

## An Analysis on Tourist Behavior in Ecotourism Area: A Case of Shenyang Bird Island, China

Xiao-Ping GU<sup>1,a,\*</sup>, Peng-Fei WANG<sup>2,b</sup>

<sup>1</sup>College of Economics & Management, Shenyang Agricultural University, Shenyang 100866, China

<sup>2</sup>College of Forestry, Shenyang Agricultural University, Shenyang 100866, China

<sup>a</sup>gxpsxsc@163.com, <sup>b</sup>wangpengfei200696@163.com

\*Corresponding author

**Keywords:** Tourist Behavior, Shenyang Bird Island, Suggestion.

**Abstract.** Analysis and study on the characteristics of tourist behavior is very significant for tourism managers to make decision and carry out sustainable tourism as well as government authorities. As the only bird-watching center with natural ecological characteristics, Bird Island, located in Shenyang City, Liaoning Province, is abundant with pristine natural landscapes including forest, shrub, wetland and ponds. This paper analyzed tourists' behavioral attributes, including the demographic characteristics, consumption foci, demand characteristics, and perception of visiting experience of 150 respondents in Shenyang Bird Island, by the methods of questionnaire, observation and in-depth interview. The results of our statistical analysis showed that tourists in Bird Island were different from those in the other common tourism destinations, as for tourist behavior characteristics mentioned above. Finally, based on our findings, some future strategies and directions for the development and promotion of Bird Island tourism are discussed.

### Introduction

For the tourism industry, the development of multi-level and diversified tourism products is closely connected with tourist behaviors, therefore tourist behavior research is very urgent and necessary. Meanwhile, as the subject of tourism activities and phenomenon, the analysis and study on the characteristics of tourist behavior is the main focus for tourism managers and government authorities to make decision and carry out sustainable tourism.

In the last few decades, the literatures on tourist behavior have greatly increased. For travel studies, the goal of a behavior analysis approach is to understand the psychological forces that motivate an individual to go out for traveling, that influence the tourists' decision-making on tourism, and that impact the level of satisfaction with a tourist destination [1]. Tourist behavior analysis is the most important content to carry out sustainable tourism [2]. Some scholar has focused on eco-tourists, and the behavioral approach has been used to study ecotourism and nature destination [3]. Other scholars think tourists prefer to observe wild animals and hike in ecotourism resorts such as national park and expect that they can have opportunities to watch animals up-close. [4-5]. For both pleasure and business trips, the travelers from the different origin tend to give different opinion to shopping and local culture [6]. As far as ecotourism management is concerned, one of the primary challenges is not only to establish a profitable and ecologically sustainable industry but to achieve a satisfying experience for visitor and to raise living standards in the host community [7]. Meanwhile, some scholars believe that the awareness of in-resort environmental practices and satisfying experiences in ecotourism accommodation may lead to reinforcing visitors' favorable environmental attitudes, and thus increasing their interest in further ecotourism experiences [8].

In recent years, Chinese scholars have paid much attention to tourist behavior research from different perspectives. Scholars have mainly focused on the behaviors of different types of tourists, such as the college student tourists [9-11], backpackers [12, 13], self-driving tourists [14, 15], urban holiday makers [16] and resident tourist [17], eco-tourist [18-20], bird-watching tourists [21] and so on. As the only bird-watching tourist area with ecological characteristics in Shenyang City, Liaoning

Province, our knowledge of tourist behaviors of Bird Island is limited.

The primary objective of this paper was to research and analyze tourist behavior characteristics. Secondly, based on the research results, some suggestions concerning the construction and management were put forward to realize sustainable development in Shenyang Bird Island.

### **Site Description and Method**

Bird Island is also named Ganhezi Island, located in the east of Fuling Mausoleum and the south of World Horticultural Exposition, 25 km away from the city center, covering 49.26 km<sup>2</sup>. Bird Island is the only bird-watching center with natural ecological characteristics in Shenyang City, where there are four kinds of pristine natural landscapes, including forest, shrub, wetland and ponds. Wetland covers about an area of 0.1 km<sup>2</sup>, which is the main habitat for wildlife, especially for wading bird species, swimming bird species, onshore birds and passerine birds.

In this paper, questionnaires, in-depth interviews, field observation and other methods were used to tourist surveys. Questionnaire content included the demographic characteristics, demand behaviors, consumptions, perceptions, experiences and other aspects. Most of questions had selective answers, and some problems required respondents to give their own ideas in the questionnaires. In order to ensure validity, one pretest was conducted before the formal questionnaires. The survey was made from May 1st to 15th in 2010. The purposive sampling method was used, and the respondents were the visitors who had a complete travel experience. The samples included groups and individuals, and totally 150 completed usable questionnaires were returned. Furthermore, field observation, track survey and random interview were all used in this paper to record the words and behaviors of tourists and assist the questionnaires.

### **Tourist Behaviors in Bird Island of Shenyang City**

#### **Demographic Characteristics**

The demographic characteristics of tourists in this study included basic information such as gender, age, occupation, level of educational attainment, monthly income, and generating region (Table 1).

From the findings of the investigation, the main tourists were male, but there was no sharp distinction between male tourists and female tourists. The young and middle-aged from 19 years old to 45 years old accounted for 80.7%. White-collars, students, serving, selling and trading staffs were the main part of tourists, which accounted for 50.6% of the total respondents. Many tourists had higher education, and 65.3% of the respondents were the junior colleges or undergraduates and above. The tourists with medium income from 1001 yuan to 5000 yuan were the main part, which accounted for 74.0% of the total respondents. Many tourists were from the nearby area, of which the tourists from Shenyang city accounted for 55.3%.

Table 1, Profile of the respondents

Demographic characteristics	Basic attribute	Frequency (n)	Tourist proportion (%)
Gender	Male	83	55.3
	Female	67	44.7
Age	18 years and younger	7	4.7
	19-30 years	52	34.7
	31-45 years	69	46.0
	46-60 years	13	8.7
	61 years and older	9	6.0
Occupation	Student	27	18.0
	Business staff	23	15.3
	Office-bearer	16	10.7
	Serving, selling and trading staff	26	17.3
	Professional/technical staff	18	12.0
	Soldier	1	0.7
	Worker	18	12.0
	Retiree	17	11.3
	Peasant	4	2.7
	others	0	0.0
Education degree	Junior high school and below	13	8.7
	Senior high school or technical secondary school	39	26.0
	Junior college or undergraduate	75	50.0
	Undergraduate above	23	15.3
Monthly income	1000 yuan and below	30	20.0
	1001-2000 yuan	46	30.7
	2001-3000 yuan	42	28.0
	3001-5000 yuan	23	15.3
	5001 yuan and above	9	6.0
Generating region	Shenyang city	83	55.3
	Surrounding counties and cities nearby Shenyang	52	34.7
	Distant counties and cities away from Shenyang	7	4.7
	Other provinces	8	5.3

### Consumption Foci of Tourists

From Table 2, we can see that the consumption level of the tourists in Bird Island was low and the consumption structure was very single. The tourists with consumption level below 50 yuan were the main part, which accounted for 58.0% of the total respondents, but consumption level above 150 yuan only accounted for 4.0%.

The survey showed that the stay time was very short when tourists travelled in Bird Island, most of them was a half day, which caused low consumption. Meanwhile, because there was only a small store selling souvenirs, bird food and local food, which also resulted in single consumption.

The consumption structure showed that the consumption of the tourists in Bird Island was for buying some local food, which accounted for 29.3%. The proportion of the tourists purchasing bird food was the lowest, which accounted for 22.0%.

Table 2, Consumption behaviors of tourists

Behaviors	Basic attribute	Frequency (n)	Tourist proportion (%)
Consumption level	30 yuan below	45	30.0
	30-50 yuan	42	28.0
	51-100 yuan	32	21.3
	101-150 yuan	25	16.7
	150 yuan above	6	4.0
Consumption structure	Purchasing special souvenirs on the birds	39	26.0
	Purchasing bird food	44	22.0
	Purchasing local food	33	29.3
	Without any consumption	34	22.7

### Demand Characteristics of Tourists

Usually there are a large group of tourists in the Shenyang Bird Island at weekends. From Table 3, we can see that most of respondents travelled together with their families, relatives and friends, which accounted for 74%. There were no tourists organized by the association of bird friends, which showed that the association of Bird Island has not been founded nor had a low popularity in Shenyang. Compared to other cultural attractiveness, the natural scenery in Shenyang Bird Island was relatively attractive to the public. "Spring country walk and relaxation" and "enjoying the quiet atmosphere" were considered to be the main purpose of their tours, which accounted for 78.0%, and "watching birds and learning knowledge" only accounted for a small part, which was 8.7%. This showed that Shenyang Bird Island was only an ecological park with ecological natures in the tourists' eyes, but not a pure preserve for watching bird.

The survey showed that most of the respondents would like to choose some means of transportation, such as self-driving and buses, which accounted for 74.0%. This was accordance with traveler generating region of Shenyang Bird Island, most of tourists came from the nearby area of Shenyang City. Majority of 54.7% tourists knew about Shenyang Bird Island by recommendation of friends and relatives.

Table 3, Demand characteristics of tourists

Demand characteristics	Basic attribute	Frequency (n)	Tourist proportion (%)
Tourist motivation	Enjoying quiet atmosphere	27	18.0
	Spring country walk and relaxation	90	60.0
	Sharing happiness with families and friends	20	13.3
	Watching birds and learning knowledge	13	8.7
Travel mode	Independent outing	21	14.0
	Tour together with families, relatives and friends	111	74.0
	Organization by travel agency	18	12.0
	Organization by association of bird friends	0	0.0
Travel vehicle	Bike	25	16.7
	Bus	51	34.0
	Self-driving	60	40.0
	Taxi	11	7.3
	Train	3	2.0
Information channel	Broadcasting and Tv propaganda	25	16.7
	Newspaper and magazine introduction	16	10.7
	Friends and relatives recommendation	82	54.7
	Website inquiry on watching bird	6	4.0
	Travel agency recommendation	13	8.7
	Tour website introduction	8	5.3
	Others	0	0

## Perception of Visiting Experience

Tourists' comments on Bird Island was at the higher level, about 94.7% of the respondents were satisfied with Bird Island. The survey also found that tourists coming to Bird Island in the first time accounted for 66.0%, most of them had visited there two or three times. As for the intension to return, about 48.7% of the tourists would like to revisit in the future, while those unwilling to return again only accounted for 4.7%, which suggested that Bird Island had a higher attractiveness to many tourists. About 54.7% of the total respondents thought that the present ticket price could be accepted and was more reasonable, but 45.7% of the tourists advised it would be reasonable when the ticket price was from 15 to 20 yuan (Table 4).

In addition, by the observation and interviews with the tourists it was found that the whole environment in Bird Island was satisfactory to the respondents, but they felt dissatisfaction in the aspects of the types and quantities of the birds, interpretation, tourist activities and so on. The survey also showed that 46% of the tourists visited Bird Island together with their children, so they hoped that more tourism projects should be designed to meet the needs of children' experience and preference.

Table 4, Perception of visiting experience of tourists

Perception characteristics	Basic attribute	Frequency (n)	Tourist proportion (%)
Overall satisfactory degree	Very satisfied	5	3.3
	Satisfied	55	36.7
	Somewhat satisfied	82	54.7
	Dissatisfied	8	5.3
Intension to return	Extremely willing	6	4.0
	Willing	67	44.7
	Uncertain	70	46.7
	Unwilling	7	4.7
Ticket price	More reasonable	82	54.7
	Very expensive	68	45.3

## Conclusion and suggestions

### Conclusion

This study shows that tourists in Bird Island are different from those in the other common tourism destinations. The main tourists were male, but there was no sharp distinction for gender, and generally tourists were youngers and the middle-aged, well-educated, most of them were white-collars, students, serving, selling and trading staffs with medium income. The consumption level of the tourists in Bird Island was low and the consumption structure was very single, so souvenir with typical characteristics should be designed and developed. Most of tourists like accompanying by self-driving and buses during their travelling. The main purpose of the tourists was not watching birds and learning knowledge, which suggested that Bird Island didn't play an important role in its bird-watching, ecological and educational function. Tourists' total evaluation to Bird Island was at the higher level, but the scenic area still has a long way to go in the types and quantities of the birds, interpretation, tourist activities and so on.

### Suggestions from Perspective of Tourist Behavior

#### *To Take Advantage of the Location, Improving the Traffic Conditions*

Good geographical location is a prerequisite for the development of tourism. Convenient public transport brought the bulk of passengers for Bird Island, but public transport available in peak season such as weekends was unable to meet the tourist demand. There is only a 6.5-meter-wide road in front of the gate of the Bird Island, during the May Day; large numbers of tourists are detained at the gate because of overcrowded vehicles. Improving the accessibility of public transport and increasing the

width of the street can increase the comfort and satisfaction of tourists.

### ***To Preserve the Original Landscape***

Tourists choose to travel in Bird Island for being mainly attracted by the diverse birds and beautiful ecological environment. It is essential to maintain the original ecological environments and landscapes of flora and fauna on the island as possibly, which are fundamental to the sustainable development of tourism. When all kinds of constructive activities are conducted such as landforms modification, vegetation greening, soil and water conservation, function partition, and forest landscape construction, green and ecology should be regarded as the theme of the Bird Island. Based on the condition of the natural environment of the island, combined with the solicitation of wild birds, wildlife viewing, science education and sightseeing tours; and it is necessary that make the island become an ecological scenic area for surrounding people to listen to the birds singing and appreciate the eco-landscape in Shenyang city.

### ***To Focus on Developing Students' Tourist Market***

With the continued growth of residents' revenue and the rapid increase of consumers' confidence, based on consolidating the surrounding tourist market in Shenyang, although many tourists were from the nearby area, the tourist from developed areas and emerging source markets should be considered as the key markets by tourism manager and developer. However, in the process of issuing questionnaires, a tour group for purpose of spring outing attended the interview, which are composed of about 2000 primary school students from grade one to grade six. The survey showed that the students' tourist market should be focused on and developed as a huge and potential market in the future.

### ***To Further Enrich Tourist Products***

At present the main attractions are just the sightseeing landscapes, and Bird Island needs to make more efforts to further enrich tourism products including ecological products and leisure products in the future. Having a spring outing and relaxation are the main tour purposes of tourists. The unique geographical position makes Bird Island as a recreational space for urban residents in Shenyang. Bird Island has inherent advantages in water resources, so a series of leisure attractions relative to yachting, boating and other water projects should be developed to improve simple situation of consumer's products, to stimulate tourist's consumption, and to extend visitor's consumption chain.

### ***To Enhance Quality of Visitor Experiences***

Tourism products should be designed to leave deep impressions and to obtain unforgettable experiences to visitors when involvement in different tourist activities. Now most of the attractions in Bird Island are static landscapes. At present "bird culture" is the main attraction, which is mainly used for performance, lack of participation and authentic experience. Bird Island should enhance the quality of visitor experiences and take some flexible and diversified ways to add interests and participation of tourist attractions. Some activities tourists can directly participate in should be developed, such as bird watching and feeding from a short distance, appreciating the performance art of birds, studying knowledge on bird's physical and life characteristics. The interaction between the tourists and the attractions should be improved to extend the stay time of tourists on the island, to increase the tourists' satisfaction degree, and finally to make man and nature live in harmony.

### ***To Strengthen Regional Cooperative Marketing***

As far as the geographical space is concerned, Bird Island is adjacent to Fuling Mausoleum. Bird Island is abundant in natural ecological landscapes, while Fuling Mausoleum has a large number of humanistic and historic tourism resources. If regional cooperative marketing is implemented between Fuling Mausoleum and Bird Island, and they can complement and benefit each other. Not only one-day trip from Fuling Mausoleum to Bird Island can be developed, but the strategies of regional cooperative marketing should be adopted to expand promotion. In addition, large outdoor billboard



should be established to propagate the external image of Bird Island. Large billboards as well as direction road signs should be set up in high speed junctions to advertise the scenic area.

### ***To Improve Tourist Facilities and Services***

Although the overall evaluation on Bird Island from tourists is better, many tourists are dissatisfied with facilities and services, especially with shopping and interpretation. Because there is only a small stall to sell snack to tourists, improving the catering facilities become Bird Island's important measure to enhance tourists' satisfaction degree. Another key problem is to perfect interpretation systems. As an only ecological park with wetland in Shenyang, Bird Island should play an important role in ecological and scientific education, and bring together pleasure, recreation and education. In order to deal with the tourists' dissatisfaction with explanation information, Bird Island must improve interpretation systems through establishing information boards to popularize the knowledge of birds, plant species and environmental protection, making full use of the diversified media guide and enhancing the training of tour guides to help visitors to understand Bird island very well. In peak tour periods, in order to enhance visitors' satisfaction and foster tourists' loyalty, Bird Island should further strengthen the management of tourists and regularly upgrade the facility of services.

### **Acknowledgement**

This research was financially supported by the Key Research Project of Humanities and Social Sciences in Liaoning Education Department (No. WSNZD201601).

### **References**

- [1] K.S. Chon, Understanding recreational traveler's motivation, attitude and satisfaction, *Tourism Review*. 44 (1989) 3-7.
- [2] J. Obua, D.M. Harding, Visitor characteristics and attitudes towards Kibale National Park, Uganda, *Tourism Management*. 17 (1996) 495-505.
- [3] D.L. Kerstetter, J.S. Hou and C.H. Lin, Profiling Taiwanese ecotourists using a behavioral approach, *Tourism Management*. 25 (2004) 491-498.
- [4] G.T. Hvenegaard, P. Dearden, Ecotourism versus tourism: A Thai National Park, *Annals of Tourism Research*. 25 (1998) 700-720.
- [5] D. Davis, S. Banks, A. Birtles, P. Valentine and M. Cuthill, Whale sharks in Ningaloo Marine Park: Managing tourism in an Australian marine protected area, *Tourism Management*. 18 (1997) 259-271.
- [6] Y.K. Suh, L. McAvoy, Preferences and trip expenditures-a conjoint analysis of visitors to Seoul, Korea, *Tourism Management*. 26 (2005) 325-333.
- [7] C. Lim, M. Mcaleer, Ecologically sustainable tourism management, *Environmental Modeling & Software*. 20 (2005) 1431-1438.
- [8] W.H. Lee, G. Moscardo, Understanding the impact of ecotourism resort experiences on tourists' environmental attitudes and behavioural intentions, *Journal of Sustainable Tourism*. 13 (2005) 546-565.
- [9] L.M. Li, J.G. Bao, A study on tourism behavior of college students: the case of Zhongshan University, *Journal of Guilin Institute of Tourism*. 11 (2000) 45-54. (In Chinese)
- [10] P.B. Jin, F.P. Lang, Analyses on tourism behavior of university students—illustration of Hangzhou City, *Tourism Tribune*. 19 (2004) 19-22. (In Chinese)
- [11] R. Meng, W.L. Zhao and J.W. Liu, A study of undergraduates' touristic behaviors, *Tourism Science*. 18 (2004) 15-19. (In Chinese)

- [12] K. Bai, Y.F. Ma and T.S. Li, A study on the impact of environmental perception on the decision-making behavior of foreign inbound backpackers—taking Xi'an as a case, *Tourism Tribune*. 21 (2006) 48-52. (In Chinese)
- [13] H.F. Zhang, J. Wu and M. Li, International backpackers' motives, activities and satisfactions based on urban cultural tourism resources—A case study of Beijing, *Tourism Tribune*. 22 (2007) 23-29. (In Chinese)
- [14] X.Y. Zhang, S.Q. Zhang and X. Ma, A study on the behavior of self-driving tourists in China, *Tourism Tribune*. 21 (2006) 31-35. (In Chinese)
- [15] S.H. Feng, Study on behaviorial characteristics of self-driving tourists and their spatial effect, *Tourism Tribune*. 23 (2008) 34-38. (In Chinese)
- [16] B.H. Wu, A.M. Huang and Q. Kong, Study on the behavior characteristics of the urban holiday makers in the city of Changchun, *Tourism Tribune*. 11 (1996) 26-28. (In Chinese)
- [17] J.F. XU, An analysis of tourist behavior features of Beijing residents, *Tourism Tribune*. 21 (2006) 34-39. (In Chinese)
- [18] ZW. Wu, L.Y. Hu, Study on psychological need and behavior characteristic of ecological tourists: taking national-level nature reserve of Wuyi Mountain as an example, *Journal of Central South Forestry University*. 24 (2004) 42-48. (In Chinese)
- [19] Y.Q. Li, A comparative study on ecotourists' behavior and attitude both at home and abroad—A case study of Baihuashan Nature Reserve in Beijing, *Tourism Tribune*. 21 (2006) 75-80. (In Chinese)
- [20] N. Chen, G.H. Qiao, A comparative study on the tourism motivation of ecological tourists: A case of the Geopark at the Mount Yuntai Scenic Spot, *Progress in Geography*. 29 (2010): 1005-1010. (In Chinese)
- [21] L. Li, E. Wu En and S.J. Ling, Analysis of Beijing bird-watching tourists behavior characteristics. *Journal of Harbin University of Commerce (Social Science Edition)*. 1 (2009) 112-114. (In Chinese)