languages: Catalan, Spanish, English, French and German) contains 30 questions and is divided into three themes: the profile of the interviewees, their experience of scuba diving in the Medes Islands waters and, finally, their sojourn in L’Estartit. In this last section the divers are asked to assess different aspects of their accommodation and the complementary tourist activities offered in the locality. Twenty-three of the questions can be considered to be limited and seven as open-ended. In questions where an assessment is required a five-point scale is used (i.e., $1 = $very poor, $2 = $poor, $3 = $fair, $4 = $good and $5 = $very poor).
good). One of the first problems to be encountered on interviewing the divers was the excessive length of the questionnaire (15–20 min required for its completion). The length of the questionnaire was, however, determined by the different interests of the organisations represented on the Medes Islands Advisory Council. The survey team detected another problem that was the bias generated by those divers who reside in L'Estartit on a permanent basis and cannot therefore be considered tourists. However, the answers to the question on the length of stay enabled these interviewees to be identified (29 persons representing 5.8 per cent of the total sample). It should be noted that, among the interviewees of Spanish nationality, differentiation has been made between those who reside in Catalonia and those who reside in other parts of Spain. It was felt intuitively that these two groups could present different behavioural patterns.

The sampling method used is the simple random sample, using two discrimination criteria; the first criterion is that of seasonality (the number of questionnaires made was proportional to the number of dives performed each month) and the second criterion is of a geographical nature (different sampling points were set up at the port, the boats, the tourist office and the hotels). The data was processed by SPSS statistical software (Statistical Package for Social Sciences).

3. Study results

3.1. Profile of the average interviewee

The questions were divided into two subsections: one which refers to the basic personal data of the interviewees (age, sex, nationality, professional occupation and academic qualifications) and another which gives information on the interviewee as a diver (qualifications, membership of a diving club, diving experience, number of times diving in the Medes Islands area).

With regard to personal characteristics, the scuba divers who come to the Medes Islands are middle-aged persons: more than half (56 per cent) are in the 31–45 year old age bracket. The groups containing younger people and older individuals are less representative: only 10 per cent are younger than 25 years old and another 10 per cent are older than 50. This can be linked to the fact that scuba diving requires a certain level of purchasing power (not always within reach of younger people) and a physical fitness that is not always found among older persons. The distribution by sex is clearly in favour of men, who represent 80.6 per cent of those interviewed. Scuba diving around the Medes Islands is thus a predominantly male sport. It is also noted that the proportion of women divers descends as age rises, only 2.2 per cent of females in the over 50 age bracket participate. Thus, it appears that the main characteristics of the divers are similar to those of divers surveyed in other parts of the world (Davis et al., 1997; Tabata, 1992). The nationality which is most highly represented and which is most dominant over the whole year is French (28 per cent of the total). The origin of the rest of the interviewees is of less significance. Catalans account for 15 per cent of the total (in this case, geographic proximity is a decisive factor), Germans 13.6 per cent and Belgians 12.4 per cent. The geographical proximity factor does not seem to have any special relevance for Spaniards who do not reside in Catalonia, as this group is the fifth largest in terms of number of divers. Finally there is a small representation of divers from Holland, Italy, Portugal, Switzerland, the United Kingdom and Luxembourg. The number of British divers is surprisingly low (a mere 1.8 per cent of the total) because British tourists represented 11.8 per cent of the total number of visitors to this Mediterranean resort. The United Kingdom has traditionally been one of the main countries from which tourists originate. The presence of tourists of this nationality has decreased by approximately 20 per cent in only 4 years however (Mundet, 2000, p. 15). It is also clear that, at the moment, the Medes Islands do not have the capacity to attract divers from other continents, as do other places in Australia or the Cayman Islands (Jenner & Smith, 1994, pp. 37–40).

Most of the interviewees are employed in middle to high level professional activities. Thus, occupations such as that of department head, technicians, members of the liberal professions, administrators or skilled workers, business people or employers make up 70 per cent of the total. This fact is related to the larger representation of the over 31 year old age bracket and with the predominance of middle to high level academic qualifications. The interviewed divers come mainly from an academic background of middle or university level which, taken together, represent 88.6 per cent of the total. Student divers and retired people, on the other hand, are represented as a much lower percentage, which bears a direct relationship to the lower representation of young people and persons of more advanced age groups. This professional profile presupposes that these divers tend to be more discerning with regard to the quality of services offered.

With regard to the characteristics of the interviewees as divers, the qualifications correspond to those of experienced divers who have considerable knowledge of this sport. Thus, over one-half possess advanced level scuba diving qualifications (57 per cent) and nearly one-quarter possess intermediate level qualifications (23.4 per cent). Three-quarters of the interviewees are members of a scuba diving club and this proportion increases to 94.3 per cent among visitors to the Medes Islands over the Easter period. The distribution by years of diving experience presents a significant spread. In this respect, the group of divers who can be considered as novices (with
only 1 or 2 years experience) and the group of more expert divers are both well represented. It is also noteworthy that the Medes Islands attract a large number of veteran divers: 60 per cent of those interviewed possess at least 6 years experience and one-third have been diving for over 10 years. About one-quarter of the interviewees were diving for the first time in the Medes Islands waters. Parallel to this, a significant percentage of persons show an index of considerable loyalty to the area, which means that many are regular visitors. In this context, 66.6 per cent have repeated the experience two or more times and 19.6 per cent have used the service more than 10 times.

3.2. Scuba diving practice

This section describes various aspects related to the practice of scuba diving in the Medes Islands area: how the Medes Islands were discovered as a diving place, reasons for choosing this locality, general assessment of the resort and suggestions for future improvements submitted by the interviewees. The results obtained are relevant because they provide information on the divers level of satisfaction with the services, can be used as a reference to improve the scuba diving offer and guarantee the continuity of the Medes Islands as a tourist destination. Proposals for the future depend upon two specific questions, namely: the interest expressed by the interviewees in the possibility of taking courses which would complement the scuba diving activity, and opinions as to whether diving should be freely permitted or restricted to guided dives. The survey also included questions on the places chosen for diving within the protected area (most visited places, number of dives in each place and assessment thereof) and questions on different animal and vegetal species that the divers were able to identify. However, it is not considered relevant to include these results here as they contain a level of detail that is unnecessary for the purposes of the present article.

Diffusion of knowledge of the Medes Islands as a diving place takes place largely through friends and through scuba diving clubs: nearly one-half the interviewees claim to have first heard of the locality via one or other of these two channels. This piece of data underlines the dependence of the resort on word of mouth recommendation by users and the importance of visiting divers achieving a high level of satisfaction. Other interviewees stated that they had learned that scuba diving could be practised in the Medes Islands waters while visiting the area on previous occasions (14.4 per cent of the total), or through diving publications (12 per cent). Specialised trade fairs play an insignificant role in this respect (2.6 per cent). Travel agencies have surprisingly little impact on putting the Medes Islands on the diving map: only 2.2 per cent of the total number of interviewees ticked this option (none at all at Easter or during the low season). Closely related to this is the fact that only 5.2 per cent of the interviewees organised their trip through a travel agency.

As can be observed in Fig. 4, by far the main reason given for choosing the Medes Islands is the rich marine life of the area: 90 per cent ticked this option among their
five principal reasons for selecting this locality. This is similar reason to those given by divers in other parts of the world (Tabata, 1992, p. 174). Therefore, it can be clearly seen that environmental protection is an indispensable condition for the continuation of the industry surrounding the option of scuba diving in this area. The other significant factors that influenced the choice of the interviewees are geographic proximity (61.8 per cent), the quality of the infrastructures (50 per cent), the cleanliness of the seawater (43 per cent), or the time of year preferred for diving (42.2 per cent). The interviewees were allowed to tick more than one option in this section (for this reason the total amounts to more than 100 per cent). The existence of complementary tourist options is an aspect which is least appreciated. This fact suggests that when divers choose to come to the Medes Islands, they do not take into any special account the possibility of carrying out other activities that are not connected in some way with the practice of their sport.

On the whole, the aspects of the protected area assessed by the interviewees obtained a positive appraisal, given that the average ratings are always found above “fair” and oscillate between 3.4 and 4.1. The mode is “good” in most cases, except for the assessments referring to the water temperature and the danger of underwater currents, which are rated as “fair”. In general, the interviewees also favourably appraise aspects related to scuba diving centres. Some of these aspects receive very good assessments as in the case of the 4.1 rating referring to the qualification of the diving guides. The quality of the boats, the duration of the dives and the total length of the trip to the islands were all awarded a rating of 4 points. All these questions situate 65–75 per cent of the assessments between “good” and “very good”. The quality of the rental diving equipment also obtains a high rating (3.9). Prices charged and group size are found in the lower rating bracket, obtaining an average of 3.3 and 3.4, respectively. Fifteen per cent of the interviewees rate prices as “poor” or “very poor” and, in the case of group size, this percentage rises to 17 per cent. On the other hand, the appraisal of the price/quality ratio, with an average rating of 3.6, somewhat qualifies the negative price rating. Finally, information facilities and diving safety obtained good ratings, with an average of 3.7 and 3.8, respectively.

Opinions expressed on aspects that the interviewees found lacking on their dives are of considerable diversity, due to the fact that the questions were open-ended, and gave rise to a great variety of comment and consideration. Some divers refer to shortcomings observed in guides and monitors. Opinions on this matter are varied: the interviewees would like to see better organisation, stricter permit control, greater vigilance of divers’ behaviour, and more underwater presence of guides and monitors on certain types of dives. Several negative comments on the actual dives refer to the lack of necessary spare or safety equipment, such as oxygen tanks, descent ropes, and spare masks. Other responses highlight the lack of information supplied to divers, ranging from information on the driving areas to fact sheets on the biology and the marine life of the archipelago. Finally, another set of responses which appear in this section refer to overcrowded diving conditions and the need for a smaller number of participants on each dive. Apart from assessing the different aspects of the diving centres, the interviewees were also given the opportunity to write a general appraisal of the scuba diving offer. Some give a negative appraisal and a wide variety of reasons were put forward. The main reasons given is that diving trips are limited in number and badly organised. Other reasons cited are difficulty in obtaining permits, the need for stricter vigilance by the guides and monitors of divers’ behaviour underwater, the strong dependence of the trip organisers on meteorological conditions or the excessively high cost of the activity.

The interviewees were invited to submit proposals as to how the activity could be improved. Fifty-seven per cent of the interviewed divers expressed an interest in attending courses with a view to deepening or widening their knowledge of the Medes Islands. This interest suggests that these types of courses in the future would not only be viable but would also help to create greater awareness of the need to protect the environment. The most requested subject matters are those related to biology, still and video underwater photography, and environmental education. The opinion of the interviewees concerning the manner in which diving in the protected area should be organised lean heavily in favour of freedom to dive alone as against diving in guided groups of five to seven participants. However, a significant number, 34 per cent, express a preference for guided dives (against 57.2 per cent who would prefer diving alone) a high enough percentage to warrant the continuance of the guided diving option. It so happens that preference for unguided diving is given only to the group of interviewees holding intermediate or advanced diving qualifications, whereas among the group of less experienced divers the preferences are clearly inverted in favour of guided dives (61.5 per cent).

3.3. Sojourn in L’Estartit

This section analyses the complementary tourist activities available to scuba divers in L’Estartit. Not only are questions included covering aspects of accommodation used during the sojourn but a study is also made of the activities carried out by the interviewees when not engaged in diving, an overall appraisal of their sojourn in L’Estartit and any faults or shortcomings of the locality that may have been observed. A description is also included of those aspects that specifically refer to the sojourn of divers in L’Estartit, such as length of vacation,
organisational modality and the general impression received by the visitors.

The majority (65 per cent) opted for hotel accommodation in one form or another: full board, one-half board or bed and breakfast. Apartment or campsite accommodation vie for second and third place, with percentages of 13.4 and 13 per cent, respectively. When the mode of accommodation is analysed according to age group, nationality or professional occupation some differences appear.

The differences by age group are slight. The predominant group using hotel accommodation is the 31–40 age bracket (40.5 per cent), which is understandable, given that this is the largest age bracket. A similar tendency is also found in apartments (38.8 per cent) and in campsites (33.9 per cent). By nationality, hotel accommodation is chosen mainly by French divers (39 per cent). The main customers for apartments, however, are German (25.4 per cent) and Catalan (22.4 per cent). German (29.2 per cent) and Dutch (18.5 per cent) divers favour campsite accommodation. When accommodation preference is related to professional activity, it can be observed that the department head category predominates in hotels (23.2 per cent). On the other hand, the professional profile of persons that choose apartment and campsite accommodation is that of administrator.

The activities carried out by the interviewees when not engaged in diving are mainly bathing, sun bathing and practising other water sports (63 per cent). However, it is worth mentioning that 45 per cent of the interviewed divers take the opportunity to visit other parts of the Costa Brava during their stay. The percentage of divers who choose to visit the cities of Barcelona and Girona, however, drops to 17 and 15 per cent, respectively. Thirty-one per cent of the divers visit historic/artistic sights or monuments and almost 20 per cent attend some cultural or typical show during their stay. The assessment of the complementary tourist attractions available in L’Estartit can be divided into two parts. The first part includes the restaurants, bars and shops which are rated by almost 50 per cent of the interviewees as “good” or “very good”. The second part includes appraisals of the nightlife, public services and cultural venues in the town and receives an average rating of “fair”. The range of cultural venues is the most negatively rated item (12 per cent pronouncing it to be “poor” or “very poor”) followed by the nightlife and the public services (with 10 and 9 per cent of unfavourable ratings, respectively).

As concerns the faults or shortcomings of L’Estartit perceived by the interviewees, persistent complaints are of the shortage of free parking spaces and showers on the beach, the lack of a municipal swimming pool, bus station and maritime museum, or a Medes Islands cultural centre imparting courses in environmental education. Other demands stress the need for improvement of the services offered more than that of actual town facilities. For some, there is a notable lack of nocturnal activities, while others would appreciate more peace and quiet at night. Some visitors say that in wintertime there is little to do and few cultural events in L’Estartit, others criticise the lack of friendliness of the local people or the excessively “touristy atmosphere” of the town. It is also significant that some interviewees want for nothing, claiming that they “just came here for the diving around the Medes Islands”.

Among the interviewed divers the average length of stay in L’Estartit is 12 days, although the most frequent unit of stay is a week. As regards the organisational model of the trip, it is surprising to note that travel agencies account for a negligible 5.2 per cent. Scuba diving clubs are behind 36 per cent of the trips to L’Estartit but almost 60 per cent of the total number of visitors organise their own vacations, thereby eliminating the need for intermediaries between customers and accommodation establishments in favour of a direct mode of marketing and transactions. The analysis of the overall assessment of vacationing in L’Estartit is positive: 70 per cent consider that the vacation lived up to expectations, 17 per cent said that their vacation was better than they had expected and only 3 per cent claimed to have been disappointed (Fig. 5).

4. Conclusions

The present article is based on a survey of 500 scuba divers who had been diving in the waters surrounding the Medes Islands between July 1998 and June 1999. The article draws up a profile of these divers and their assessment of the diving experience and of their stay in the locality of L’Estartit.
The average scuba diver who visits the Medes Islands is a middle-aged man of between 31 and 45 years of age, coming mainly from France or Catalonia (although there is also a significant proportion of German and Belgian visitors). He is a professional man and comes from a medium to high academic background. He is an experienced diver, holder of advanced diving qualifications and member of a scuba diving club. On average, this diver has made more than one visit to the Medes Islands, which were first brought to his attention through friends or the scuba diving club. The diver usually organises the trip to L'Estartit himself and stays for an average of 12 days in the locality. The main reason for him choosing the Medes Islands as a diving ground is because of the rich marine life of the area. The average diver gives a very positive appraisal of the diving centres, the quality of the boats and the total length of the diving trips. He expresses interest in the possibility of taking courses to deepen or widen previous knowledge of the Medes Islands, especially courses on biology and underwater still or video photography. He prefers diving freely in the protected area without a guide. The average diver stays in a hotel where the service level, price/quality ratio and staff professionalism are highly rated. The main activities carried out when not engaged in diving are centred on the beach, practising water sports and visiting other localities on the Costa Brava, even if these sorts of activity were not the main reason for choosing L'Estartit as a place to spend the vacation. The restaurants, bars and shops are more positively rated than the nightlife, the public services and the cultural venues offered. The average diver considers that his stay in L'Estartit met his prior expectations.

The data collected by this survey can be used as a means of improving the scuba diving offer and thus guarantee that L'Estartit continues to be a tourist destination taken into account by visitors wishing to practice this sport. However, it is important to avoid slipping into complacency and the locality should treat these favourable indexes of satisfaction as a stimulus to continue to improve the diving product. Another point is that only by conserving the natural environment will the tourist diving industry be maintained as the divers place interest in nature as the most important reason for choosing to come to the Medes Islands. The key issue lies in being able to combine the economic viability of the businesses that have grown up around scuba diving with the capacity of the Medes Islands to withstand intensive diving expedition so that the natural environment is not damaged. In Sharm-el-Sheik, a tourist destination in Egypt, situated on the Red Sea, the growth in scuba diving that occurred after 1985 proved detrimental to the coral colony of the area (Hawkins & Roberts, 1993) and, in fact, damage to the under water environment also happened in the Medes Islands before the area was protected (Zabala, 1999).

The results obtained by the survey also reveal a high level of satisfaction among divers and this is an important fact, given that the data prove that information regarding the Medes Islands is spread primarily by word of mouth. It is therefore of importance to ensure continued satisfaction among visiting divers. Many of the scuba divers that come to L'Estartit are also known to have dived in other places, such as the Red Sea, the Maldives and the Caribbean. It can therefore be assumed that the Medes Islands are already on the list of interesting places for European scuba divers to visit.

Scuba diving has lengthened the tourist season from 3 to 7 months and has relieved L'Estartit of its excessive dependence on the summer season. Tourist activities have also been diversified to attract new divers who would probably never have come to L'Estartit if it had not been situated near the Medes Islands. This fact is proven by examination of the reasons given by divers for choosing the Medes Islands: rich marine life is put forward by 90 per cent of the interviewees whereas the complementary tourist opportunities were only mentioned by 14 per cent. In other words, when divers choose to come to L'Estartit they are not concerned about complementary activities in which they might participate. In summary, the diversification of the tourist offer has had a positive effect on L'Estartit as a resort. Some authors venture to say that scuba diving represents 7 per cent (Jenner & Smith, 1992, p. 6) or 10 per cent (Mundet, 1998, p. 292) of the total expenditures by visitors to L'Estartit. However, further studies should more systematically analyse the economic repercussions of scuba diving on the L'Estartit tourist industry and demonstrate whether the aforesaid diversification has indeed had such a positive economic effect or whether it is more a question of image.

References


