## TECHNICAL CONTRIBUTION

# ANIMAL WELFARE AND ETHICS EVALUATIONS IN SOUTH EAST ASIAN ZOOS: PROCEDURES AND PROSPECTS

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#### Abstract

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The rise in public interest in animal rights and welfare during the last two decades has been dramatic, and concern for zoo animals is evident throughout society in many South East Asian countries. It is essential that problems related to animal welfare are understood in order for zoos to make significant improvements in their professional and ethical standards. In this paper, I describe in detail the procedures of welfare and ethics evaluations in South East Asian zoos. Zoo evaluation is an ongoing process and is carried out on behalf of the South East Asian Zoos Association to evaluate the members of this organisation. During recent evaluations, several major and minor problems have been identified and constructive suggestions have been provided to zoo authorities which have in turn significantly improved the standards of animal welfare and ethics. Thus, the welfare evaluation procedures outlined in this paper could serve as a model for other zoos to follow — locally, regionally and globally.

**Keywords**: animal rights, animal welfare, ethical issues, evaluation methods, South East Asia, zoo standards

### Introduction

The South East Asian Zoos Association (SEAZA) is a major organisation that incorporates about 60 zoological gardens and recreational parks in the region. SEAZA was officially formed as a registered association in 1990, then headed by the retired Indonesian general D Ashari. Its objectives are to promote *in situ* conservation, to increase captive breeding, to improve standards of animal welfare, to provide better recreational experiences for zoo visitors, to educate the public about the importance of wildlife conservation, and to promote tourism in South East Asia (Agoramoorthy & Hsu 2001). Since 1993, SEAZA has expanded to incorporate 12 countries and territories including Brunei, Cambodia, Hong Kong, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Taiwan, Thailand and Vietnam.

In 1998, SEAZA organised a strategic planning workshop in Bangkok and it was decided that the ethics and welfare committee should commence evaluation of member zoos (SEAZA 1998a,b). The author is the chairman of the ethics and welfare committee, the aim of which is to assess ethics and animal welfare in zoos in order to identify problems so that constructive recommendations can be provided to improve animal welfare standards. The objective was not to measure welfare scientifically but rather to identify, rectify and prevent ethical and

welfare-related problems in South East Asian zoos. Between 1999 and 2001, at the invitation of the local zoos and their associations, I led evaluation teams in the assessment of nine member zoos in countries including Malaysia, Thailand and Indonesia. In this paper, I describe the procedures involved in such evaluations and summarise their importance in improving ethical and animal welfare standards among South East Asian zoos.

# **Evaluation procedures**

Data on animal welfare are collected using questionnaires and data forms. Representatives from the SEAZA Executive Board, local animal welfare organisations or wildlife professionals and members of the local zoo participate in the collection of data. Usually, a maximum of six members collaborate for each evaluation. The idea of including local zoo staff is to provide an insight into how they would evaluate their own zoo. Each member of the team chooses a single exhibit or species to thoroughly evaluate in terms of welfare, in addition to recording general information relating to zoo management, nutrition, veterinary care, hygiene, animal handling, acquisition, transportation, species management, disposal of surplus animals, breeding, education, research, safety, public health, funding, and responsibility.

A decade ago, Hutchins and Fascione (1991) pointed out that the most potentially controversial ethical issues facing zoos are the acquisition of animals for captive breeding, the disposal of surplus animals, basic animal care and husbandry, and the use of animals for research and recreation. All of these issues are touched upon during the evaluations, but emphasis is given to issues related to basic animal care and husbandry.

A few months prior to the evaluations, the forms are translated into the local language (eg Thai, Bahasa Indonesian or Bahasa Malaysian) and are forwarded to the local zoo associations and zoos in the respective countries. Thus, the zoo staff members are familiar with the evaluation questionnaire. Before each evaluation, a meeting is held that includes the director, curators, veterinarians and animal keepers. On completion of the evaluation, staff members of each zoo are briefed on the results.

A total of 94 questions are addressed to collect data on issues related to ethics and animal welfare. These questions are organised in seven broad categories: (i) freedom from hunger and thirst; (ii) freedom from thermal and physical discomfort; (iii) freedom from pain, disease and injury; (iv) freedom to express normal behaviours; (v) freedom from fear and distress; (vi) animal welfare and zoo management; and (vii) animal welfare and the zoo's responsibility (adapted after Thorpe 1969 and Spedding 1993). For each category, a mark is given: 5 (excellent); 4 (good); 3 (average); 2 (poor); and 1 (not acceptable). The data are entered onto a computer, and statistical analyses are carried out using Statistical Analysis Systems software (SAS Institute 1989). Effects of different zoos and evaluators are tested for, using analysis of variance (General Linear Model). The Duncan's Multiple Range Test is used to test for differences in mean scores.

# Major welfare and ethical issues facing South East Asian zoos

Some of the problems commonly faced by zoos are overcrowding of animals in small cages (partly through the rescuing of confiscated animals), poor hygiene associated with overcrowding, lack of enrichment (especially for primates), old and unsuitable indoor enclosures, use and/or abuse of animals in entertainments and shows, and lack of a policy for responsibility for animals that are sent to other zoos (especially great apes). No matter how big or small the zoo, these problems are found — even among the best zoos.

Two pressing issues that require special attention are: (i) the rebuilding of decades-old indoor enclosures; and (ii) the rescuing of confiscated and abandoned animals, which are regularly being offloaded at zoos by both the general public and governmental and non-governmental agencies. Funding and time are crucial for tackling both of these major problems.

Most zoos rescue various species of animal, both common and highly endangered. The rescue facilities certainly lower the overall quality of the zoos, mainly because of the lack of space in holding areas and the deficit in manpower to care for the animals. Instead of waiting for funds to rebuild cages, zoos should embark on projects to relocate the rescued animals to more specialised professional centres with support from local governmental and non-governmental agencies (Agoramoorthy 1997; Agoramoorthy & Hsu 2001). Zoos could also find suitable humane solutions that promote conservation and education, such as the prompt release of healthy animals after a short period in captivity, or the development of captive breeding projects for rare and highly endangered species for eventual reintroduction into suitable natural habitats — strictly following the IUCN (1998) guidelines.

# Minor welfare problems facing South East Asian zoos, and solutions

Most of the zoos' outdoor exhibits have naturalistic environments with lush green vegetation as they are located in the tropics. Most enclosures, however, lack enrichment devices. This could be easily improved upon by adding ropes, artificial vines, branches and other necessary furniture to stimulate activities for the animals. I have suggested that the zoos' directors arrange periodic environmental and behavioural enrichment training courses for keepers. Such courses could serve as catalysts for creativity, as enrichment activities require constant revision with the introduction of new devices to minimise boredom among the captive inhabitants. Mixed-species exhibits are currently rare in our zoos because most of the facilities are decades old. I therefore recommend that in the future the mixed-species concept be incorporated into the design and building of new enclosures.

## Zoos' responses to the ethical and welfare evaluations

Some of the zoos' employees reacted swiftly in rectifying some problems, for example by adding more ropes into gibbon enclosures to stimulate behavioural enrichment and by socialising a young male chimpanzee that was being kept alone in a small cage. Moreover, the zoos' directors also submitted reports on how they had solved problems and on the measures that were being taken to address major issues that might otherwise require more time and funds. I had many productive interactions with zoo employees and they took the criticisms seriously, showing immediate progress in solving some problems. The zoo employees were not only concerned about animal welfare but also demonstrated their moral and professional obligations to provide humane care for the animals for which they are responsible.

It was noticeable that local evaluators gave higher scores while inspecting their own zoos. This may have been because they did not notice welfare problems and thus underestimated the extent of animal welfare issues. Furthermore, the local evaluators selected the best exhibits in the zoos for evaluation, whereas the outside evaluators selected those exhibits with the most serious welfare concerns. This showed that the local zoo evaluators were reluctant to look at the welfare problems critically and were biased in their political standpoint. The role of outside evaluators is clearly crucial in ensuring that assessment procedures are fair, efficient and successful. Therefore, all future zoo evaluations in South

East Asian countries must be conducted with the participation of at least some outside evaluators.

## Need for the ethics and welfare committee

It is important for each zoo to set up an ethics and animal welfare committee by including one or two local animal welfare representatives. This committee will be of immense help in identifying and solving animal welfare issues before a small problem increases in magnitude uncontrollably. Wildlife Reserves Singapore, which manages Jurong Bird Park, Singapore Zoological Gardens and Night Safari, has already set up an animal welfare and ethics committee comprising distinguished members of society, most from outside the zoo community. I also recommend that each national zoo association set up their own ethics and welfare committee. The Indonesian Zoos Association, which has a membership of 28 zoos, recently formed its own animal welfare committee, and other countries in the region should follow this model.

Moreover, both local and international animal rights organisations must be willing to work with zoos by providing constructive criticism and possibly raising funds to improve zoo standards. In western countries, animal rights groups sometimes criticise zoos destructively, and this approach will not yield positive results that improve captive animal welfare. Most zoos in South East Asia are open to constructive criticism and are willing to try their best to maintain high standards of ethics and welfare despite pressing social, economic and other hardships. Animal rights organisations should take this opportunity to work with zoos in the region to improve ethical and welfare standards. During the last decade, I have been working closely with two passionate and dedicated groups of people who admire and care for animals: they are the animal rights activists and zoo managers. If they were to work together they would not only relieve animal suffering in zoos but also improve ethical and animal welfare standards. Although the World Association of Zoos and Aquariums has a committee for animal welfare, animal rights activists are not allowed to participate actively in the workshops and discussions. SEAZA however, as a regional association, is open for discussion to anyone who is willing to help animals, including those who represent animal rights organisations.

## **Conclusions**

Despite the multi-faceted nature of issues related to the ethics of zoo keeping (Jamieson 1986; Singer 1990), the ethics and welfare committee of SEAZA is highly committed to addressing welfare problems and improving standards of zoos in the region. I found the current evaluation process adequate, as it helps zoos to understand basic animal welfare problems; such understanding eventually leads to improvement in standards. This procedure could serve as a standard methodology for the inspection of zoos by local and regional zoo associations. The ethics and welfare committee of SEAZA aims to work closely with the national zoo associations in the future to initiate the process of accreditation, and only zoos that maintain acceptable animal welfare and ethical standards will be accredited. Thus, the prospect of improving animal welfare standards in South East Asian zoos appears promising, and the committee is dedicated to promoting professional and ethical standards among member zoos.

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#### References

**Agoramoorthy G** 1997 Wildlife rescue and rehabilitation centers in Southeast Asia. *International Zoo News* 44: 397-400

**Agoramoorthy G and Hsu M J** 2001 South East Asian Zoos Association. In: Bell C (ed) *Encyclopedia of the World's Zoos*, pp 1164-1165. Fitzroy Dearborn: Chicago, USA

**Hutchins M and Fascione N** 1991 Ethical issues facing modern zoos. *Proceedings of the Annual Meeting of the American Association of Zoo Veterinarians* pp 56-64. AAZV Publication: Philadelphia, USA

IUCN 1998 IUCN Guidelines for Re-introductions. Information Press: Oxford, UK

**Jamieson D** 1986 Against zoos. In: Singer P (ed) *In Defense of Animals* pp 108-177. Harper & Row: New York, USA

SAS Institute 1989 SAS/FSP Software, Usage and Reference: Version 6. Cary, North Carolina, USA

SEAZA 1998a SEAZA Future 2005. Long Range Plan 1999-2005. SEAZA Publication: Singapore

SEAZA 1998b Report on 1998 SEAZA Strategic Planning Workshop. SEAZA Publication: Bangkok, Thailand

Singer P 1990 Animal Liberation. The New York Review: New York, USA

Spedding C R W 1993 Animal welfare policy in Europe. *Journal of Agricultural and Environmental Ethics* 6: 110-117

Thorpe E S 1969 Welfare of domestic animals. Nature 244: 18-20