

NATURE PARK LASTOVO ARCHIPELAGO
VISITORS STUDY

Client: Association Sunce

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CONTENTS

SUMMARY	2
INTRODUCTION	3
1) METHODS OF STUDY	5
2) SOCIODEMOGRAPHIC INFORMATION	7
3) MAIN CHARACTERISTICS OF TRAVEL AND STAY	12
4) ATTITUDES ABOUT THE NATURE PARK	22
5) CHARACTERISTICS AND ATTITUDES OF BOATERS	30
CONCLUSION	38

SUMMARY

- ✓ Aim of study: To define parameters on the characteristics and attitudes of visitors to the Nature Park Lastovo Archipelago, which will be used for planning future development and management of the Park
- ✓ Type of study: Primary
- ✓ Study instrument: Structured questionnaire in four languages (Croatian, English, German, Italian)
- ✓ Data collection methods: Personal interviews with visitors to the Nature Park combined with a self-filling questionnaire
- ✓ Spatial and temporal coverage: June-September 2010, in the Nature Park Lastovo Archipelago
- ✓ Location: Micro-locations within the Park
- ✓ Population: Visitors to the Nature Park who are over 18 and who visited the park in the period June-September (hikers, boaters and tourists located on the island)
- ✓ Sample: Stratified random sample
- ✓ Strata: Months, country of visitors origin
- ✓ Sample size: 399

INTRODUCTION

The study of the visitors to the Nature Park (NP) Lastovo Archipelago was conducted during the summer 2010, at the initiative of the Association for Nature, Environment and Sustainable Development Sunce, within the "MedPAN South Project - Strengthening the network of marine protected areas in Croatia."

The main objectives of the umbrella project are:

- Uphold public institutions of marine protected areas (MPA) in Croatia involved in the project in the gradual development of management plans of their protected areas.
- Enhance the capacity of public institutions involved in the project, about the issues related to the management of marine protected areas.
- Improve the networking of Croatian MPAs and other relevant institutions and their integration into the MedPAN and AdriaPAN networks for the purpose of encouraging the exchange of information, best practices and solutions to problems of MPA management.

Directly involved project partners are the Ministry of Culture, State Institute for Nature Protection and public institutions of national and nature parks that contain a significant sea area - Brijuni, Telašćica, Kornati, Mljet and Lastovo. Coastal county public institutions for the management of protected areas were also indirectly involved in the project.

The Project Coordinator in Croatia is the Association Sunce (Split), that are part of the Regional MedPAN South project coordinated by the office of the Mediterranean Programme Office of the World Wide Fund for Nature (WWF MedPO). It is funded by the European Commission (EuropeAid), Fonds Français pour l'Environnement Mondial (FFEM) and the MAVA Foundation. The Project is conducted in collaboration with the Secretariat of the MedPAN Network and the UNEP MAP Regional Center for Special Protected Areas (RAC / SPA).

The need for a visitors study within the umbrella project was imposed for several reasons. Lastovo Archipelago is located in a developed tourist County of Dubrovnik-Neretva, and it is a site with unspoiled beauty and peace that tourists love to visit. Given that this area was declared Nature Park in 2006, from the environmental point of view it is particularly sensitive. As the number of visitors during summer months increases, the nature park management and Lastovo Archipelago as a tourist destination comes to question in a way to alleviate potential negative impact of tourism on the existing natural and cultural resources, while at the same time to have economic benefits that will enable the revitalization of the local population. In order to facilitate better management of the Park, it is necessary to know the profile of visitors based on the characteristics of their travelling, motives, activities in the park, views of the park and their perceptions about the ecological preservation of the park. Such information is necessary for designing and implementing appropriate development strategy for the design of new products and services to implement effective marketing campaigns and develop a management plan of the flow of visitors.

The first part of the document describes the study methods, followed by the study results, which include socio-demographic data about visitors, such as age, gender, occupation and monthly household income. It is then followed with the main features

of travel and stay of visitors, their motives, means of information and activities in the park. The fourth section lists the views of visitors on certain elements of the offer, their expectations, level of awareness and their assessment of the ecological preservation of the site. The same section states descriptive responses of visitors, both positive and negative. The final part lists the attitudes of boaters, who comprise a significant segment of demand, their vision for preservation of environment and waste disposal issues.

STUDY METHODS

The data were collected by interviewing visitors who stayed in the Park during the peak tourist season, namely boaters, tourists centered on the island and visitors. The main data collection instrument was a structured questionnaire and a personal interview was used for data collection. Interviewing visitors was conducted by the Association Sunce. The questionnaire was made in four languages (Croatian, English, German and Italian).

The questionnaire consists of five elements. After the introductory section, containing identification questions, the second section examines the socio-demographic profile of visitors (country of origin, age, gender, average income, occupation). The third part examines the motivation for visiting the park, features of the arrival and stay in the park, source of information about the facilities of the park, and activities in the park. The fourth part includes satisfaction ratings in the park area, intentions to re-visit the park, assessment of ecological preservation of the sites and visitor attitudes about the positive and negative features of the nature park. The last group of questions is intended for boaters, since they represent a significant segment of the demand at both locations, and other tourists do not meet the criteria.

The study plan included polling of 458 interviewees from six groups of countries, distributed over months as follows: June 21 polling, July 41 polling, August 36 polling and September 15 polling. The sample frame was represented by the data on overnights at Lastovo, as well as information on ticket sales. The achieved percentage of the initial plan was 87% or a total of 399 correct polls, which is considered a very good return. A small number of polls in June reflects the fact that the survey started later than planned. The sample was a stratified random sample, by country of origin and by month. Some data were compared with results of a study "Tourist attitudes and spending habits in Croatia TOMAS-summer 2007" (Institute for Tourism, 2008), "Attitudes and spending habits of boaters in Croatia -TOMAS Nautika 2007" (Institute for Tourism, 2008) and "Attitudes and spending habits of tourists and visitors to national parks and nature-TOMAS National Parks and Nature Parks 2006" (Institute for Tourism, 2007) in order to put the visitors of the Nature Park Lastovo into perspective with other coastal and nautical tourists, and visitors of other protected areas.

Table 1.1. Lastovo Archipelago - planned number of polls

	Jun	Jul	Aug	Sep	Total
Total	65	151	191	51	458
Italy	9	24	78	5	116
Croatia	22	32	35	8	97
Slovenia	6	43	30	12	91
Germany	4	6	7	8	25
Austria	3	5	5	3	16
Other countries	21	41	36	15	113

Table 1.2. Lastovo-generated number of polls

	Jun	Jul	Aug	Sep	Total
Total	4	143	196	56	399
Italy	3	41	71	7	122

Croatia	1	59	41	8	109
Slovenia	0	5	27	15	47
Germany	0	5	12	8	25
Austria	0	6	5	4	15
Other countries	0	27	40	14	81

Data for Lastovo Archipelago were collected at ten locations, and the largest sample of visitors was in the town of Lastovo (28.8%) and Ubli (18,0%), and in coves Pasadur (16.5%) and Skrivena Luka (15,0%).

Table 1.3. Locations of polls

	Number of polls	%
Cove Mihajla	27	6,8
Lastovo	115	28,8
Ubli	72	18,0
Skrivena Luka	60	15,0
Pasadur	66	16,5
Zaklošatica	43	10,8
Jurjeva Luka	10	2,5
Pjevor	1	0,3
Lucica	3	0,8
Velo Lago	2	0,5
Total	399	100,0

The survey was conducted in June-September 2010. The largest number of surveys was completed in August (49.1%) and July (35.8%).

Table 1.4. Period of polling

	Number of polls	%
June	4	1,0
July	143	35,8
August	196	49,1
September	56	14,0
Total	399	100

2. SOCIODEMOGRAPHIC DATA

Sociodemographic data describe the country of residence, age, gender, education level and total monthly household income of interviewees, thus creating the image of a typical visitor to Lastovo.

COUNTRY OF ORIGIN

The largest number of interviewees are from Italy (30.6%), followed by domestic visitors (27.3%) and guests from Slovenia (11.8%), Germany (6.3%) and Austria (3.8%). This structure does not significantly deviate from the scheduled plan of

survey.

Table 2.1. Country of origin

	Number of polls	Percentage
Italy	122	30,6
Croatia	109	27,3
Slovenia	47	11,8
Germany	25	6,3
Austria	15	3,8
Other countries	81	20,3
Total	399	100,0

AGE

The average age of visitors to the park is 38, which means that visitors to the archipelago were somewhat younger than the average tourist who comes to Croatia (mean age 41 years, median 39 years). Data for comparison are taken from the study Tourist attitudes and spending habits in Croatia (TOMAS Summer 2007). The largest group are young visitors who are as old as 29 (32.7%), and those up to 39 years (24.5%). The median is 36 years, which means that the prevailing tourists / visitors are aged 30-39 years.

Table 2.2. Age of interviewees according to age groups

	Number of polls	%
Up to 29	128	32,7
30-39	96	24,5
40-49	82	20,9
50 and over	86	21,9
Total	392	100,0

Table 2.3. Average age

	Arithmetic mean	Std.Dev	Min	Max	Number of polls
Age	38	13	18	78	392

GENDER

The study included slightly more men (52.4%) than women (47.6%), which can be explained by the fact that men were more willing to cooperate.

Table 2.4. Gender

	Number of polls	%
Men	208	52,4
Women	189	47,6

Total	397	100,0
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The following table shows the age difference between male and female interviewees. There were more women than men in the youngest age group (up to 29 years), as well as in the group of 40-49 years.

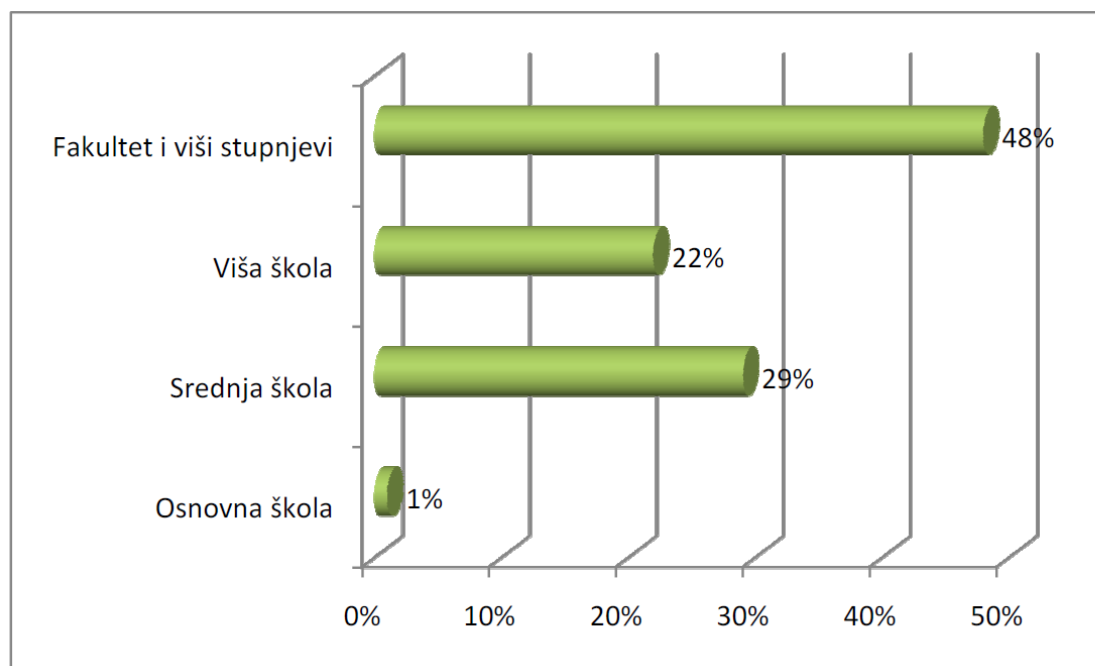
Table 2.5. Age groups according to gender (%)

	up to 29	30-39	40-49	50 and over	Total
Men	27,8	26,3	19,5	26,3	100,0
Women	38,4	22,7	22,2	16,8	100,0

Nearly 70% of interviewees had college or university degree, which means that visitors to the park are more educated than average tourist who comes to Croatia (60% have college or university degree according to the study "TOMAS Summer 2007"), and this is consistent with the general trend of increasing levels of education. Even during summer holidays tourists want to educate themselves about the local culture, customs and natural features of the region they visit, while looking for new and creative approaches to information.

Chart 2.1. Level of education

University and higher degree
College degree
High school degree
Elementary school



MONTHLY INCOME

The largest percentage (29%) of average monthly income of tourists and visitors to the Lastovo Archipelago ranges from 1001 € to 2000 €, and from 2001 € to 3000 €. As expected, the monthly income of domestic households are mostly around up to 1,000 euros a month (39.2%) or 1001-2000 euros (38.1%). Foreign interviewees have greater purchasing power, and they are mostly within the salary scales of 2000 euros and 1.001 and 2001-3000 euro, and even higher salary grades exceed their share of domestic interviewees. According to the study "TOMAS Summer 2007" in all coastal counties, nearly half of the tourists (49%) comes from households with monthly income of 2,000 euros or less, while about a third of guests have the average monthly household income between 2,000 and 3,000 euros. The Dubrovnik-Neretva County stands out with above-average share of guests with monthly household income of 3,000 euros or more (32%). This means that foreign visitors to the park have greater purchasing power than the average for the coastal counties, but slightly lower than the average purchasing power of the Dubrovnik-Neretva county.

CHART 2.2. Monthly income of households

More than 5000 €
 4001 – 5000 €
 3001 – 4000 €
 2001 – 3000 €
 1001 – 2000 €
 Up to 1000 €

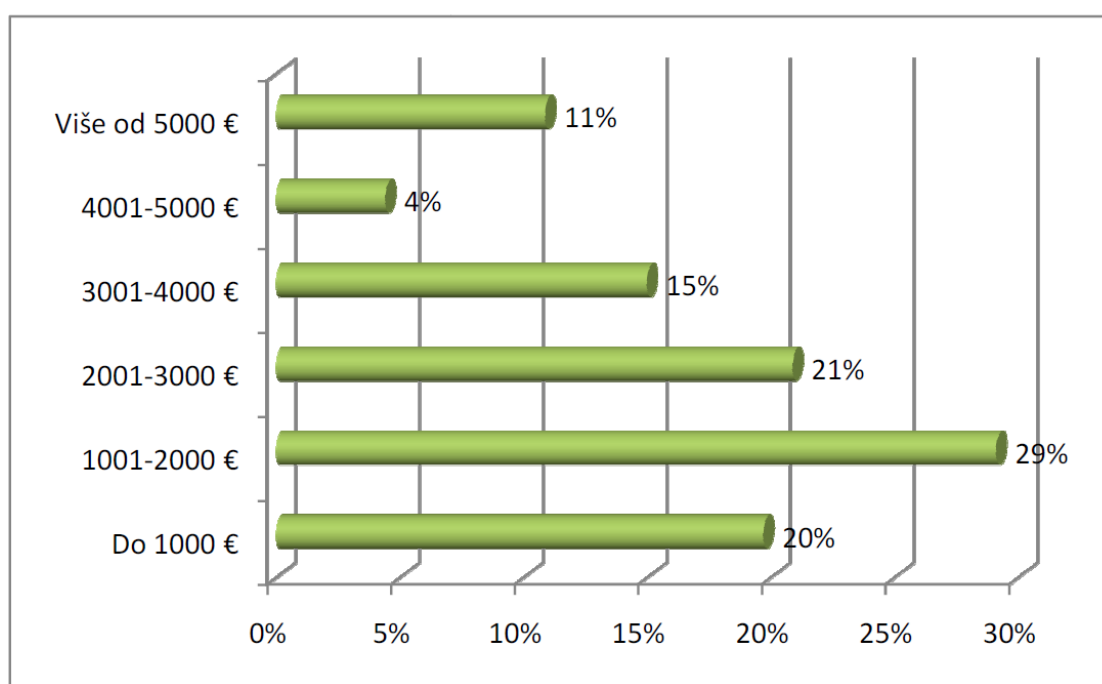


Table 2.6. Monthly income of domestic and foreign tourists

	Up to 1000 €	1001 – 2000 €	2001 – 3000 €	3001 – 4000 €	4001 – 5000 €	More than 5000 €	Total
Domestic	39,2	38,1	12,4	5,2	1,0	4,1	100,0
Foreign	11,9	25,5	24,3	18,9	5,8	13,6	100,0

OCCUPATION

Visitors to the Nature Park Lastovo Archipelago are mostly employed (74.8%), and considering that they are young people there is a large proportion of pupils or students (14.8%). The share of retired people is very small (6.4%), which confirms the lower proportion of elderly guests.

Table 2.7. Visitors' occupations

	Number of polls	%
Employed	267	74,8
Unemployed	14	3,9
Retired	23	6,4
Student	53	14,8
Total	357	100,0

3. MAIN CHARACTERISTICS OF TRAVEL AND STAY

ACCOMMODATION

Since the majority of interviewees had previously visited the island of Lastovo, the next question was about the type of accommodation. Besides boaters, who stayed on board (26.4%), the largest group of visitors stayed in private accommodation (35.3%) or at a hotel (14.4%). About 10% of tourists stayed with friends or relatives, 6.7% in a camp and 6.1% in their own accommodation. Visitors to the park more often stay in private accommodation in relation to the average of the coastal counties (26.5% according to the TOMAS Summer 2007), what is a direct consequence of a limited accommodation offer on the island.

Table 3.1. Type of accommodation

	Number of polls	%
Hotel	52	14,4
Private accommodation	127	35,3
Camping site	24	36,7
Boat	95	26,4
Owned accommodation	22	6,1
Relatives/friends	39	10,8
Other	1	0,3
Total	360	100.0

The data showed that the majority of interviewees stayed in the Park overnight (93.6%), and only a small part of them at the time of the study was in transit or on a trip (6.4%). Interviewees on average stayed in the Park for 8 nights, and the median was 7 nights. The largest number of tourists was in the group of those who have stayed 4-7 nights (31.8%), followed by 1-3 nights (27.6%), and 8-14 nights (23.6%). As for those that Lastovo was not a main destination for travel, they spent 12 hours on average on a trip or in transit, but most frequently 10 hours. These data suggest that guests stay in the park for shorter period than the average for coastal counties (9 nights). If we observed the length of stay by type of accommodation, it is evident that guests stay the longest in their own house (70% with more than 15 nights) and with friends and relatives (34% with more than 15 nights). Guests at the hotel, private accommodation and camping generally stay 4-7 days, boaters usually stay 1-3 days (76%).

Table 3.2. Tourists and visitors

	Number of polls	%
Tourists	365	93,6
Visitors	25	6,4
Total	390	100,0

Table 3.3. Number of nights

	Number of polls	%
1 – 3	91	27,6
4 – 7	105	31,8
8 – 14	78	23,6
15 – 21	31	9,4
22 and more	25	7,6
Total	330	100,0

Table 3.4. Number of nights by accommodation establishment

	Hotel	Private accommodation	Camping site	Boat	Owned accommodation	Relatives / friends
1 - 3	10,2	18,1	4,2	75,6	0,0	10,5
4 – 7	51,0	32,8	62,5	14,1	5,0	31,6
8 – 14	34,7	31,9	29,2	2,6	25,0	23,7
15 – 21	2,0	12,9	0,0	6,4	20,0	15,8
22 and more	2,0	4,3	4,2	1,3	50,0	18,4
Total	100,0	100,0	100,0	100,0	100,0	100,0

Table 3.5. Average number of nights

	Arithmetic medium	Std.Dev	Min	Max	Number of polls
Number of nights	8	5,8	1	30	314

Table 3.6. Average number of hours of stay for day visitors

	Arithmetic mean	Std.Dev	Min	Max	Number of polls
Number of hours	12	6,3	4	23	19

JOURNEY ACCOMPANIMENT

One third of the visitors travelled with friends/acquaintances (33.3%), and almost the same number of interviewees came to the park only with a partner (30.3%), which can be explained by the fact that a large proportion was young population. A quarter of the guests came with a family member, while only 1.3% of interviewees came as a part of an organized group. Visitors to the park, regarding their accompaniment, do not vary much from the rest of the Dubrovnik-Neretva County, where guests typically come with a partner (43%).

Chart 3.1. Accompaniment on the journey

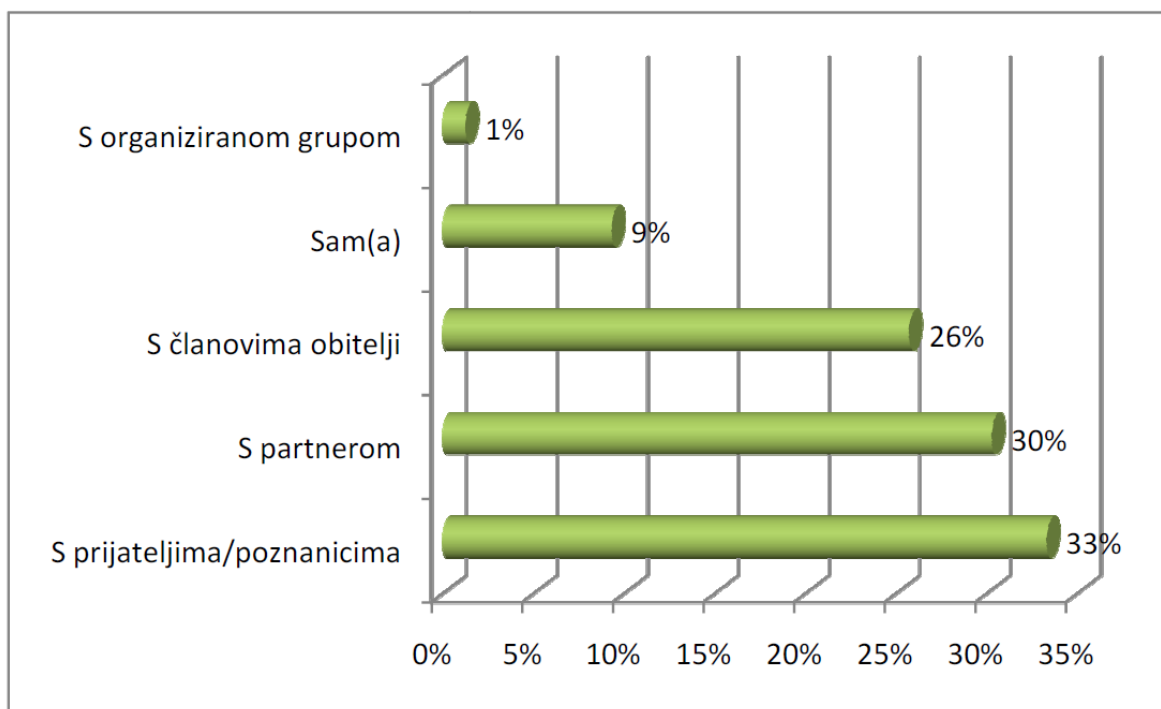
Organized group

Alone

With family

With partner

With friends/acquaintances



FREQUENCY OF VISITS

Following questions attempt to examine how loyal tourists and visitors of Lastovo are, and how frequently they visit Croatia, Lastovo Archipelago and the location where the study was done. Most of the interviewees had been several times in Croatia, but there is a large share of those who came first time, which is in line with global trends, according to which tourists are less loyal to a particular country and destination, and in one trip they want to visit as many places as they can. Lastovo Archipelago has 2.5 times more visitors that come to Croatia for the first time than the Croatian average (18.9%), which is the characteristic of the Dubrovnik-Neretva County (according to the study TOMAS Summer 2007, it stands out with by far the largest share of new guests). A similar situation is with visiting the island of Lastovo, with slightly more than half of interviewees in their first visit (52.2%), followed by those who have visited Lastovo Archipelago four or more times (25.4%). As for the location where the study was done (cove Mihajla, Lastovo Ubli, Skrivena Luka, Pasadur, Zaklopatica, Jurjeva Luka, Pjevor, Lučica, Velo Lago), almost 60% of interviewees were for the first time at each location, and then follow the loyal guests who have visited the site four or more times (24.9%). Guests are mostly loyal to the locations of Pasadur, Lastovo and Ubli, which have the highest proportion of repeated visits.

Table 3.7. Number of arrivals in Croatia *, Lastovo Archipelago and the location of polling

	Croatia*		Nature Park		Location	
	Number of polls	%	Number of polls	%	Number of polls	%
First visit	78	25,4	194	52,2	206	59,5
Second visit	52	16,9	55	14,8	45	13,0
Third visit	23	7,5	21	5,6	9	2,6
Four and more visits	154	50,2	102	27,4	86	24,9
Total	307	100,0	372	100,0	346	100,0

*only for foreign tourists and visitors

Table 3.8. Number of arrivals according to locations

	First visit	Second visit	Third visit	Fourth visit and over	Total
Cove Mihajla	68,0	20,0	4,0	8,0	100,0
Lastovo	62,7	5,9	2,0	29,4	100,0
Ubli	60,3	12,7	0,0	27,0	100,0
Skrivena Luka	61,2	24,5	4,1	10,2	100,0
Pasadur	40,4	15,8	1,8	42,1	100,0
Zaklopatica	71,1	10,5	2,6	15,8	100,0
Jurjeva Luka	50,0	12,5	12,5	25,0	100,0
Pjevor	100,0	0,0	0,0	0,0	100,0
Lučica	100,0	0,0	0,0	0,0	100,0
Velo Lago	50,0	0,0	50,0	0,0	100,0

MEANS OF TRANSPORTATION

Foreign visitors were asked about their means of transportation in Croatia. Most of the interviewees came by car (31.7%). There is a large proportion of those who came by boat (20.3%) or a sailboat / yacht (23.7%), due to the fact that boaters make a significant segment of interviewees. Plane transport share (11.7%) is slightly lower than the average for the county (according to TOMAS Summer, 2007, 38% of tourists came to the Dubrovnik-Neretva County by plane, and only 0.1% by a yacht or sailboat).

Table 3.9. Means of transportation when arriving in Croatia

	Number of polls	%
Car	103	31,7
Bus	10	3,1
Train	8	2,5
Plane	38	11,7
Boat/ferry	66	20,3
Yacht/sailboat	77	23,7
Some other means of transportation	2	0,6
Combination of means	21	6,5

Total	325	100,0
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ORGANIZATION OF THE JOURNEY

Almost all visitors independently organized their journey (96.9%), while only 3.1% of them organized transport, accommodation or both through travel agents. There are much more independently organized trips than the average for coastal counties (65.7%), and the Dubrovnik-Neretva County (54.4%) (TOMAS Summer 2007, Institute for Tourism).

Table 3.10. Organization of the journey

	Number of polls	%
Organized	12	3,1
Unorganized	371	96,9
Total	383	100,0

TYPE OF JOURNEY

Is the Lastovo Archipelago a primary destination for visitors, or just one of the destinations on a longer journey? For more than half of interviewees (52.1%), Lastovo was the main and the only destination on this journey and for 37.3% of interviewees it was one of the destinations they visited. Lastovo Archipelago was a byway destination on the way to the main destinations for 9.1% of passengers who are in transit, mostly from Italy, and only 1.5% of interviewees were on a day excursion.

Table 3.11. Type of journey

	Number of polls	%
Main and only destination	207	52,1
Part of a cruise	148	37,3
Transit	36	9,1
Trip	6	1,5
Total	397	100,0

MOTIVES FOR THE JOURNEY

Visitors to the park are primarily motivated by a desire for rest and relaxation (82.2%), sunbathing and swimming (45.9%) and learning about places where they come (34.5%), making them typical resort guests. Getting to know the local cuisine is one of the main motives for 16.0% of nature park visitors and exploring the culture and traditions for 14.7% of them. Motives for coming to the Lastovo Archipelago were similar to the motives in other coastal destinations, where rest and relaxation comes in the first place (61.6%), and guests of the Park are motivated less than the average with getting to know the local cuisine, and are more interested in exploring tradition and culture (9.8% of Croatian visitors according to the TOMAS Summer survey). If

we compare visitors to the archipelago with visitors to other nature parks, they are more motivated to rest and relax, rather than learning about the park, which is very probably due to the fact that a large number of tourists is not sufficiently informed. Thus, the primary motive to visit national parks and nature parks (TOMAS National Parks, 2006) is to enjoy the natural beauty (49.8%) and explore the park (47.6%), while rest and relaxation comes to the third place (28, 9%).

Table 3.12. Motives for the journey *

	Ranking	%
Rest and relaxation	1st	82,2
Sunbathing and swimming	2nd	45,9
Learning about the park	3rd	34,5
Learning about the local cuisine	4th	16,0
Learning about tradition and culture	5th	14,7
Visiting friends/relatives	6th	12,9
Diving	7th	7,9

*More than one answer

SOURCES OF INFORMATION

Information about tourist attractions of the Nature park Lastovo Archipelago, are collected from multiple sources, mostly on the Internet (46.8%), and are based on recommendations from friends and relatives (43.2%). Important source of information are brochures, ads and posters (29.3%), and published travel guides (12.3%). Certain number of visitors did not need additional information, because they all learned during the previous stay. Since more and more tourists organize their travel independently and retrieve information via the Internet, the share of media and recommendations from travel agencies is smaller. Guests of the Dubrovnik-Neretva County otherwise excel in comparison to the average Internet use (37% in the county, compared to 29% for Croatia to the TOMAS Summer 2007)

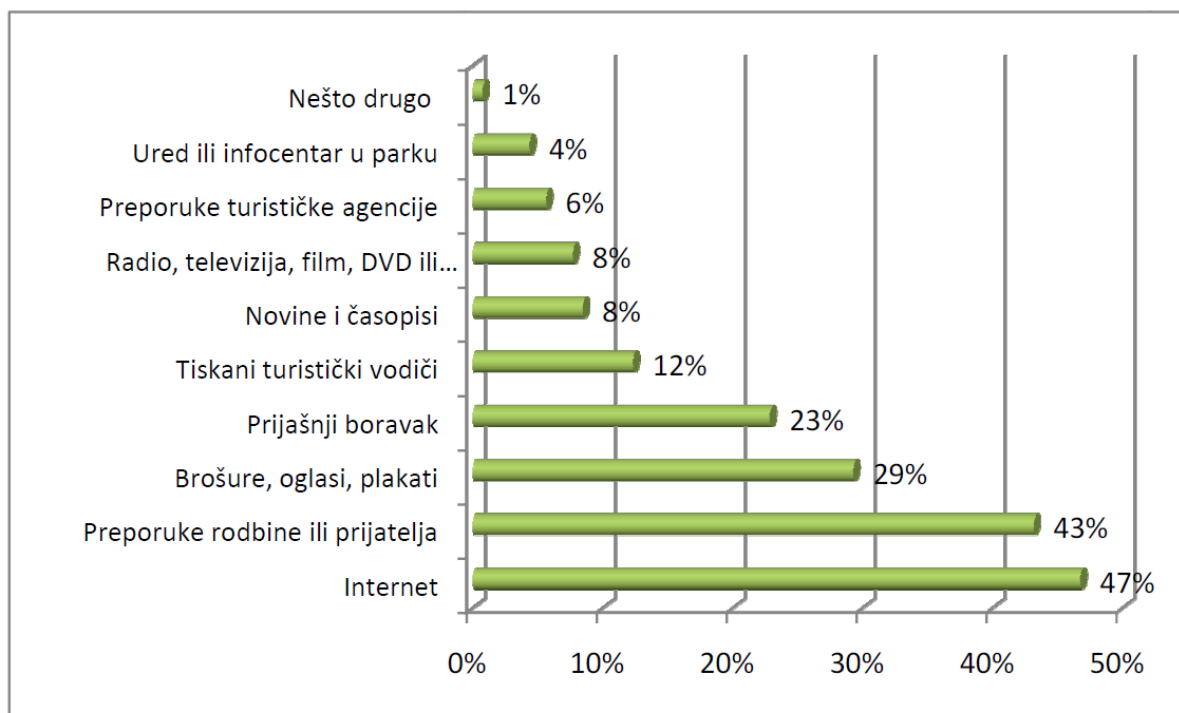
Table 3.13. Sources of information *

	Ranking	%
Internet	1st	46,8
Recommendations from family/friends	2nd	43,2
Brochures, boards, posters	3rd	29,3
Former visit	4th	22,9
Travel guides	5th	12,3
Newspapers and magazines	6th	8,5
Radio, TV, film, DVD or video	7th	7,7
Recommendations from travel agency	8th	5,7
Information office or centre in the park	9th	4,4
Other	10th	0,8

*More than one answer

Chart 3.2. Sources of information

Other
 Information office or centre in the Park
 Recommendations from a travel agency
 Radio, TV, film, DVD or...
 Newspapers and magazines
 Published travel guides
 Previous stay
 Brochures, ads, posters
 Recommendations from friends or relatives
 Internet



ACTIVITIES IN THE NATURE PARK

More than 80% of interviewees are engaged in activities that are common in summer months, such as swimming and sunbathing. Hiking is another popular activity for tourists and visitors (46.4%), followed by visiting restaurants (45.9%) and trips (22.1%). According to similar studies in Croatia and Europe, tourists are increasingly active, and want to participate in the life and activities of local communities (traditional crafts, agriculture, fishing). Visitors to the park visit restaurants a little less than the average (87% for the coastal counties). Activities in the Lastovo Archipelago are different from other nature parks activities, because visitors are more focused on activities typical of coastal destinations, and not those of protected areas. According to the study TOMAS National Parks 2006, the main activities of visitors in protected areas were photography (83.5%), visits to restaurants (37.6%) and visit to the info-point (31.0).

Table 3.14. Activities in the Nature Park *

	Ranking	%
Swimming/sunbathing	1st	80,7
Hiking	2nd	46,4
Visiting restaurants	3rd	45,9
Excursions	4th	22,1
Snorkeling	5th	21,6
Shopping/souvenirs	6th	17,0
Other sports activities	7th	16,0
Visiting info point or travel office	8th	9,5
Fishing from shore/boat	9th	8,8
Scuba diving	10th	7,0
Other	11th	4,0
Undersea fishing	12th	2,8

*More than one answer

4. ATTITUDES ABOUT NATURE PARK

Interviewees were asked to evaluate a total of fourteen elements of the natural park graded from 1 (very poor) to 5 (excellent). Evaluated elements included: availability of information about the Nature Park, quality of transport, quality of marking attractions, cleanliness of the Park, offer in the Park and ticket price. Guests evaluated the Nature Park with an average grade of 4.0. Very high grades (sum score excellent and very well more than 80%) were given to the beauty of nature and clear sea and coast, and high marks were given to the hospitality of the workers and the general cleanliness of the park. Guests were slightly less satisfied with restaurants and quality of highlighting attractions, while very low levels of satisfaction (sum score of very good and excellent is less than 20%) were showed to the access of information about the park before setting off, the availability of information materials on the site (brochures, maps), transport and connectivity of the island sites, hiking trails, shop offer and the entrance fee for the Park. Elements with an average score 3.0 and below should be the base for improving services and facilities in the park.

Table 4.1. Degree of satisfaction with the offer in the nature park

Beauty of the landscape/attractiveness	Very high
Clean sea and shore	
Hospitality of employees	High
Clean environment of the Park in general	
Restaurant offer	Medium
Quality of marking attractions	
Availability of information before departure	Low
Availability of informative materials at the location (brochures, maps)	
Traffic connections to	

the island	
Quality of transportation on the island	
Hiking paths in the Park	
Shop offer	
Ticket price for the Park	

Interviewees gave worse grades, compared to other nature parks (according to study TOMAS National Parks, 2006), to the quality of hiking trails, the quality of transportation in the park and places to eat, and were equally satisfied with the beauty of landscape, the hospitality of workers and the cleanliness of the park in general. In the Lastovo Archipelago and other national parks/nature parks visitors have expressed their dissatisfaction with the availability of information about the park before arriving at the location, range of shops and ticket price.

Table 4.2. EVALUATION OF NATURE PARK

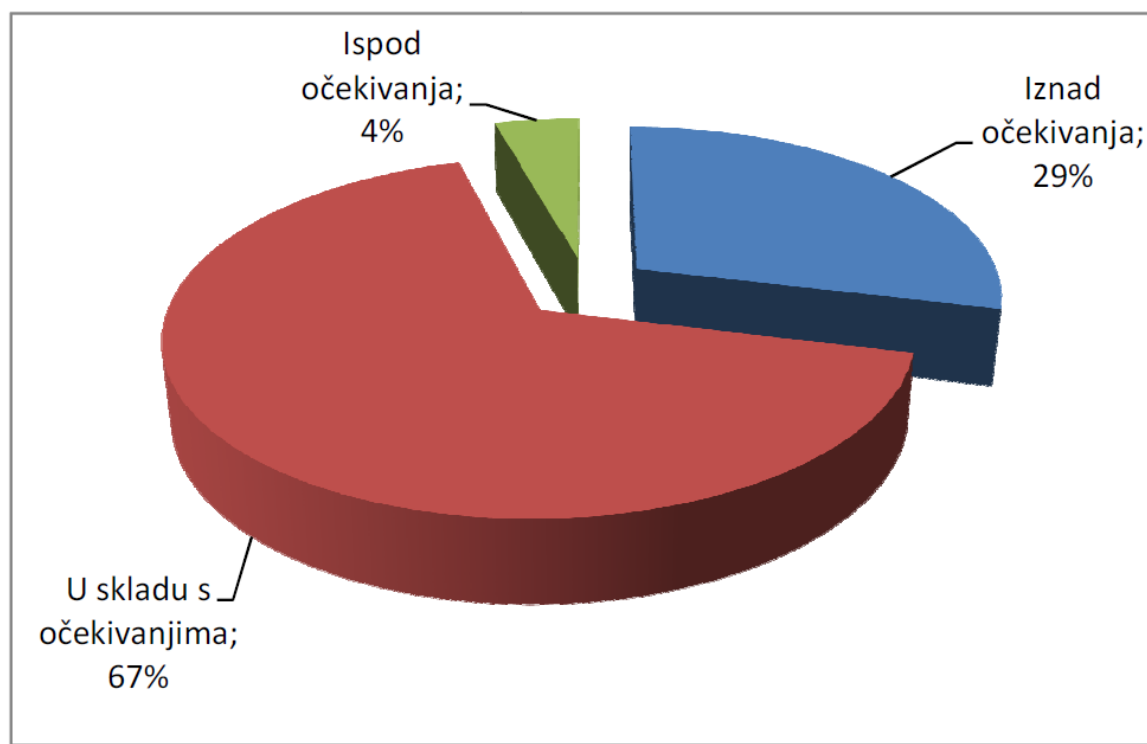
	Very good or excellent (%)	Average grade
Availability of information about the Park before departure	24,3	2,8
Availability of informative materials at the location (brochures, maps)	29,1	3,0
Travel connections to the island	26,8	3,0
Quality of transportation on the island	25,8	3,0
Hiking paths in the Park	39,3	3,5
Quality of marking attractions	40,6	3,5
Beauty of the landscape/attractiveness	84,2	4,5
Clean environment of the Park in general	66,2	4,0
Clean sea and shore	79,4	4,3
Hospitality of employees	70,9	4,1
Restaurant offer	60,2	3,8
Shop offer	28,8	3,0
Ticket price for the Park	35,1	3,5
Average grade of the Park	67,4	4,0

EXPECTATIONS

For about two-thirds of the visitors, their visit to the Park was in line with expectations (66.9%), and for nearly a third they were above expectations (28.8%). A very small percentage of the visitors failed to meet expectations when visiting the park (4.4%).

CHART 4.1. Expectations

Below expectation 4%
Above expectations 29%
According to expectations 67%



INFORMEDNESS OF VISITORS

More than half of visitors (52.4%) were informed about the uniqueness and values of Lastovo as a nature park, although they had previously expressed dissatisfaction with the lack of information materials. Interviewees are slightly poor informed about the rules of behavior within the park (43.1%) and territory and boundaries of the park (42.9%). The visitors were poorly informed about endangered species /habitats, penalties for inappropriate behavior within the Park and contact phones for emergency or contaminating flora and fauna in the Park (less than 35% of interviewees). In some future study it would be interesting to examine visitors' perception about the extent of high awareness rating, and how many of them are really informed about the specifics of the park.

Table 4.4. Informedness about the nature park

	Yes	No	Total
Particularities/values of the Nature Park	52,4	47,6	100,0
Endangered species/habitats	34,3	65,7	100,0
Territory/boundaries of the Nature Park	42,9	57,1	100,0
Rules of conduct inside the Park	43,1	56,9	100,0
Penalty for inappropriate behaviour in the Park	31,8	68,2	100,0
Contact numbers in case of danger or endangering flora and fauna in the Park	27,6	72,4	100,0

ASSESSMENT OF SITE'S ECOLOGICAL PRESERVATION

Interviewees evaluated the ecological preservation of the visited sites, while 17 interviewees did not visit any of these locations. Environmental preservation is assessed according to perceptions of visitors about the location, which includes cleanliness of the location and devastation of the landscape, i.e. subjective feeling of (un) attractiveness. Top marks were given to Saplun (53.9%), Lastovo (51.3%) and Skrivena Luka (49.4%). More attention about ecological preservation should be paid to the locations Jurjeva Luka (15% poor rating), Ubli (21.2% poor rating) and Zaklopatica (14.9% poor rating).

Table 4.5. Ecological preservation of sites (%)

	Poor	Good	Excellent	Total
Ubli	21,2	61,4	17,3	100,0
Jurjeva luka	15,0	57,7	27,3	100,0
Malo Lago-Pasadur	9,0	46,1	44,9	100,0
Zaklopatica	14,9	39,6	45,5	100,0
Lastovo	2,3	46,4	51,3	100,0
Lučica	2,3	51,2	46,5	100,0
Skrivena Luka	5,2	45,4	49,4	100,0
Islet Saplun (Mladine)	11,2	34,9	53,9	100,0

COLLECTION OF INFORMATION DURING THE STAY

Just over half of the interviewees (51.4%) learned during their stay something new about the biodiversity and specifics of the Nature Park. In future studies it would be interesting to examine in what way they got informed.

Table 4.6. Information on biodiversity and values of the Park

	Number of polls	%
Yes	202	51,4
No	191	48,6
Total	393	100,0

REVISITING

When asked if they plan to come and stay in the Nature Park again, the majority of interviewees (88.3%) responded positively.

Table 4.7. Planning to revisit

	Number of polls	%
Yes	347	88,3
No	35	8,9

Total	382	97,2
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POSITIVE AND NEGATIVE ATTITUDES

Nearly 50% of visitors gave positive comments, what tells us that guests develop attachment to the site they visit. The total of 197 positive comments from the interviewees is grouped into several thematic groups. The greatest number of positive attitudes is related to the beauty of nature and the environment (67%). Visitors were impressed by the clean sea, beautiful and diverse landscape, unspoiled and pristine nature, peace and quiet (13.2%). The hospitality of the local population (11.7%) and cuisine (4.1%) were also positively assessed. When asked what they liked most on Lastovo, some of the descriptive comments were "The island is remote and unspoiled, perfect for rest and relaxation", "Chirpping of crickets, view at the yachts, the town of Lastovo, stone houses," "Natural beauty , people, sea, "" The ambience of the island that offers holidays in peace and relaxation, nature and hospitality of the locals ".

Table 4.8. Positive attitudes of tourists

	Number of polls	%
Nature, sea, ambiance	132	67,0
Peace and quiet, unspoiled environment	26	13,2
Hospitality of local population	23	11,7
Gastronomy	8	4,1
Architecture	7	3,6
Other	1	0,5
Total	197	100,0

In addition to positive attitudes, interviewees were asked to give suggestions about how to improve the organization and offer in the Park. The total of 131 remarks was grouped into six categories. The largest number of complaints related to poor transport links (24.4%), cleaning the sea and shore in some locations-mostly the islet Saprun (22.1%) and more information for tourists (15.3%). Some of the interesting suggestions for improvement were:

"Clean the waste – remove small waste dump, and the big one near the road Ubli-Lastovo"

"Restore old houses, renovate the waterfront, save Mermaid, make camp, organize a Jazz Festival, put labels on trash cans in color, repair phone booths, put up some nice posters, set more waste bins, and those for cigarette butts, repair the roads,"

"Immediately clean the park of asbestos-Pasadur"

"More information available for tourists (billboards, public places); organized walking tours, market local products,"

"There are numerous island's specifics that are under-promoted (chimneys of Lastovo, carnivals, attractive underwater). Consider additional ways to promote the above.

"The connection to the island is very bad, the lines are rare, the price of the ferry is too high"

"Increase the ticket price to enter the park. Residents of Lastovo insufficiently support

the idea that they have a nature park on the island. Park staff should educate the population about the positive sides of a nature park.

"I would introduce cleaning of bathing sites (gravel) from drifted rubbish and syringes in the coves Sv.Mihovil and Skrivena Luka (at least once a week) "

"Clear the access route and mark the path to Jurjev Vrh, clean military tunnels"

Table 4.9. Suggestions for improvements

	Number of polls	%
Better traffic connections	32	24,2
Keeping sea and shore clean	29	22,1
More information for tourist	20	15,3
Greater variety of cultural and entertaining offer	11	8,4
Better offer in shops	11	8,4
Other (better marked roads, more facilities on the beaches, lower prices)	28	21,4
Total	131	100,0

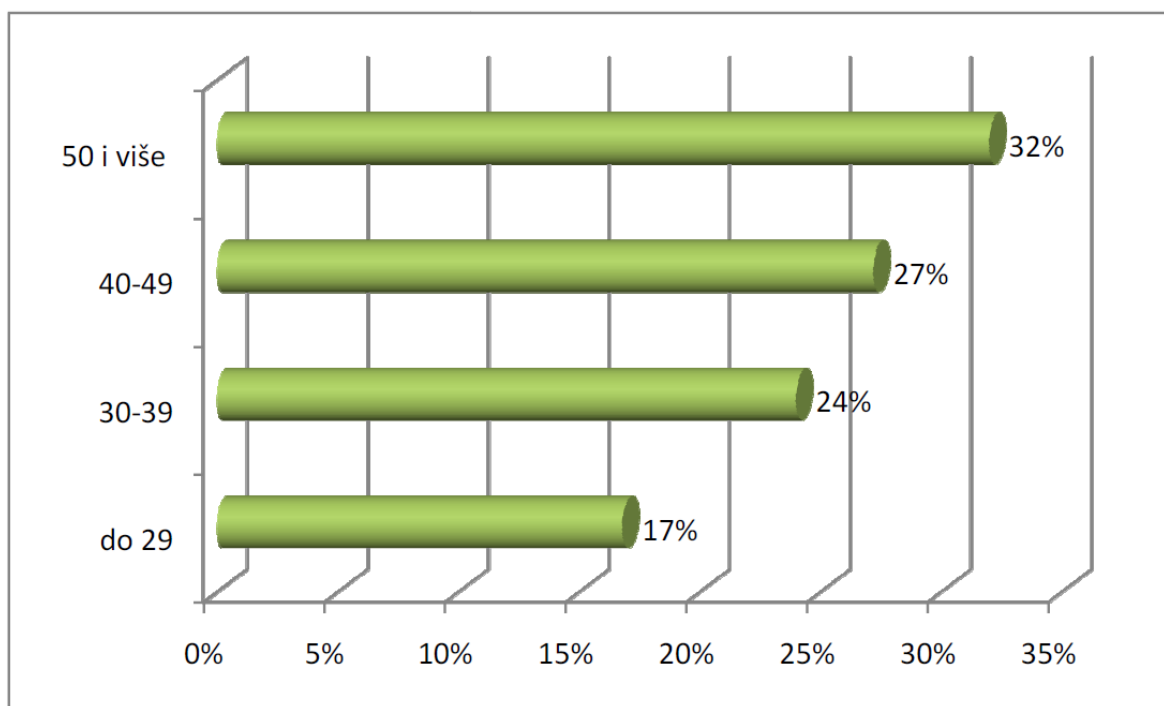
5. CHARACTERISTICS AND ATTITUDES OF BOATERS

One of the goals of the study was to examine the attitudes of boaters who stay within the Nature Park Lastovo Archipelago, and they made slightly less than a third of interviewees. Where possible, the results were compared with a similar study Tomas Nautica (Institute for Tourism, 2007).

Boaters who come to Croatia are on average 44 years old. They were significantly older population than other tourists, but there is a marked increase of boaters aged 26-45 (Tomas Nautika, 2007). A similar situation exists in the park, where the average age of boaters is 43 years and the largest share of boaters are in the age group of 50 and older (32%).

CHART 5.1. Age of boaters

50 and over
40 – 49
30 – 39
Up to 29



In contrast to the total population of tourists, boaters were dominantly men, who make up two thirds of boaters (66.7%).

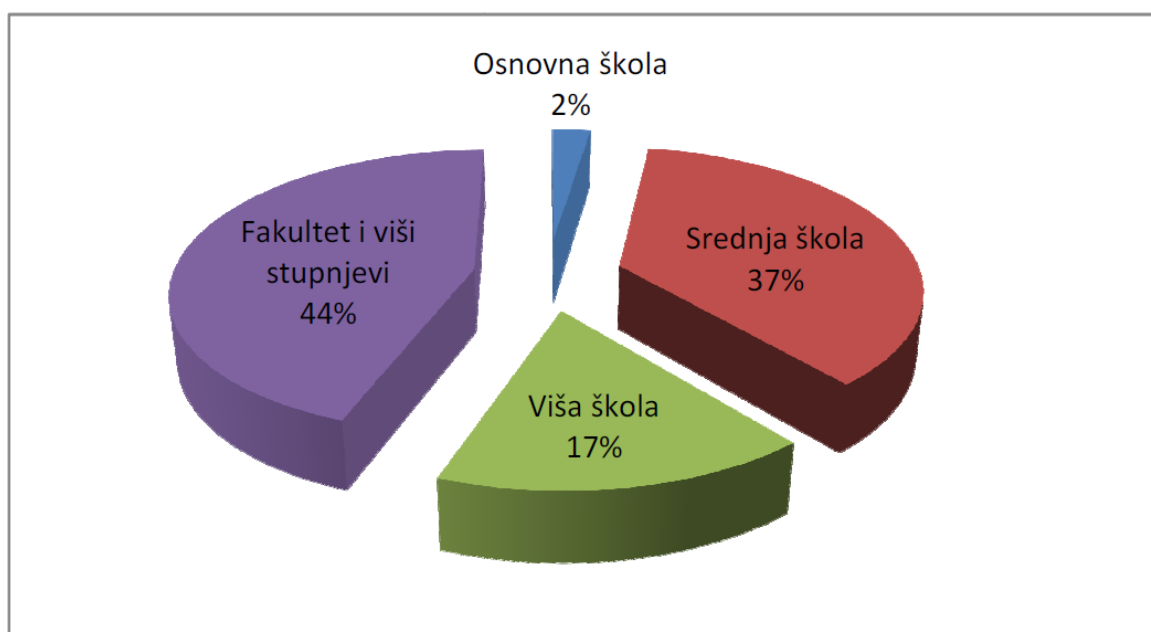
Table 5.1. Boaters by gender

	Number of polls	%
Men	84	66,7
Women	42	33,3
Total	126	100,0

Boaters coming to Croatia are better educated than tourists staying on the mainland, and over 50% of them have university or higher education (Tomas Nautika, 2007). The highest percentage of boaters arriving to Lastovo also had higher education (44%).

CHART 5.2. Education of boaters

Elementary school 2%
 High school 37%
 College 17%
 University and higher 44%



Boaters have higher average incomes than the total population of tourists who visit Lastovo, i.e. there are fewer in the group receiving up to 1,000 euros (13.4% compared to 19.7%) and significantly higher in the group above 5,000 euros (23.7% compared to 10.9%).

Table 5.2. Average household income of boaters

	Number of polls	%
Up to 1000€	13	13,4
1001 - 2000€	30	30,9
2001 - 3000€	15	15,5
3001 - 4000€	12	12,4
4001 - 5000€	4	4,1
5000€ and more	23	23,7
Total	97	100,0

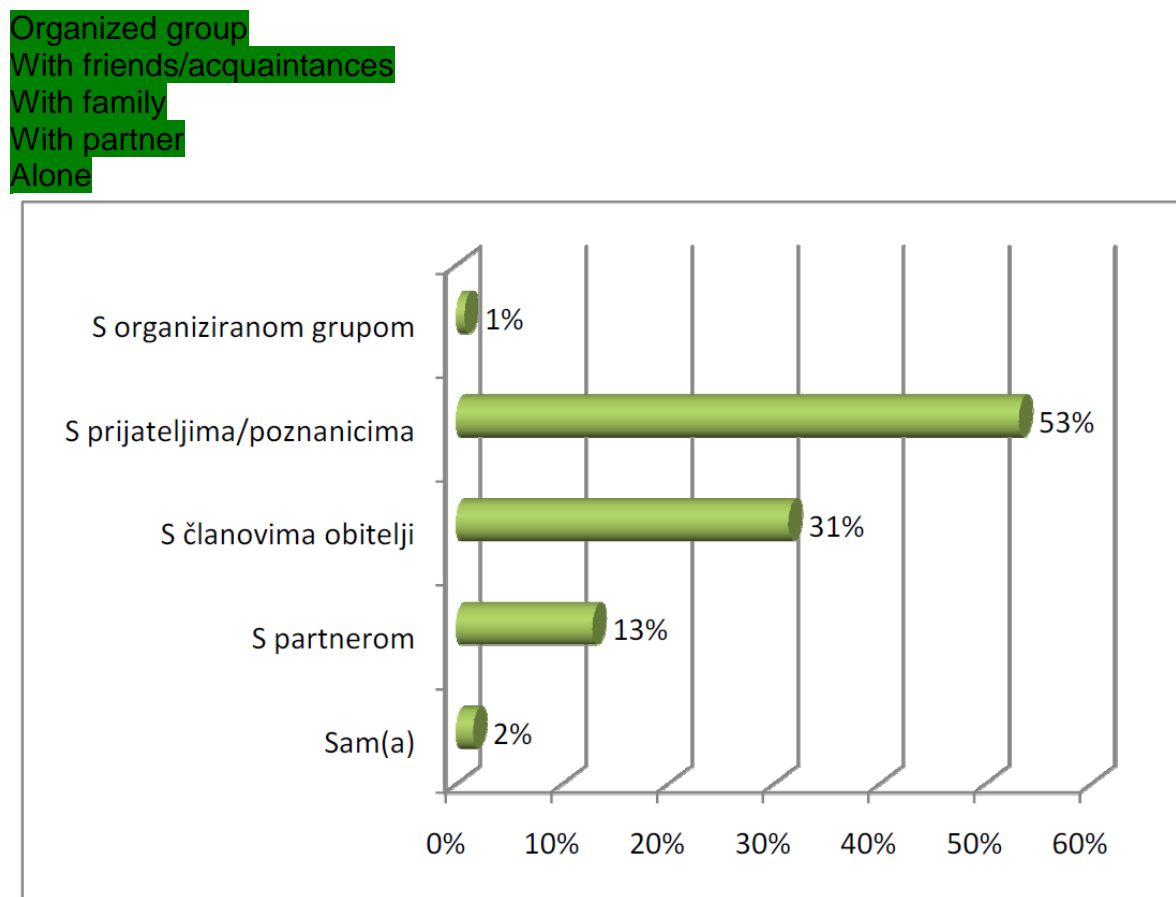
Among the boaters there are more employed (83.3%) and retired (11.1%) tourists than among other tourists, and there is a smaller proportion of unemployed and students, which is consistent with the fact that boaters are somewhat older than other tourists, and therefore have higher incomes.

Table 5.3. Occupation of boaters

	Number of polls	%
Employed	90	83,3
Unemployed	1	0,9
Retired	12	11,1
Student	5	4,6
Total	108	100,0

Boaters who come to the park usually travel with friends/acquaintances (53%) or with family (31%), and a very small percentage comes from an organized group (1%).

CHART 5.3. Accompaniment of boaters



The largest number of interviewees was on sailboats (49.6%) and yachts (35.2%), 11-20 m long (60%). The average length of vessels was 12.1m.

Table 5.1. Number of boaters

	Number of polls	%
Boaters	126	31,6
Other	273	68,4
Total	399	100,0

Table 5.2. Type of vessel

	Number of polls	%
Speedboat	15	12,0
Sailboat	62	49,6
Yacht	44	35,2
Other	4	3,2

Total	125	100,0
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CHART 5.3. Length of vessel

Over 20m
11 – 20m
7 – 10m
0 – 6m

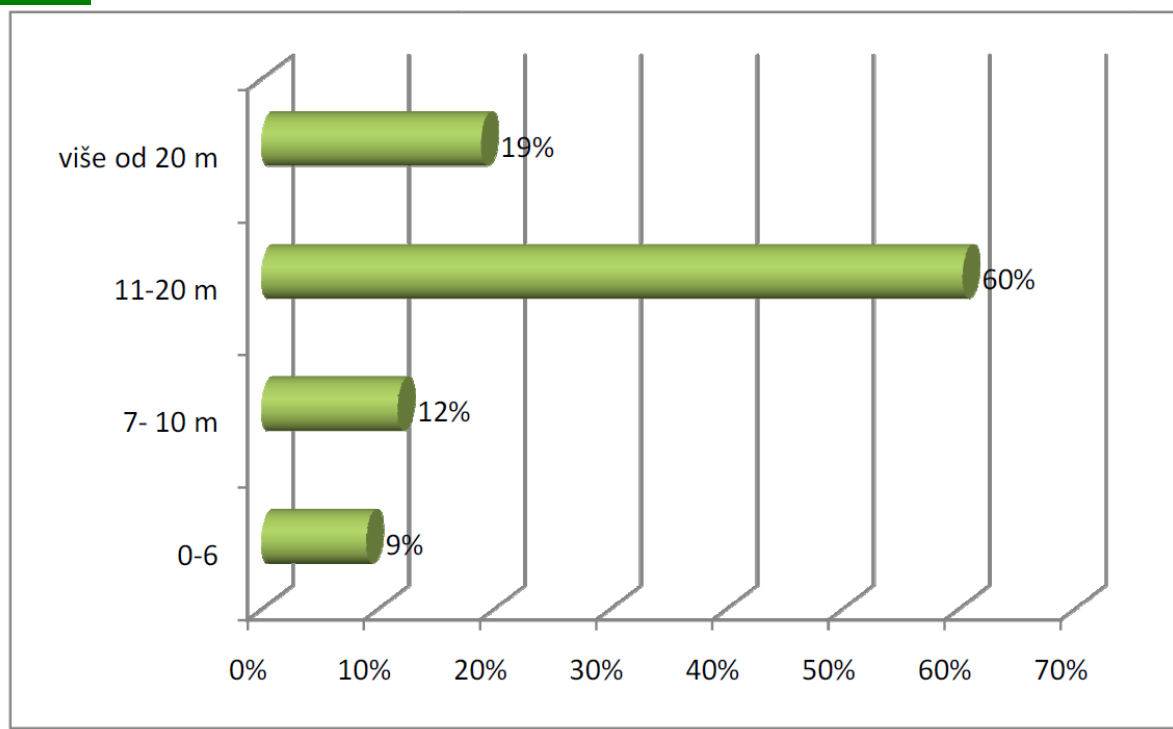


Table 5.4. Average length of vessels

	Arithmetic medium	Std.Dev	Min	Max	Number of polls
Length of vessel	12,1	15,3	3,8	66,5	111

In half the cases there were up to 5 persons on board and in 42.2% there were 6 to 10 people. On average, there were 8 people aboard. This is more than the Croatian average, because according to the study Tomas Nautika, 2007, there were on average 5 persons aboard, and the proportion of vessels with 6 or more persons was 34.5%.

Table 5.5. Number of persons on board

	Number of polls	%
1 – 5	58	50,0
6 – 10	49	42,2
More than 10	9	7,8
Total	116	100,0

Table 5.6. Average number of persons on board

	Arithmetic medium	Std.Dev	Min	Max	Number of polls
Number of persons	8	7,1	2	28	116

Vessels coming to the park are mostly privately owned (72.4%) and charter boats made up less than a third of vessels (27.6%).

Table 5.7. Owned vessels

	Number of polls	%
Owned by the interviewee/by friend/by relative	89	72,4
Charter	34	27,6
Total	123	100,0

In the coves and on the beaches that the boaters visited, they usually did not notice floating debris (77.1), but at the anchorage they were usually disturbed by the noise of other boats (37.7%), followed by a variety of waste (18.9%), noise from other sources (17.0%) and fuel stains (11.3%).

Table 5.8. Floating debris

	Number of polls	%
Yes	27	22,9
No	91	77,1
Total	118	100,0

Table 5.9. Disturbances at the anchorage

	Number of polls	%
Fuel stains	6	11,3
Other waste	10	18,9
Noise from other boats	20	37,7
Noise from other sources	9	17,0
Other	8	15,1
Total	53	100,0

Boaters usually dispose of waste in containers on the island (65.8%), and to a lesser extent when they pay for docking or anchoring (13.3%) or when they return to the mainland or to some bigger place (12.5%).

Table 5.10. Disposal of waste

	Number of polls	%
At anchoring/docking	16	13,3
In waste containers on island	79	65,8
In restaurant facilities	1	0,8
Upon returning to land	15	12,5
Other	9	7,5
Total	120	100,0

The ratio of those on board who sort waste and those who do not is almost equal, but somewhat higher percentage of interviewees said they did not sort waste (51.8%). Interviewees rated the waste disposal service with grades from 1 (very poor) to 5 (excellent). Waste disposal services in the Park were rated 3.0, and as many as 32.8% of interviewees consider these services very poor and poor.

Table 5.11. Sorting of waste

	Number of polls	%
Yes	53	48,2
No	57	51,8
Total	110	100,0

Table 5.12. Waste disposal services

	Number of polls	%
Very poor	6	5,5
Poor	30	27,3
Good	44	40,0
Very good	23	20,9
Excellent	7	6,4
Total	110	100,0

More than half of interviewees leave mooring/anchorage on a daily basis or occasionally and there is a large number of those who are in transit on their way to the main destination (37.4%). Interviewees who leave the anchorage and go to attractive coves and beaches mostly do not face the crowds (55.3%).

Table 5.13. Leave the port / anchorages

	Number of polls	%
Daily	33	28,7
Occasionally	30	26,1
Not leave anchoring/docking	9	7,8
In transit	43	37,4
Total	115	100,0

Table 5.14. Crowds in attractive locations

	Number of polls	%
Yes	51	44,7
No	63	55,3
Total	114	100,0

When asked how to arrange the mooring fee process, most boaters said that there should be the possibility of free anchoring/docking without control or paying fee (55.3%).

Table 5.15. Billing anchoring/docking

	Number of polls	%
Set up more docking places and charge them	51	44,7
Leave possibility of free anchoring	63	55,3
Total	114	100,0

CONCLUSION

A typical visitor to the Nature Park Lastovo Archipelago is a young person, with college or university degree and medium or higher purchasing power. They mostly visit the Park looking for rest and relaxation in the classical form of sunbathing and swimming. Guests usually come based on information received via the Internet and printed publications, from which it can be concluded that the written interpretation of the archipelago in terms of heritage description, tourist service on the island and service information are of great importance.

Boaters, as a special segment of the demand, are on average older, better educated and with higher purchasing power than other tourists. They usually travel with family or friends on their own boat. On average, the park is visited by larger boats with larger number of crew members.

An important role in informing is recommendation from friends and relatives, which means that comments and recommendations included in the questionnaire must be seriously taken into consideration. The guests were unhappy with the information available prior to departure and on location, ticket price and hiking trails. Regarding the functioning of the park, the poorest is the visitors' awareness about endangered species / habitats, penalties for inappropriate behavior within the park and contact phones for emergency or endangering flora and fauna in the park. These topics can be easily translated into specific stakeholders' actions or projects (park management, community and county tourist board, local government, county office for nature, etc.

Some significant effort should be made in the direction of developing heritage interpretation. For the Park, this means the possible use of existing materials from e.g. SINP and research of existing works in popular (National Geographic, Meridians, Geo, etc.) and scholarly sources (articles, theses, seminars, etc.).

Traffic connection to the island represents opportunities for private initiative in the form of seasonal taxi. Highlighted problems from the guests' point of view are municipal waste disposal issues which, in the form of illegal dumps or minor beach pollution, spoil the impression of cleanliness and create additional risks.

Main disturbances for boaters are noise and waste, and crowds in attractive coves. This indicates that the saturation of boaters at certain locations in the season has been reached and that care should be taken about how to better manage anchorage, collection services, and distribution of vessels in the coves.

The first step towards addressing these problems is the introduction of more accurate statistics on ticket sales to create an overview of typical movement and stay on the island. This means to keep a daily record of ticket sales and tourist movement

regarding visited sites, length of stay, type of activity and satisfaction with what they saw. In this way, clear information on intensity, type and geographical distribution of tourism pressures could be obtained. In addition, it is important to periodically monitor the attitudes of guests about the occurrences that may affect nature.

The second step would include preparation of a receiving / carrying capacity, with special emphasis on the boats in coves, the number of vessels, and number of people aboard and the dimensions of the vessel. This would result in setting, maintaining and billing anchorage and mooring as well as prohibiting free anchoring in order to protect *Posidonia* and prevent introduction of allochthonous organisms. Studies show that if guests are clearly informed about the reasons for restrictions and charges, they accept the rules and contribute to better use and protection of space.

In order to contribute to sustainable development guidelines, it is extremely important to involve local communities in the whole process and in the following way:

- Enable local population to generate income from tourism while protecting the environment (heritage interpretation, collecting medicinal plants, production of souvenirs, olive production and wine tasting, etc.)
- Give regular information and education to raise awareness and accountability (schools, summer workshops for the public, etc.) and
- Look into their attitudes toward tourism / tourists with the help of Doxy index, focus groups and direct communication.