



COMMUNIQUE TURTLE SURVIVAL ALLIANCE

AN IUCN PARTNERSHIP NETWORK FOR SUSTAINABLE CAPTIVE MANAGEMENT OF FRESHWATER TURTLES AND TORTOISES

TSA Announces Conservation Plans for Indian Turtles

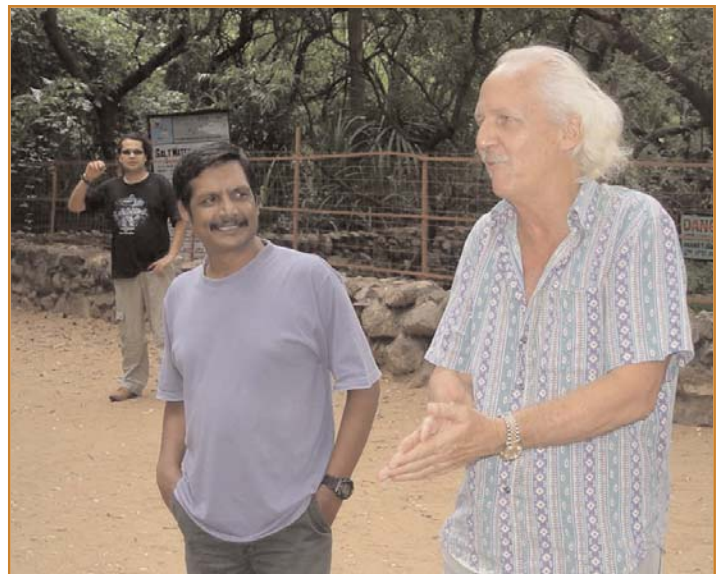
Introduction

The **Madras Crocodile Bank Trust**, in conjunction with the **IUCN Turtle Survival Alliance**, has announced a collaborative program designed to develop and implement conservation action plans for some of India's endangered freshwater turtles. *"This is an exciting time for TSA because this is the first range-country program that we have launched. This effort will depend on strategic partnerships, and will focus attention on a country with an incredibly rich and diverse turtle fauna"* said TSA co-chair Rick Hudson.

In terms of assessing Asian countries that are the most important to devote limited resources for turtle conservation, India ranks high, actually fifth behind China, Myanmar, Vietnam and Indonesia. This composite evaluation (Stuart & Thorbjarnarson, CCB, Vol. 4, No.3) was based on three factors including species richness, degree of endemism and degree of endangerment.

With so much of the conservation focus on Southeast Asian species, India's turtles often are overlooked because they are infrequently seen in the pet trade. However large numbers are collected for internal use and a number of species are often reported in Chinese markets. For the past few years India has risen in importance because of the perception, right or wrong, that little was being done to address some of the critical issues facing turtles in that country.

Based on the wide-held belief that the Madras Crocodile Bank Trust (MCBT) would be the logical location from which to launch a comprehensive conservation program for Indian turtles, a team representing the Turtle Survival Alliance visited India in October 2003 to assess that institution's potential. That team consisted of TSA chair Rick Hudson, Hugh Quinn and Don Boyer, and based on that visit, a conservation action plan is now beginning to take shape. During the course of our meeting with MCBT co-founder Rom Whitaker and Director Harry Andrews and his staff, a five-year plan was drafted that lays the groundwork for a multi-species, multi-faceted program that includes a range of components including field surveys, captive breeding/management and public awareness.



MCTB co-founder Rom Whitaker (right) and director Harry Andrews.



Background

The MCBT was founded by Rom and Zahida Whitaker in 1976 to conserve crocodylians and establish programs for the conservation and propagation of other species of endangered reptiles. Research within MCBT and in the field has covered a wide range of herp topics that since 1976 has resulted in over 300 scientific publications. Also a number of very well-known researchers and their projects have been based out of the MCBT over the past twenty years. The Centre provided logistical support and served as Ed Moll's home base during his WWF funded survey work on Asian riverine turtles in the 1980s. During the period 1984 - 1994 the Centre worked extensively with Jeff Lang on defining Temperature Sex Determining (TSD) patterns as well as other reproductive strategies in the Mugger crocodile. Later the Centre hosted Michael Ewert as he investigated egg incubation strategies in chelonians. The incubation facilities remain operational and continue to be utilized by Harry Andrews for TSD research. Additionally, *Hamadryad*, the Journal of the MCBT Centre for Herpetology, is widely recognized as a reputable and high-quality scientific journal. Their herpetological library is extensive and complete, and is considered to be the best resource of its kind in India.

The MCBT is financially stable and self-sustaining, and among Indian zoological institutions, is considered a model for fiscal responsibility. The budget is about \$100,000 US per year with 90% of this being raised through gate revenue; visitation is about 500,000 per year. Staff size is 17. MCBT has a large collection of crocodylians, with over 2,800 specimens, representing 14 species. They have a history of success with a number of India's freshwater turtles and, with moderate assistance, are capable of doing much more. The collection at MCBT consists of 300 turtles, representing 16 of the 33 taxa found in India.



One of 19 *Kachuga kachuga* hatchlings from the MCBT. This is the first breeding of the critically endangered turtle in India.

The Center has bred several of these species, and recently announced the world's first captive breeding of the Painted roofed turtle, *Kachuga kachuga*, ranked as Critically Endangered by the IUCN Red List. They have done extensive research with their collection, especially in the field of egg incubation and TSD studies. In fact, due to their strong working relationship with the State Forestry Departments and the three gharial rehab centers in the North (sites of ongoing turtle hatching and headstarting programs), their existing infrastructure of enclosures and support facilities (including incubation room), their expertise, knowledge and desire to push turtle conservation, the MCBT is well positioned to catalyze a major turtle initiative in India. Their recognition as a well-respected conservation organization, both in India and worldwide, make them the logical choice as a partner to launch a turtle recovery program.

In short, most of the pieces are in place to do this, both at Madras and the gharial facilities in the North, such that a modest amount of funding will almost certainly produce some substantial results. A turtle conservation network consisting of four captive management facilities, with MCBT as the catalyst and focal point, and with MCBT-based staff providing logistical and technical support, is currently envisioned.

Harry Andrews prepared a five-year project proposal for \$56,000 US, the bulk of which will support two PhD students that would be based out of MCBT. The first year expenses to get started are \$15,000, half of which (\$7,500) was pledged by Walter Sedgwick (Island Conservation) contingent on matching funds. Recently the Turtle Conservation Fund (\$6,000) and TSA (\$1,500) matched that challenge thus securing the \$15,000 in start-up funds needed for Year 1.

Improvements to existing facilities at MCBT are also needed that will enable them to breed and maintain larger numbers of species; these costs are estimated to run \$8,000. To meet this need the British Chelonia Group (BCG) conducted a fund-raising campaign that successfully raised this amount that is specifically earmarked for construction costs. Plans call for the conversion of a series of existing grow-out ponds for young crocodilians into an aquatic turtle breeding and management facility.

Annual expenses for this program are estimated at roughly \$8,000 - \$10,000 per year, and these funds will support two PhD students dedicated to turtle conservation in India. One is a field position, with primary duties of conducting turtle surveys, networking with existing turtle conservationists, and conducting public awareness campaigns for turtles in targeted areas. Primary responsibilities of the second position will be to catalyze appropriate captive management of targeted turtle species among Indian institutions (zoos and the three satellite facilities in the north). The person selected will also manage the turtles at MCBT. To date over \$26,000 has been raised to support this new program over the next two years.

The next critical step, already in the planning stages, is a workshop to develop a strategy for conservation of Indian turtles and to set this process in motion. Bringing together all the primary players from the State Forestry Departments and participating universities, and organized by Zoo Outreach Coordinator Sally Walker, this workshop should establish a planned agenda, defining the following:



- Priority species
- Site selection: which species will be housed at which of the four facilities
- Acquisition strategy: collection of eggs, hatchlings or adults from wild
- Type of activity: headstarting/release vs. captive breeding
- Captive rearing and release strategy
- Size of desired captive population
- Timelines: who will do what and when
- Production of educational materials, identification guides and field guide books in local languages

Funds for this workshop, planned for January 2005, are also in place, thanks to generous support from TSA Partners Jim and Kirsten Kranz plus funds from Conservation International. We predict that this workshop will produce a blueprint for conservation action for the next five years, and provide a sound basis for seeking support from outside funding agencies.



A handful of juvenile *Kachuga kachuga* and *K. dhongoka* hatched at the Deori Crocodile Center in Morena from eggs collected on the Chambal River. This is one of the existing gharial rehab facilities in northern India that also does turtle conservation work.

Summary

Due to their reputation and high standing, both nationally and within the international herpetological community, the MCBT is uniquely positioned to catalyze a broad range of conservation initiatives for India's freshwater turtles and tortoises. Widely recognized throughout India and the rest of the global conservation arena, the MCBT has the scientific ability to coordinate and manage a turtle recovery program. Infrastructure, in the form of captive facilities and husbandry skills, are already largely in place but need some refinement. Perhaps more importantly, the desire and will to develop such a program also appears to exist.

The critical components are, for the most part, in place and will coalesce given some modest funding. The primary funding needs (given that the structural improvements to MCBT

facilities are already funded) are for two PhD students to focus on both captive and field aspects, and to develop a network of turtle biologists and facilities all working towards the implementation of a unified conservation strategy. A turtle conservation network consisting of existing headstart and management facilities, plus a number of zoos, with MCBT as the catalyst and focal point and with MCBT-based staff providing logistical and technical support, is currently envisioned. An integral part of developing such a strategy will be a planning workshop involving all the players and stakeholders that have the capacity and desire to contribute. In summary, the strength of this proposal is that it initiates a comprehensive range-country program that is broad-based, providing coverage for multiple taxa and involving multiple institutions. Support of this proposal however, should not be seen as a single year investment, but moreover a multi-year commitment on behalf of both the Turtle Conservation Fund and the Turtle Survival Alliance. To be successful this effort must continue to grow as a collaboration between partners, and we will be seeking to develop new partnerships as we move this process forward. The TSA will also be launching a major fund-raising campaign in the near future so stay tuned for further news.

Rick Hudson
TSA Co-chair



A handsome Ganges softshell, *Aspideretes gangeticus*, at the MCBT where they have had good breeding success over the years.