

Indian Zoo Working Group

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The group members introduced themselves. Dr. Brij Sharma referred to a "Concept paper on *in-situ/ex-situ* linkage - Conservation Breeding of Endangered Wild Animal Species in India" which related recent policy decisions by the Technical Committee of India's Central Zoo Authority. These were, in brief, to set up ISIS/ZIMS for all of the Large, Medium and Small zoos in India, to establish collaborative relationships with the international zoo community for cooperative breeding of selected Indian species to maintain assurance populations for wild taxa of less than 2500 in the wild. Further CZA has scheduled a meeting for which they want international participation so that Indian zoo directors and international species coordinators for selected taxa can meet and become acquainted. Following this interaction there will be a before field visit in order to become fully acquainted with the situation for Indian wildlife conservation. There is also to be a closed seminar for Indian zoo directors and five experts on conservation breeding, records, and environmental enrichment before the larger meeting. Dr. Sharma essentially wanted assistance in making an invitation list for the larger meeting going by the list of threatened species he brought with him.

Summarising objectives, initiatives and strategy, Dr. Sharma related a policy that zoos in India should maintain 100 individuals of each taxon which have been systematically conceived, bred and reared. This is for providing "insurance" in case of population loss of the species in the wild.

There are also three objectives i.e. having systematically bred captive stocks for display, for insurance and for reintroduction. The participating Zoos have been asked to:

- construct appropriate enclosure for the targeted species to fulfill their physical and behavioural needs;
- to create off-display conservation breeding facility either in the Zoo compound or as satellite facilities; ? a Laboratory (Laboratory for Conservation of Endangered Species ? LaCONES) has been established at Hyderabad to develop new technology in reproduction and molecular characterization of endangered species;
- preparation and updating of National Studbook for the identified endangered wild animal species is being taken up for conservation breeding programme;
- zoos are also being provided funds in form of small grant fellowships to organize studies of local issues and the

- coordinating Zoos have been asked to engage technical manpower for preparation of conservation breeding management plans for the targeted species.

All these initiatives are being made to equip the zoos for taking up the responsibility of participating in conservation breeding programme. ISIS ?ZIMS Authorities have also been contacted to assist the Indian Zoos in data compilation and record keeping.

A strategy has been approved for carrying out this plan. Help of the national and international organization, institutions, NGOs and related bodies is being sought to make the programme successful. WAZA and CBSG are requested to become engaged in the activity.

Dr. Sharma presented a list of the identified endangered wild animal species to be taken up for the planned coordinated Conservation Breeding and the working group suggested various experts around the world who could assist with the project and/or be invited for the meeting.

The participants from India will be Directors of Indian zoos. Dates are 21-22 Feb 2007 for a seminar on conservation breeding, records and environmental enrichment. Selected persons have been invited for this and their international travel will be provided by CZA.

The dates of 23 -24 Feb are for the larger group of international participants, directors of zoos holding threatened Indian species who may like to enter into agreements to exchange Indian animals for conservation purpose, species coordinators and researchers. Following this there are to be a post workshop visits to primary zoos and nearby wild areas. It is planned to support this group within India with accommodation, local transport, etc. but they will bear their international air travel.

The goal of the workshops in India is to enhance networking, capacity building, cooperation, sourcing of animals, training on species coordination, and related topics. The primary purpose of this initiative is the linking of expertise abroad to the need in India to establish *ex situ* programmes. The working group also stressed that when new founders of Indian origin were to be sourced from other regions, they should be of genuine Indian origin and of the same subspecies. Currently the primary responsibility for species has been assigned to one zoo which holds the studbook and is responsible for coordination with other zoos, planning off-exhibit breeding area, etc. and other

participating zoos which exhibit the animals. There are species action plans for some taxa only. For identifying individuals CZA is providing transponders and other appropriate equipment as well as using DNA analysis for identification. Identifying founders is a problem. Genetic and behavioural considerations should be borne in mind. People that attend should be at a sufficient level to make or influence a decision.

Several dozen taxa have been identified and prioritized for the programme which are threatened or of particular interest for some other reason. Other species can be added later but not included now because either there are none in captivity, such as Pallas cat, or large number in captivity such as gharial. Many of the species selected could be grouped into taxonomically similar animals to reduce the numbers of experts. Taxon Advisory Groups could be a focus for selection and this method was suggested to be followed in drawing up a list.

A tentative list was drawn up by the working group which could be used not only for inviting people to the meetings but in future for research seminars, requesting advice, etc.

Dr. Sharma will follow up this exciting project also during WAZA with numerous delegates.



CBSG Gharial Working Group

Members: *Ivan Rehak, Brij Raj Sharma, Sally Walker, Virginia Lindgren, Christian Schmidt, Michael Jorgenson, Sophie Oliver, Don Boyer*

Background

The gharial (*Gavialis gangeticus*) is a large crocodile native to India and Nepal. A PHVA was conducted on the gharial population in 1995, when the population was estimated at 2,500 animals. Since that date, habitat destruction and persecution of gharial have led to a significant population decline, and the current population is approximately 200 adults, with a breeding nucleus of about 100 animals.

The last viable population of gharial is located in the Chambal Sanctuary of India. A 2006 survey there found 82 females and four males. A large captive population exists, but to date, public resistance has prevented reintroduction of these animals.

A proposal for a resolution to conserve the gharial has been submitted to WAZA, and the working group's first action was to review the resolution and support its passage.

The group discussed barriers to gharial conservation, which include a lack of knowledge about the genetic health of the captive population, local resistance to reintroduction, persecution of gharial, lack of law enforcement in protected areas, and misuse of protected areas by local people. The group also agreed that pressure from outside

groups may be necessary to encourage conservation of the gharial.

Possible strategies for gharial conservation were discussed and prioritized by the group, leading to the development of four goals for gharial conservation.

Goals

- The IUCN should advocate urgent action by the Indian Government to reduce biotic pressure in critical gharial protected areas.
- Investigate the need for both range country *ex situ* populations, and non-range country *ex situ* populations as assurance colonies. Improve scientific management of captive gharial by developing an international studbook, and identifying the genetic diversity in the current *ex situ* population.
- Involve local communities in gharial conservation. Develop special educational materials designed for stakeholders including the non-literate population
- Raise funds to support *in situ* and *ex situ* conservation efforts.

Note: The Gharial resolution passed by CBSG was taken to WAZA, reviewed by the WAZA Conservation Committee and passed unanimously by WAZA. The resolution will be forwarded to IUCN with the hope of a communication from IUCN to the concerned governments.