# **EDUCATION IN ZOOS**

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Education is one of the major functions of zoos worldwide. It is performed on the levels of formal, non-formal and informal education. The formal educational goal is to assist in the extension of the classroom situation of the formal educational sector in order to enrich the syllabus. On the non-formal level zoos present courses, workshops and seminars to the public. Informal education in zoos is provided, for example, through nameboards, informative graphic displays, demonstrations and discovery objects.

Education in zoos reaches out to every single visitor. It cannot be aimed at children only, since research in America has indicated that the majority of zoo visitors consist of families or groups of friends (White and Marcellini, 1986). Ultimately, a zoo should find avenues to educate all, thus fostering an increasing awareness of the importance of environmental conservation.

In this article we will take a look at the various ways education is offered at zoos.

#### FORMAL EDUCATION

From responses to an enquiry sent to zoos worldwide, it became apparent that most zoos (96% of the respondents) have some form of educational service rendered to school and tertiary student groups (Viljoen, 1987). The nature of these services vary. The Johannesburg Zoo, for example, presents occasional lectures while the Paignton Zoological and Botanical Gardens in Britain offers residential courses.

Two main trends in formal educational services are evident. The first is based on the principle that the teacher is the person responsible for the pupils' visit to the zoo. The zoo educator's role, then, is to give the necessary professional assistance to the teacher by means of oral and published information, educational media and possibly an orientation lecture. Educational media include self-guiding booklets, filmstrips and demonstration objects such as skulls.

The second trend is that of the zoo educational officer (or often a docent) taking care of the group when it arrives, presenting a programme for a set time. The programme may include an introductory lecture, worksheets and an accompanied tour of the zoo. A number of zoos have intimate classroom settings providing the opportunity to learn from 'hands-on' material. Staff from the zoo may be present, but sometimes the teacher is in charge of the situation.

#### Docents

Docents, as mentioned, are incorporated into many of the zoo's formal educational programmes to relieve the workload of the educational officers. The latter are responsible for the training of docents and the co-ordination of educational programmes. The docents are not paid, but are bound by

an ethical code. The opportunity to be a docent is often regarded as an honour. They often help with the zoo's informal educational programmes as well.

## INFORMAL EDUCATION

The most basic form of informal education presented by zoos is the use of nameboards, enabling the visitor to identify animals. Since zoos usually boast a very cosmopolitan animal collection, the nameboards furnish the natural distribution of animals as well. Often this basic information is extended by notes on the food, breeding, habits and habitats of the particular animal. Displays of interesting features such as horns, antlers, fur, feathers and many more, are also put up in suitable places. The ultimate purpose of these exhibits is to improve man's understanding of his natural environment. Yet it seems that the level of learning that is expected is often not achieved.



FIGURE 1 Basic informal education is provided through nameboards and graphic displays

Photo: Nat. Zoo. Gardens.

On the other hand the childrens' zoo seems to be very popular and successful. What is different apart from the kind of animals kept there? The purpose of the childrens'

zoo is to keep domestic animals such as cows, goats, ducks, donkeys, horses, chickens, geese and pigs. Naturally these animals are tame and allow themselves to be touched. It has become quite clear that not only do the young ones enjoy this opportunity, but their parents are as keen. It is a combination of the close contact with the animals and the mutual involvement of the family which sets this experience apart from the experience in the rest of the zoo.



FIGURE 2 The childrens' zoo often lends itself to physical contact between visitor and animal Photo: Nat. Zoo. Gardens.

To capitalise on this phenomenon the Bronx Zoo in New York turned its Noah's Ark exhibit into an animal guessing game (Brown, 1973). Various displays were put up inside the Ark. The visitors can now experience these displays through the portholes using their senses: for example, by putting their hands into a 'touch' display, the fur of a rabbit can be felt and at a 'smell' porthole the scent of a beaver's castor gland can be smelled.

The National Zoological Park in Washington developed an informal educational facility known as HERPlab. It has similar objectives to that of the Noah's Ark in the Bronx Zoo. This display, however, concentrates more on imparting knowledge about wild animals. Various activities can be completed by one person or by a family party. A family can, for example, assemble the skeleton of a tortoise or work through a set of questions printed on small cards, while observing a snake in a glass tank with a mirror floor.

Himeji City Aquarium in Japan built touch tanks in which various aquatic animals can not only be observed but also touched (Uchida and Asuke, 1982). At a display of Blind Cave Characin Fish the visitor can change the obstacles that are in the tank and observe the fishes' behaviour. At

another tank they can change the surrounding colour in order to stimulate fish like sole to change their body colours. The theoretical information is explained by tape recordings (Uchida, 1973).

To many of a zoo's visitors these informal educational displays or, for that matter, even the mere existence of the zoo suffice. Yet many people are stimulated by this to gain even more knowledge of animals. Where the zoos provide more formally organised courses, workshops and seminars, they move into the field of non-formal education.

#### NON-FORMAL EDUCATION

A few zoos present courses on specialised zoological fields to the general public. Thus the National Zoological Gardens in Pretoria presents courses in bird identification, mammals and ecology. The bird identification course is particularly popular and has been going for the past seven years. At the end of these courses participants can write exams to qualify for an attendance certificate.

Most of the courses are geared towards a specific age group. The bird identification course, for example, is presented to adults, but is also presented to school children during holidays. At the John G. Shedd Aquarium in Chicago they also present workshops for family participation.

A large number of zoos have workshops for teachers to enrich their knowledge of zoos and to show how zoo education can be incorporated into the school syllabus. (Viljoen, 1987).

#### THE EDUCATIONAL ROLE OF ZOOS

Zoos play an important role in the education of the public in general and formal educational institutions in particular. They are there to serve a particular community and should, through education, change peoples' attitude, thus obtaining more positive contributions in environmental conservation.

## REFERENCES

- BROWN, R.A. 1973: Why children's zoos? International Zoo Yearbook. Vol.13 pp.258 - 261.
- UCHIDA, I. 1973: New educational displays in the Himeji City Aquarium. International Zoo Yearbook. Vol.13 pp.262 265.
- UCHIDA, I. & ASUKE, M. 1982: The Touch Tank at the Himeji City Aquarium. International Zoo Yearbook. Vol.22 pp.271 - 276.
- VILJOEN, A. 1987: Die funksie van 'n dieretuin in skoolonderwys. M.Ed. dissertation. University of Pretoria.
- WHITE, J. & MARCELLINI, D.L. 1986: HERPlab: A family learning centre at the National Zoological Park. International Zoo Yearbook. Vol.24/25 pp.340 343.