

# PERCEPTIONS OF ZOOS: CONSERVATION AND CREDIBILITY

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## 1. Introduction

Despite the popularity of zoos as wildlife tourist attractions, until recently there has been little research to investigate the attitudes and motivations of their visitors. (Mason, 2000). The nature of the zoo as a recreational setting would imply that enjoyment is a primary motivating factor, and this is supported by a number of studies across several countries. For instance in a survey of visitors at Woodland Park Zoo Seattle, Fielder and Wheeler (1985) found that nearly three quarters considered the zoo to be about entertainment with 92 per cent visiting as a family or social group. Studies in the USA (Andreck & Caldwell, 1994), the United Kingdom (Rajack & Warren, 1996) and Australia (Ford, 1998) have all produced similar results.

However, perhaps of greater significance for zoos is the fact that conservation does not appear to be a major motivation for zoo visitors. This was shown consistently in the studies mentioned above, and is supported by Turley (1999a) who found that of the three key objectives pursued by zoos (recreation, education and conservation), conservation had the least influence on the desire to visit. Turley (1999b) suggests that conservation may provide people with a justification for visiting the zoo, and therefore does influence attendance level indirectly. However, there is no evidence to support this yet. As Mazur (2001) points, it is not known if visitors will actually go to a zoo less if more conservation programmes are implemented and promoted.

Such unanswered questions point to a need for more research in this area, particularly as modern zoos promote themselves as important conservators of nature. So far most has been short term and marketing based (Mazur, 2001), and there has been little deeper evaluation of visitor behaviour.

This paper reports on a study which compared the attitudes of visitors at four Australian zoos and four United Kingdom zoos with the attitudes of the staff at those same zoos and with the attitudes of “non-zoo” wildlife professionals. In particular it sought information about their attitudes to the role and achievements of zoos in wildlife conservation

## 2. The Zoos

Eight zoos were selected for this study – four in Australia and four in the United Kingdom:

- **Australia:** Adelaide Zoo, Australia Zoo, Melbourne Zoo and Perth Zoo.
- **United Kingdom:** Bristol Zoo, Jersey Zoo, London Zoo and Twycross Zoo.

These zoos were selected on the basis of their collection size, number of staff, annual visitor numbers, type of ownership, membership of their regional zoo association, commitment to wildlife conservation, and willingness to participate in this research.

The non-zoo wildlife professionals (non-zoo staff) were selected from Australian and UK delegates who had attended the Third International Wildlife Management Congress in December 2003.

## 3. The Methodology

The surveys for zoo visitors, zoo staff and the non-zoo wildlife professionals were all similar in design. In particular:

- All surveys were self- administered and took about 10 minutes. This provided greater anonymity for the respondents, who may in turn, have been more open when answering.
- All three surveys were designed to identify attitudes to and perceptions of zoos and of their role in conservation. Each was divided into at least three sections which covered:
  - The demographic characteristics of the respondents.
  - The attitudes of respondents to wildlife and its conservation.
  - The perceived roles of zoos.

#### 4. The Results

##### 4.1 The Zoo Visitors

A total of 1439 visitors were surveyed across the eight zoos, of which 64% were female and 36% were male. The respondents were mainly domestic visitors (88%) while 12% were international. They were between 11 and 82 years of age, with the average age being 38, with the 31 to 40 year age group accounted for 34% of the sample. Thirty two percent were first time visitors to the zoos, and of those who had visited previously, the majority had only been once (72%). Nearly all the visitors were with family and/or friends (96%), and a large proportion of these groups (29%) included children under 12.

The reasons for visiting the zoos are shown in Table 1.

**Table 1. The reasons for visiting the zoos in Australia and the United Kingdom.**

| REASON FOR VISITING                 | ALL AUSTRALIAN ZOO VISITORS |               | ALL BRITISH ZOO VISITORS |               | ALL ZOO VISITORS |               |
|-------------------------------------|-----------------------------|---------------|--------------------------|---------------|------------------|---------------|
|                                     | Mean %*                     | Mean Rating** | Mean %*                  | Mean Rating** | Mean %*          | Mean Rating** |
| Spend time with family/friends      | 57                          | 4.2           | 47                       | 4.1           | 53               | 4.2           |
| See lots of different animals       | 53                          | 4.3           | 49                       | 4.4           | 51               | 4.3           |
| Learn about wildlife                | 35                          | 4.0           | 43                       | 4.1           | 39               | 4.0           |
| Be in a pleasant outdoor space      | 42                          | 4.1           | 29                       | 3.9           | 37               | 4.0           |
| See endangered animals              | 40                          | 4.0           | 31                       | 3.8           | 37               | 3.9           |
| Learn about wildlife conservation   | 34                          | 3.9           | 27                       | 3.7           | 31               | 3.8           |
| Contribute to wildlife conservation | 24                          | 3.6           | 16                       | 3.2           | 21               | 3.4           |
| <b>No. Respondents</b>              | <b>787</b>                  | <b>787</b>    | <b>652</b>               | <b>652</b>    | <b>1439</b>      | <b>1439</b>   |

\*% of visitors giving a 'very important' rating

\*\*Rating scale: 1= not important, 5= very important

These results indicate that for all zoos, the main reasons for visiting were to spend time with family and friends and to see lots of different animals. Of less importance was learning about the wildlife or seeing endangered species, and of least importance was the opportunity to contribute to conservation.

The levels of visitor satisfaction and learning are shown in Table 2.

**Table 2. Levels of visitor satisfaction and learning at the zoos in Australia and the United Kingdom.**

|  | ALL AUSTRALIAN ZOO VISITORS | ALL BRITISH ZOO VISITORS | ALL ZOO VISITORS |
|--|-----------------------------|--------------------------|------------------|
| VARIABLE   | %/rating*                   | %/rating*                | %/rating*        |
| Level of Satisfaction                                      | 8.6                         | 8.2                      | 8.5              |
| Level of Learning  | 6.9                         | 6.5                      | 6.8              |
| Level of Conservation Learning                             | 6.0                         | 6.3                      | 6.1              |
| How much does this zoo do for Conservation?                | 8.3                         | 7.9                      | 8.1              |
| Would you return if this zoo did nothing for Conservation? | 34%                         | 21%                      | 27%              |
| Would you visit this zoo again within one year?            | 53%                         | 40%                      | 48%              |
| <b>No. Respondents</b>                                     | 787                         | 652                      | 1439             |

\*Rating scale: 0= not at all, 10= a great deal

These results indicate that the level of satisfaction of the visitors was high for all zoos, with a mean score of 8.5 (on a scale where 0=not at all satisfied and 10=very satisfied). Visitors also reported that they did learn a moderate amount about the animals on display with a mean rating of 6.8 out of 10 (on a 10 point scale where 0= not a lot and 10= a great deal). Respondents gave a slightly lower rating for how much they learned about wildlife conservation with a mean rating of 6.1 out of 10. Nevertheless, they did believe that the zoo was doing a lot for conservation (8.1 out of 10). Overall, 46% of the respondents said that they would visit the zoo again within a year, although only 28% said that they would return if the zoo did nothing for conservation.

#### 4.2 The Zoo Staff

A total of 417 staff were surveyed across the eight zoos. More than half of the respondents (55%) worked in the Animal Management field while 19% work in administration and 26% in education. The majority of the staff surveyed had worked at their zoo for less than five years (61.1%), 19% of the respondents had worked at the zoo less than one year and 42% had been employees of the zoo for 1-5 years. Only 28% and 11% had worked at the zoo for 5-10 years and more than 10 years, respectively.

Staff were asked for their perceptions of their zoo's conservation efforts. The results are shown in Table 3.

**Table 3. Zoo staff attitudes to their own zoo.**

| VARIABLE   | ALL AUSTRALIAN ZOO STAFF |               | ALL BRITISH ZOO STAFF |               | ALL ZOO STAFF |               |
|--|--------------------------|---------------|-----------------------|---------------|---------------|---------------|
|  | Very Impt* %             | Mean Rating** | Very Impt* %          | Mean Rating** | Very Impt* %  | Mean Rating** |
| Conservation is the main focus of my zoo   | 38                       | 3.4           | 47                    | 4.3           | 42            | 3.8           |
| All staff are working to a common conservation goal  | 28                       | 3.6           | 13                    | 3.3           | 22            | 3.5           |
| I know what my zoo's conservation objectives are   | 40                       | 3.9           | 23                    | 3.7           | 33            | 3.8           |
| My zoo should provide more conservation education  | 24                       | 3.8           | 27                    | 4.1           | 25            | 3.9           |
| Visitors to my zoo are exposed to the full extent of our conservation activities           | 16                       | 3             | 7                     | 2.8           | 12            | 2.9           |
| Government conservation agencies appreciate the full extent of our conservation activities | 5                        | 2.7           | 2                     | 2.5           | 6             | 2.6           |
| <b>No. Respondents</b>   | <b>243</b>               | <b>243</b>    | <b>174</b>            | <b>174</b>    | <b>417</b>    | <b>417</b>    |

\*% of staff giving a 'very important' rating    \*\*Rating scale: 1=strongly disagree, 5= strongly agree

Forty two percent of respondents strongly agreed with the statement that 'conservation is the main focus of my Zoo', while 22% believed that all staff at their zoo were working towards a common conservation goal. On average, the lowest levels of agreement were given to the statements 'Visitors to my zoo are exposed to the full extent of our conservation activities' (12%) and 'Our local government conservation agencies appreciate the full extent of our conservation activities' (6%).

#### 4.3 The Non-Zoo Staff

A total of 101 non-zoo staff were surveyed, 47% of whom worked for a university, 34% for a government wildlife agency and 13% for a non-government agency. Thirty six per cent had been in their position for less than 5 years, 34% for 5 to 10 years, while 41% had been employed for more than 10 years.

Non-zoo staff perceptions of zoos and their conservation efforts are shown in Table 4.

**Table 4. Non-Zoo staff attitudes to zoos.**

| VARIABLE | AUSTRALIAN NON-ZOO STAFF |               | BRITISH NON-ZOO STAFF |               | ALL NON-ZOO STAFF |               |
|----------|--------------------------|---------------|-----------------------|---------------|-------------------|---------------|
|          | Very Impt* %             | Mean rating** | Very Impt* %          | Mean rating** | Very Impt* %      | Mean rating** |

|  |    |     |    |     |     |     |
|--|----|-----|----|-----|-----|-----|
| Conservation is the main focus of zoos   | 2  | 2.8 | 14 | 3.1 | 8   | 2.9 |
| Zoos should provide more conservation education  | 48 | 4.2 | 59 | 4.5 | 53  | 4.3 |
| Government conservation agencies appreciate the full extent of zoos' conservation activities | 4  | 3.1 | 0  | 3   | 2   | 3.0 |
| How much do you think zoos do for conservation?  | 10 | 2.5 | 13 | 2.8 | 12  | 2.6 |
| No. Respondents  | 52 | 52  | 49 | 49  | 101 | 101 |

\*% giving a 'very important' rating    \*\*Rating scale: 1=strongly disagree, 5= strongly agree

Only 8% of non-zoo staff believed that conservation to be the main focus of zoos, and just 2% felt that government agencies appreciate what zoos do for conservation. More than half (53%) thought that zoos should provide more conservation education.

#### 4.4 Visitor, Staff and Non-Zoo Staff Attitudes towards Zoos and Conservation

Zoo visitors, zoo staff and non-zoo staff were asked to choose the three most important zoo activities. These results are shown in Table 5.

**Table 5. Visitor, staff and non-zoo staff attitudes of the important activities that zoos can do\*.**

|                               | ALL ZOO VISITORS | ALL ZOO STAFF | ALL NON-ZOO STAFF    |
|-------------------------------|------------------|---------------|----------------------|
| ZOO ACTIVITY                  | Mean % Visitors  | Mean % Staff  | Mean % Non-zoo Staff |
| Educate public                | 68               | 93            | 84                   |
| Breed Endangered Species      | 52               | 49            | 71                   |
| Support Wildlife Conservation | 51               | 60            | 48                   |
| In situ Conservation          | 18               | 30            | 10                   |
| Entertain Visitors            | 17               | 8             | 6                    |
| Do Research                   | 16               | 25            | 29                   |
| No. Respondents               | 1439             | 416           | 101                  |

\*Up to three responses allowed

For all groups the top three activities were to *educate the public*, *support wildlife conservation* and *breed endangered species*, although the staff rated education as being much more important (93%). Other main differences included:

- Visitors rated *entertaining visitors* (17%) as more important than did the staff (8%) or the non-zoo staff (6%).
- Staff rated *in situ conservation* (30%) higher than did the visitors (18%) or the non-zoo staff (10%).

Visitors, zoo staff and non-zoo staff were then asked to rate various organisations on how much difference they can make to wildlife conservation. Visitors felt that *zoos*, followed by *the national government* and *conservation groups* could make the most difference, while the zoo staff believed that *the national government*, then *zoos* followed by *local governments* were most important. However, non-zoo staff rated zoos fourth, behind *national government*, *conservation groups* and *local government*.

These results are shown in Table 6.

**Table 6. Zoo Visitor, staff and non-zoo staff ratings of the importance of organisations to wildlife conservation.**

|                     | ALL ZOO VISITORS | ALL ZOO STAFF | ALL NON-ZOO STAFF    |
|---------------------|------------------|---------------|----------------------|
| Organisation        | Mean % Visitors  | Mean % Staff  | Mean % Non-zoo Staff |
| Zoos                | 70               | 64            | 22                   |
| National Gov't      | 65               | 78            | 87                   |
| Conservation Groups | 43               | 36            | 29                   |
| Local Govt          | 32               | 37            | 23                   |
| Business            | 27               | 18            | 16                   |
| Local Community     | 22               | 18            | 14                   |
| Individuals         | 21               | 21            | 13                   |
| No. Respondents     | 1439             | 416           | 101                  |

% of staff giving a 'very important' rating

## 5. Discussion

These results firstly confirm the findings of earlier studies that an important motivation for visiting zoos is to have a pleasant time with family and friends. However, these results also suggest that visitors are interested to learn about the animals and wildlife conservation, although they do not necessarily associate visiting the zoo with actually contributing to conservation.

However, many visitors also believed that zoos have a key role to play in conservation and education. They rated the three most important things zoos can do as being to 'educate the public', 'support wildlife conservation' and 'breed endangered species', while providing a 'pleasant day out' and 'entertaining the

visitors' were rated only fifth and eighth respectively. This finding is supported by the studies of Australian zoos by Mazur (1995) and Ford (1995) and U.K. zoos by Rajack & Warren (1996), who also found that the great majority of visitors expected to learn about environmental issues at the zoo. The visitors also rated zoos as being the organisation that could make the biggest contribution to wildlife conservation – even higher than national governments!

Thus zoos seem to be faced with a contradictory situation: people visit them mainly for recreation, but they believe that their main role is actually in conservation. This dilemma has important implications for zoo management in their search for more revenue: can conservation attract visitors? Will it make money for the zoo, or merely remain a net cost? In this study, visitors were generally impressed with the zoo's conservation contribution, although while nearly half (48%) would like to return within a year, almost three quarters (73%) said that they would not do so if the zoo did nothing for conservation.

The staff results also provide some important insights into how they perceive their own zoos. Firstly, less than half (42%) thought that conservation was the main focus of their zoo, only one third (33%) knew their zoo's conservation objectives, and less than one quarter (22%) believed that all staff were working towards the same conservation goal. Perhaps even more significantly, few staff felt that their zoo's conservation efforts were appreciated by people outside the zoo, particularly government conservation agencies. These results may also be important for zoo managers if they are to better promote their zoo's conservation initiatives: while the majority of staff are themselves committed to conservation, this is not reflected in their perceptions and knowledge of their own zoo's conservation priorities and activities, nor in their belief of what others understand about what their zoo does.

Similar views were expressed even more strongly by the non-zoo staff. Only 8% thought conservation was the main focus of zoos, and just 2% appreciated the zoos' conservation activities! Consequently, non-zoo staff ranked zoos as being fourth in contributing to conservation. Such perceptions of zoos clearly need to be recognised and addressed. Over the past 15 years zoos have increasingly recognised the need to become involved in cooperative conservation projects with government and private conservation agencies – a need that has been promoted by several authors (e.g. Conway, 1999; Kelly, 1997; Mallinson, 2001, 2003) and which is seen by some as a vital part of zoo evolution (Conway, 2003). Consequently for zoos to play an effective and relevant role in the conservation of wildlife, it is important that they are viewed as being relevant and useful by the other wildlife conservationists and professionals with whom they will have to work. As Puan and Zakaria (2007, p.2) have concluded: "Such information is essential when explaining to the respective management and government agencies the reason for the very existence of zoos and the kind of support that is necessary."

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