DETERMINANTS OF VISITORS' PREFERENCE FOR WILD ANIMAL SPIECES (A CASE STUDY OF UNILORIN ZOO, ILORIN, KWARA STATE, NIGERIA)

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ABSTRACT
The enormous potentials of tourism in recreation, community and economic development can be maximised through focusing on visitors' preference in ensuring the sustainability of this increasingly important sector. This study examined the determinants of visitors' preference for wild animal species in Kwara State, Nigeria. It determined the animal species preference in the state and highlighted the desired animal characteristics that endeared animals to zoo visitors.A structured questionnaire was used to elicit information from 120 randomly selected zoo visitors. Data obtained were subjected to descriptive statistical tools as well as the Pearson product moment correlation analysis. The result showed that visitors to the zoo were predominantly youths with a mean age of 25 years, male (64.2%) and educated (97.5%). The lion and the hyena were the animals that drew the attention of most of the visitors while major desired animal characteristics indicated by the visitors were the possession of friendly nature (36.7%) and aggressiveness (28.3%). Age, occupation and gender were significant (p<0.01)in determining preference for wild animals among the visitors. The study recommended the consideration of the significant factors and the desired animal characteristics in future animal stocking exercises of the zoo management.

Key words: Determinants, wildlife preference, University of Ilorin, Zoo

INTRODUCTION

Wildlife tourism can be described as tourism undertaken to view and /or encounter non-domesticated animals in captive, semi-captive or in their natural environment (CRC, 2001; Newsome et al., 2005). According to Durbarry 2004, it could be non-consumptive such as viewing, photographing and feeding or consumptive such as hunting and fishing. The wildlife tourism experience is made possible by the successful interaction of elements relating to wildlife and their habitat, visitors, operators, the host community, the economy and the management in place (CRC, 2008).Aside from its recreational value, wildlife

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tourism contributes to specie conservation, community projects in developing countries like Nigeria, environmental education, awareness and economic development (Kutay, 1993). Filton et al. (1992) reported that 20-40 percent of international tourism is related to wildlife. In Nigeria, tourism contributed 3.3 percent of total GDP in 2011 with a forecast of a 10.8 percent increase for 2012 (WTTC, 2012).

Smith et al.(2012) recognized the roles of wildlife tourism as including breeding, species management and influencing visitors' behavior for the benefit of wild animals. Fiby (2007) underscored the value of zoo visitors and their feedbacks for the planning and designing of zoos and more importantly to decision making in zoo management by showing on-going trends. It therefore stands to reason that visitors' preferences should be seriously considered by policy makers and management of zoos and other similar institutions. An area in which visitors' preferences is highly important for a zoo in particular is choice of

animals desired. Woods (2000) observed that humans have definite preferences for different species of animals. Knowledge of visitors' desires in terms of animals and the features that make the animals appealing will assist zoo managements in animal acquisition and also in development of education and interpretation programs. Listing physical features, behavioral characteristics and level of intelligence as reasons for animal preference, studies have indicated the importance of visitors' perception rather than actual characteristics as factors influencing animal preference (Bart, 1972; Kellert, 1980; Bitgood et al.1986; woods,2000; Whitworth, 2012).

There is dearth of empirical information emanating from studies of zoos in Nigeria. The University of Ilorin zoo, although originally established for the purpose of teaching and research, has become one of the most important tourist attractions in Kwara State and its environs. The zoo haspositively impacted its host community (Tankeokeodo) and has become a key driver

of internally generated revenue for the University . It is however possible that the Unilorin Zoo may not be actualizing its revenue potentials due to the unavailability of empirical data on visitors' animal preference with which to take critical decisions such as animal stocking. Visitors' socio-economic characteristics could also play important roles in their perceptions. This study therefore examinedthe determinants oftourists' preference for wildlife species in Kwara State, Nigeria, using the University of Ilorin Zoo as a case study. Specifically, the study;

- Described the socio-economic characteristics of visitors to the zoo

- Enumerated the available wildlife species in the zoo

- Determined visitors' preference for animals in the zoo.

- Examined Characteristics of features of the animals that visitors considered appealing.

- Identified the determinants of the visitors' preference for the animals

METHODOLOGY

The Study Area

The study was carried out at the University of Ilorin Zoo. The zoo was established in 1985 to complement the University's biological sciences departments in teaching and research. The zoo which is located at the main gate of the University has a children playground and picnic grounds. A major attraction to the zoo is the 150meters long and 45meters high suspended canopy walkway which has continued to draw visitors to the zoo. The fact that most of the forest vegetation has been left undisturbed and the presence of a stream which flows through the zoo creates a serene and near natural environment which makes the zoo unique. The zoo drew over 55,000 visitors in 2012 comprising of schools, religious bodies, clubs and societies on excursion and picnics as well as individuals and families on sightseeing. Data was elicited using a structured questionnaire from 120 randomly selected visitors to the zoo. Descriptive statistics, and the Pearson product moment

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correlation (PPMC) were the statistical tools used in the study.

RESULTS AND DISCUSSION

Socio-economic Characteristics of Respondents

Table 1 presents the selected socio-economic characteristics of the respondents with a mean age of 25 years, the dominance of zoo visits by the youths is confirmed. This finding is in consonance with that of woods (2000). More males (64.2%) visited the zoo and majority (84.2%) possessed

the zoo by the University's main gate. The fact that 65 percent of the respondents are single is explained by the age distribution of the respondents. The average household size was six. While 34.2percent were civil servants, 30.8 percent of the respondents were students while the remaining 35 percent were self-employed. Majority (78.3%) had monthly incomes/ upkeep allowances of less than ₦ 50, 000.

tertiary education. The high level of education observed among the respondents may not be unconnected to the location of

Table 1: Socio- economic Characteristics of Respondents

Variable	Frequency	Percentage	Mean
Age(Years)			
12-25	72	60.0	
26-39	34	28.3	
40-53	10	8.3	25
≥ 54	4	3.3	
Total	**120**	**100.0**	
Gender			
Male	77	64.2	
Female	43	35.2	
Total	**120**	**100.0**	
Educational Attainment			
No Formal Education	3	2.5	
Primary Education	1	0.8	
Secondary Education	15	12.5	
Tertiary Education	101	84.2	
Total	**120**	**100.0**	
Marital Status			
Single	78	65.0	
Married	42	35.0	
Total	**120**	**100.0**	
Religion			
Christianity	65	54.2	
Islam	55	45.8	
Total	**120**	**100.0**	
Household Size			
≤ 5	60	50.0	
6-9	53	44.2	6
≥ 10	7	5.8	
Total	**120**	**100.0**	
Occupation			
Self Employed	42	35	
Civil Servant	41	34.2	
Student	37	30.8	
Total	**120**	**100.0**	
Monthly Income (₦)			
$\leq 50,000$	94	78.3	
50,001-150,000	20	16.7	
150,001-250,000	5	4.2	36,321
>250,000	1	0.8	
Total	**120**	**100.0**	

Source: Field Survey 2013.

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Available Wildlife Species in the University of Ilorin Zoo

An enumeration of all available wildlife species in the zoo is presented in Table 2.

Table 2: Available Wildlife Species in the University of Ilorin Zoo

S/N	English Name	Scientific Name	Kingdom	Phylum	Class	Genus	Species
1	Lion	*Pantheraleo*	Animalia	Chordata	Mammalia	Panthera	*P.leo*
2	Spurred Tortoise	*Goechelonesulcata*	Animalia	Chordata	Sauropsida	Geochelone	*G. sulcata*
3	Thomson's Gazelle	*EudorcasThomsonii*	Animalia	Chordata	Mammalia	Eudorcas	*E. thomsonii*
4	Sitatunga	*Tragelaphusspekii*	Animalia	Chordata	Mammalia	Tragelaphus	*T.spekii*
5	Marabou stork	*Leptoptitoscrumeniferus*	Ammalia	Chordata	Aves	Leptoptilos	*L.crumenifer*
6	African Rock Python	*Python sabae*	Animalia	Chordata	Reptilia	Python	*P.sabae*
7	Ball python or Royal python	*Python reguis*	Animalia	Chordata	Reptilia	Python	*P. reguis*
8	Chimpanzee	*Pan troglodytes*	Animalia	Chordata	Mammalia	Pan	*P. troglodytes*
9	Patas monkey	*Erythrocebuspatas*	Animalia	Chordata	Mammalia	Erythrocebus	*E.patas*
10	Baboon Anubis	*Papioanubis*	Animalia	Chordata	Mammalia	Papio	*P.anubis*
11	Nile crocodile	*Crocodylusniloticus*	Animalia	Chordata	Reptilia	Crocodylus	*C. niloticus*
12	Ostrich	*Struthiocamelus*	Animalia	Chordata	Aves	Struthio	*S.camelus*
13	Camel	*Camelusbactrianus*	Animalia	Chordata	Mammalia	Camelus	*C.bactrianus*
14	African grey Parrot	*Psittacuscrithacus*	Animalia	Chordata	Aves	Anser	*A.anser*
15	Greylag goose	*Anseranser*	Animalia	Chordata	Aves	Anser	*A.anser*
16	Sudanese ram	*Ovisaries*	Animalia	Chordata	Mammalia	Ovis	*O.aries*
17	African Hawk Eagle	*AguilaSpilogaster*	Animalia	Chordata	Aves	Aquila	*Spilogaster*
18	Giraffe	*Giraffacamelopardalis*	Animalia	Chordata	Mammalia	Giraffa	*G.camelopardalis*
19	Spotted Hyena	*Crocutacrocuta*	Animalia	Chordata	Mammalia	Crocuta	*C. crocuta*
20	Stripped Hyena	*Hyaenahyaena*	Animalia	Chordata	Mammalia	Hyaena	*H. hyaena*

Source: Field Survey 2013.

Wildlife Preference among Respondents

Table 3 presents the respondents' distribution by their preference for wildlife species.

Table 3: Distribution of Respondents Based on their Preference for Wildlife Species

Animals	Frequency	Percentage
Lion	85	70.8
Hyena	69	57.5
Peacock	59	49.2
Chimpazea	55	45.8
Ostrich	50	41.7
Patas monkey	38	31.7
Anubis baboon	37	30.8
African hawk eagle	30	25.0
Giraffe	25	20.8
Sudanese ram	25	20.8
Nile crocodile	20	16.7
Camel	20	16.7
Marabou stork	17	14.2
Spurred tortoise	15	12.5
African rock python	12	10.0
Ball python or Royal python	11	9.2
African grey Parrot	10	8.3
Sitatunga	10	8.3
Greylag goose	8	6.7
Thomson's gazelle	4	3.3

Multiple responses
Field survey 2013

Table 3 reveals that only the lion and the hyena had more than 50 percent of the respondents indicating them as one of their most preferred animals. The lion was the most preferred animal among the respondents with 70.8 percent of the respondents mentioning it as one of their five most preferred animals.The peacock, gorilla and ostrich with 49.2, 45.8 and 41.7 percents respectively closely followed the hyena in order of preference. However, thethomson's gazelle, white goose, sitatuga, parrot and ball python were the five least preferred animals with 3.3, 6.7, 8.3, 8.3 and 9.2 percent respectively. This finding is at variance with that of Surinova(1971) but agrees with the findings of Arluke and Sanders, (1996) and Shackley (1996).

Characteristic Animal Features desired by Visitors to the Zoo

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Table 4 presents a distribution of respondents based on desired animal features.

Table 4: Distribution of Respondents Based on their Desired Animal Features

Feature	Frequency	Percentage
Friendliness	44	36.7
Aggressiveness/ brave nature	34	28.3
Human traits	15	12.5
Beauty	12	10.0
Large Size	10	8.3
Historical Relevance	3	2.5
Colour	2	1.7
Total	120	100.0

Source: Field survey 2013

Table 4 shows that the respondents were most drawn to animals with a friendly nature as indicated by 36.7 percent. This is probably explained by the percentages of respondents' preference for peacocks, gorilla, ostrich, monkey and baboon in table 3. Although two aggressive animals (lion and hyena) emerged most preferred from table 3, aggressiveness was second with 28.3 percent in terms of desired animal characteristic. The respondents were least drawn by colour (1.7 %) and historical relevance (2.5%).

Factors that Determine Respondents' Animal Preference

The result of the Pearson product moment correlationanalysis is presented in Table 5

Table 5: Relationship between Selected Socio-economic Characteristics and Respondents' Preference for Animals

Socio-economic Characteristics	Coefficient[r]	P – value
Age	0.276***	0.002
Monthly income	0.671	0.071
Educational level	0.171	0.62
Household size	0.173	0.59
Occupation	0.52***	0.001
Gender	0.445***	0.001

*** (P<0.01)

As shown in Table 5, age of the respondents (r = 0.276), their occupation (r = 0.52) and gender(r = 0.445) are significant factors (at P = 1%)influencing animal preference. While according to Kaltenborn et al., (2006), age was not a factor in animal preference, Kellert, (1996) and Bjerke et al., (2002) reported that age and level of education significantly influenced animal preference among wildlife tourists. Gender has also been confirmed to significantly influence animal preference among zoo visitors (Kellert and Berry, 1987).

CONCLUSION AND RECOMMENDATION

The study concluded that wildlife visitors in the state have definite animal preferences which were influenced significantly by age, occupation and sex. While possessing a friendly nature was top among their desired animal qualities, animals that have been associated with aggressive nature drew the attention of majority of the visitors. The study recommends that;

- Consideration should be given to age, occupation and sex of the zoo visitors in animal stocking exercises

- Visitors' interest in the historical relevance of the animals can be enhanced through literature in form of handbills and posters or through short film shows and talks by the zoo guides

- Further studies should be carried out to elicit information on visitors' perception of the least preferred animals with a view to correct possible misconceptions about the animals.

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JOURNAL OF RESEARCH IN FORESTRY, WILDLIFE AND ENVIRONMENTAL VOLUME 7, No. 1 MARCH, 2015.

JOURNAL OF RESEARCH IN FORESTRY, WILDLIFE AND ENVIRONMENTAL VOLUME 7, No. 1 MARCH, 2015.