

### A Global Tour of Strategic Turtle Conservation Initiatives Supported by the Turtle Conservation Fund

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The Turtle Conservation Fund (TCF) is a strategizing and funding consortium of leading turtle conservation organizations and individuals focused on ensuring the long-term survival of tortoises and freshwater turtles. Its impact is global, supporting those front-line conservationists and organizations whose efforts help implement TCF strategy. Current partnering organizations include Conservation International, International Union for Conservation of Nature / Species Survival Commission / Tortoise and Freshwater Turtle Specialist Group, Turtle Survival Alliance, European Association of Zoos and Aquaria Shellshock Campaign, Chelonian Research Foundation, Chester Zoo, Fort Worth Zoo, Asian Turtle Program, Wildlife Conservation Society, Behler Chelonian Center / Turtle Conservancy, Chelonian Research Institute, World Wildlife Fund, Durrell Wildlife Conservation Trust, SOPTOM, Kadoorie Farm and Botanic Garden, Rotterdam Zoo, European Studbook Foundation, and International Center for Conservation of Turtles / Allwetter Zoo.



Since its formation in 2002, TCF has awarded \$344,912 in grants to 77 conservation initiatives representing 35 nations. TCF has two funding cycles a year, with the most recent round of grant proposals evaluated in May 2009, awarding \$52,458 to 12 worthy projects. This latest round of grant recipients is representative of this organization's global perspective. Grants were given for work with Endangered and Critically Endangered tortoise and freshwater turtle species in the Philippines, Myanmar, Cambodia, Vietnam, Mexico, Belize, Mexico, Colombia, Peru, and Madagascar.

#### Philippines

TCF funds were awarded to Sabine Schoppe of the Katala Foundation Inc. to assess the conservation status and population size changes of the Critically Endangered Philippine forest turtle (*Siebenrockiella leytensis*) on Palawan. Information from this work will help assess population stability and provide key information in designing recovery plans.



Diverlie Acosta, turtle researcher for the Katala Foundation, measures a juvenile Philippine forest turtle (*Siebenrockiella leytensis*).

#### Myanmar

Funding for two initiatives was awarded to the Wildlife Conservation Society's (WCS) Myanmar Program turtle team of Win Ko Ko, Khin Myo Myo, and Kaw Moe. One, led by Win Ko Ko, focuses on surveying the Sittoung River for the Endangered Burmese roofed turtle (*Batagur trivittata*) which has yet to be documented from this river. This work is critical, as a hydro-electric dam has already been completed in one of the two rivers known to be currently inhabited by this species, and another such dam is proposed for the other. Such impoundments destroy

nesting areas for this species and decimate populations. Finding and appropriately managing additional populations may be the only hope of survival for this species in nature. The other Myanmar initiative, led by Khin Myo Myo, focuses on conducting a survey for the Endangered Arakan Forest turtle (*Heosemys depressa*) to update its current population status and define any threats that may impact its survival.

#### Cambodia

In Cambodia, TCF support was provided to Heng Sovannara of the Royal Government of Cambodia Fisheries Administration and the WCS Cambodia Program for a project involving *Batagur baska*, the Critically Endangered river terrapin, found here only in the Sre Ambel and Kaong Rivers. Personnel with this project have been monitoring and protecting nesting beaches since 2002, but in 2008 were unable to locate any nests. This sobering turn of events prompted a request to TCF for funding to expand the search along these rivers as well as neighboring systems for nests.

#### Mexico, Belize, and Guatemala

TCF provided support for two projects regarding the Critically Endangered Central American river turtle (*Dermatemys mawii*). One project, led by Gracia Syed of the Universidad Autonoma de Mexico, seeks to identify any evolutionary lineages of this species in Mexico and Belize natural populations in an effort to better design captive breeding programs for animals residing in existing captive facilities there. The other, with Rony Garcia, Roan McNab, and Gabriela Ponce of the WCS Guatemala Program, and José Moreira of Asociación Balam, will define habitat use patterns of this species in Guatemala to better define the needs of wild populations in establishing appropriate conservation management plans.

## Vietnam

The Vietnamese pond turtle (*Mauremys annamensis*) was for years thought extinct in the wild, but was recently rediscovered. Tim McCormack, Doug Hendrie, Van Ha Hoang, and Chi Nhan Nguyen with the Asian Turtle Program and the Cleveland Metroparks Zoo, approached TCF for support to produce posters that will improve local knowledge about the significance of this species and its protection status.



The Asian Turtle Program's *Mauremys annamensis* Project (MAP) provides training to Q. Ngai Province rangers about the plight of the Vietnamese pond turtle. Six pond turtles were confiscated in this province in January and now reside at the Asian Turtle Program's Turtle Conservation Center.

## Colombia and Peru

TCF supported two projects in South America. One, lead by Adriana González-Zárate, Olga Lucia Montenegro Diez, and Olga Victoria Castaño-Mora of the Universidad Nacional de Colombia, involves the impact of impoundments (dams) along rivers on the Endangered Colombian endemic river turtle (*Podocnemis lewyana*). The outcome of this investigation will be critical, both locally and globally, as impoundments are common around the world, and knowing the influence of dams on large river turtles is essential to their conservation. The other South American initiative, lead by Fernando Arbeláez and Mario Vargas-Ramírez of Fundación BioDiversa Colombia, involves capacity building in four communities

in Colombian and Peruvian indigenous communities of the Santa Sofia Indigenous Reserve along the Amazon. This program will provide training for selected individuals in these communities to protect turtle nesting beaches, to build artificial beaches, and to translocate eggs from non-protected to protected areas.



**Torichiga:** A turtle conservation-oriented stage play written and performed by the young people of the Nuevo Jardin indigenous community, Colombia and Peru.

To see a video of this highly acclaimed production, go to <http://video.google.es/videoplay?docid=6075199196786203964>

## Madagascar

Two programs were supported in Madagascar. One, lead by Riana Rakotonrainy of the University of Antananarivo, Madagascar, Christina Castellano and J. Sean Doody of the University of Canberra, Australia, and Herilala Randriamahazo of WCS Madagascar, involves the demography, spatial attributes, and nesting ecology of the Critically Endangered Madagascar spider tortoise (*Pyxis arachnoides*). The information gained from this study will be extremely valuable in designing conservation strategies, both in nature and in captivity. TCF support of the other Madagascar project, led by Juliette Veloso of Durrell Wildlife Conservation Trust, Madagascar, will enable the second release of head-started, Critically Endangered Madagascar side-necked turtles (*Erymnochelys madagascariensis*) in Ankarafantsika National Park.

## Captive Management of Asian Box Turtles

The European Studbook Foundation designs captive breeding programs for key species. Among these are *Cuora trifasciata* and *C. aurocapitata*, which present confusing taxonomic issues. To assure that captive breeding programs produce "pure" lineages of evolutionarily significant units, TCF provided funds for molecular genetic analysis of captive populations to Jens Poschadel of the University of Hamburg, Germany, Torsten Blanck of the European Studbook Foundation, Martina Raffel and Elmar Meier of the Allwetter Zoo, Münster, Germany, Martin Plath and Ralph Tiedemann of the University of Potsdam, Germany, and Henk Zwartepoorte of the Rotterdam Zoo, Netherlands.

## Summary

These projects exemplify TCF's holistic approach to turtle conservation, which involves both *ex situ* and *in situ* approaches. Such efforts can only be possible through partnerships with the various organizations, institutions and individuals who create and conduct the above supported programs. These partnerships form a coordinated, effective, global network with a mission to conserve the world's tortoises and freshwater turtles so that no species becomes extinct in our lifetime.

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The TSA is one of the founding partners in the TCF and is joined by a host of other turtle conservation groups that comprise this organization.