



# Expanding A Global Network: *The Turtle Survival Alliance*

BY RICK HUDSON

When an international group of some 80 turtle biologists and conservationists gathered at the Fort Worth Zoo in January 2001, no one was quite sure why we were there or what we would accomplish (see December 2002 *Communiqué*). But the mission was clear: something urgent had to be done to address the Asian turtle crisis that was decimating populations throughout the region. Founded on the belief that captive management would play a vital role in preventing the extinction of many turtle species, and that multiple and diverse sectors all had a role to contribute, the Turtle Survival Alliance (TSA) was born. The TSA is an IUCN partnership network for sustainable captive management of freshwater turtles, and is recognized as a task force of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group (TFTSG). The mandate is simple: Preserving Options for the Recovery of Wild Populations. Or better put: Zero Turtle Extinctions.

Based on that ambitious goal the TSA began organizing *ex situ* captive programs, using the list of 18 Asian species ranked Critically Endangered by the IUCN Red List as a starting point. Much has been achieved in this regard through various Taxon Management Groups (TMGs) and today, more than four years since the inception of TSA, a number of these 18 species are now well-represented and reproducing in captivity, both in Europe and the U.S. However the reality soon set in that the amount of money spent on building *ex situ* infrastructure for raising turtles, particularly the large species, could be more wisely invested *in situ*. Today the TSA envisions a broader perspective, one where we are engaged whenever the conservation strategy includes a captive component. Whether it is a range country headstarting program, assurance colony facility or rescue center, the TSA has a tremendous wealth of resources to impart. And though the need to develop sustainable captive populations of endangered chelonians is our driving force, the TSA has become much more than a captive breeding organization. Recognizing the battle to save turtle populations will be won or lost in the regions where they occur, the TSA has embraced the need to expand the global network to include our range country counterparts. Our niche is supporting *in situ* programs that involve a captive component, and our strategy is to identify existing facilities and organizations that already have developed some basic infrastructure for turtle conservation.

Building the capacity for saving turtles in Asia is essential if we are to be successful. Through training workshops and on-site visits, through the provision of materials and technical expertise, and through logistical and financial support, the TSA is firmly committed to empowering workers in range states to take effective action for turtle conservation. Training is the key ingredient, and currently the TSA is organizing and conducting a series of turtle husbandry and veterinary care workshops in Asia. The first was held in con-

junction with the Singapore Zoo in March 2004 with 45 participants from 11 countries; a second will be held in Hong Kong, with our partner Kadoorie Farm & Botanic Garden in May 2005; a third is being planned for Indonesia. These workshops are funded by a number of sponsors including AZA's Conservation Endowment Fund, IMLS and the Cleveland Zoological Society. Under this same group of sponsors, and in concert with Wildlife Conservation Society, AZA Chelonian TAG Chair Hugh Quinn (Cleveland Metroparks Zoo) has begun to methodically install the basic structure to facilitate TSA-related turtle conservation activities in Southeast Asia. The creation of an Asian turtle coordinator position (Doug Hendrie) and the ensuing improved communications network (see [www.asianturtlenetwork.org](http://www.asianturtlenetwork.org)), have been two of the most important steps taken to address the Asian turtle crisis. The TSA maintains a strong working relationship with Doug and the Asian Turtle Conservation Network, and is now able to respond rapidly to the current needs of our range country partners. We are able to quickly identify funding priorities, and through our close affiliation with the Turtle Conservation Fund and other donors, locate the funds necessary to facilitate the work.

The TSA's ability to respond to the global turtle crisis is expanding on a number of fronts. In Europe the European Association of Zoos and Aquariums (EAZA) launched a unified Shellshock campaign (2004–2005) that could raise several hundred thousand dollars for turtle conservation. Closely linked with the TSA Europe program, and with an expected 120 to 150 EAZA participants, this program has the potential to be a model for the collective impact that zoos and aquariums working together can have.

**Confiscated wildlife like these temple turtles in Thailand often languish and die in "rescue" facilities due to inadequate care. TSA is well positioned to work with these facilities to improve husbandry conditions and care.**



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Closer to home TSA North America recently announced a major new grant for 2005 and 2006 — \$200,000 total — all specifically earmarked for range-country turtle conservation initiatives. This generous gift will allow TSA to greatly expand its support to some existing programs in India, Malaysia, Myanmar and Vietnam, while providing new funding to emerging programs in Thailand, Indonesia and southern

Mexico. This grant will also fund two students' participation in the heralded Asian Scholarship Program, bringing aspiring turtle biologists to the U.S. for a summer of training on a wide range of turtle conservation techniques. To help generate interest and expertise in turtle conservation in the region, funds for an Asian Turtle Action Grant program will match \$10,000 from WCS. These seed grants help fund small local projects that are carried out by range state nationals. To build capacity and sustainability into range state management of assurance populations, \$10,000 is earmarked to address the critical need for training. An evaluation of existing turtle facilities in the region has clearly identified a need for technical support designed to improve the quality of captive husbandry and veterinary care of the turtles in those facilities. Experienced veterinarians and experts from TSA will work with local counterparts to improve health care protocols, hatching success, husbandry methods, and management of captive populations at some of these key facilities, furthering the aims of TSA in assisting range state partners in efforts to establish strong and well-run assurance populations of the most critically endangered turtle species within the region.

A ranking of the most important Asian countries for turtle conservation (see *Chelonian Conservation Biology*, Vol. 4, No. 3) listed, in descending order: China, Myanmar, Vietnam, Indonesia and India. The newly awarded TSA grant will engage us in all of



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**Forty five students from 11 countries participated in TSA's first Asian turtle husbandry and veterinary care workshop hosted by the Singapore Zoo in March 2004. A second workshop is scheduled for late May 2005 in Hong Kong.**

Conservation Center (TCC) located at Cuc Phong National Park will allow that program to expand on a number of fronts. Recognized as a model for range country turtle facilities, the TCC employs a wide range of conservation initiatives including captive breeding (including two CR ranked taxa), education, field research and training of wildlife enforcement officers. In Thailand funds are earmarked for the softshell turtle-breeding program at Kanchanaburi where juvenile rearing facilities will be improved for the striped narrow-headed softshell turtle (*Chitra chitra*), ranked CR. In Malaysia, support for an emerging program with KUSTEM (University College of Science and Technology) will bring some much-needed science to ongoing hatching and headstarting programs for both mangrove (*Batagur*) and painted (*Callagur*) terrapins, both ranked CR. In India the TSA has launched a partnership with the Madras Crocodile Bank Trust designed to develop and implement conservation action plans for some of that country's most endangered turtles. Finally, breaking out of the Asian realm, TSA will begin working with two existing turtles farms in southern Mexico that are managing large numbers of Central American river turtles (*Dermatemys*) with the aim of developing a large scale reintroduction program.

**Asian Turtle Coordinator Doug Hendrie (seated) demonstrates sexual characteristics on river terrapins (*Batagur baska*) at a headstarting facility in coastal Malaysia. Shown are Hugh Quinn (Cleveland Metroparks Zoo) and Prof Chan Eng Cheng (KUSTEM) with two of her students (far left). *Batagur* are one of ten IUCN ranked critically endangered Asian turtles that is expected to benefit from a recent \$100,000 grant to the TSA.**



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these countries but one, and provide direct conservation action to half (9 of 18) of the turtle species currently ranked Critically Endangered (CR). In Myanmar we will support construction of new facilities for the endemic Burmese roofed turtle, recently rediscovered and now the subject of intensive captive breeding efforts at the zoo in Mandalay. In Vietnam support for the renown Turtle

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Increasingly, the TSA is becoming recognized as a global force for turtle conservation, and this new grant will certainly strengthen that reputation. However our pri-

mary strength lies in the enormous “people” resources that we can mobilize when needed. This is especially true with our veterinary team, many of whom have strong institutional backing. With a diverse partnership of private breeders, zoos, conservation NGOs, veterinarians, academic researchers, nutritionists, field biologists, and range country rescue centers, the TSA is uniquely positioned to conduct a wide range of turtle conservation activities, both *in* and *ex situ*. Due to a growing network of supporting individuals and organizations, we are able to rapidly catalyze conservation action for turtles. However the TSA is capable of doing so much more. We are constrained only by the lack of sustained funding.

If you are interested in learning more about the TSA, visit their Web site at [www.turtlesurvival.org](http://www.turtlesurvival.org).

Putting all this in perspective, and reflecting on the spirit of the TSA, is this from WCS’s John Behler, Co-chairman of the IUCN Tortoise & Freshwater Specialist Group: *There is precious little time remaining for turtles. We shall save some species in their wild haunts; others will require rescue and very special stewardship until conservation becomes a reality, not a luxury of first world nations. While the TSA is an impressive consortium of organizations, it is the dedicated individuals in the organization that are the driving forces behind TSA’s work. They champion the survival of turtle species at great personal sacrifice. They are indefatigable in their efforts, exhaust their time and financial resources, and do not look for praise. They are the TSA. The fruits of their efforts may well make the difference between the survival of many turtle species or their extinction.*

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at the Fort Worth Zoo and TSA Co-chair.*



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***Dr. Wachira Kitimasak examines a captive hatched striped narrow-headed softshell turtle at the Ministry of Fisheries-run facility at Kanchanaburi Thailand. TSA funds and technical support are expected to improve husbandry and veterinary care for this IUCN ranked critically endangered species.***