

## One of world's rarest turtles heading back to the wild

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Southern river terrapin. Credit: Thida Leiper

WCS (Wildlife Conservation Society) and the Royal Government of Cambodia's Fisheries Administration announced today that 21 captive-raised southern river terrapins have been released back into their native

habitat in southwest Cambodia. More than 150 villagers, government representatives, and religious leaders attended ceremonies for the release.

Southern river terrapins were believed extinct in Cambodia until 2000 when a small population was re-discovered by WCS in the Sre Ambel River system. Today, they are critically endangered and considered one of the world's 25 most endangered tortoises and freshwater [turtles](#).

The species is still known locally in Cambodia as the "Royal Turtle" because historically it was protected by royal decree and the eggs were considered a delicacy reserved for the king. More recently, southern river terrapins have been pushed to the brink of extinction largely due to unsustainable harvesting of eggs and adults. Consequently, they exist only in small isolated populations and there are less than 500 wild nesting females in total.

In 2001, WCS in partnership with the Fisheries Administration instated a community-based protection system in Sre Ambel, hiring former nest collectors to search for and protect nests, instead of harvesting the eggs. Since then, 39 nests with a total of 564 eggs have been protected and have resulted in 382 hatchlings.

Because young terrapins are vulnerable to predators such as water birds and monitor lizards, and to accidental entanglement in fishing gear, WCS and the Fisheries Administration began a program in 2006 to "headstart" the turtles and increase their chance of survival. After turtles hatched from protected enclosures on a sandbar, they were transferred to a facility and raised for several years in captivity. This enabled them to reach a size where they would be less prone to predation upon release.



Monks holding southern river terrapins during release ceremony. Credit: Allan Michaud

"We are very hopeful for the future of Cambodia's Royal Turtle," said Heng Sovannara, Deputy Director of the Conservation Department of Fisheries Administration and Project Manager for WCS. "Although we find very few nests each year due to the rarity of the species, we have been very successful with protecting wild nests and raising the hatchlings. We are now ready to return some of the terrapins back to the wild where they came from so that they can breed and start to restore the wild population."

The turtles were chosen for release based on a genetic analysis carried out at the National University of Singapore supported by Wildlife

Reserves Singapore. This analysis determined how closely the turtles were related to one another. The turtles most distantly related were picked for release to limit potential negative effects of inbreeding.

After undergoing health examinations by veterinarians with the WCS Bronx Zoo Zoological Health Program and the WCS Wildlife Health and Health Policy Program, and field laboratory testing by a New York Aquarium veterinary technician, all 21 terrapins were fitted with transmitters to allow researchers to monitor their survival and seasonal movements, and to understand their habitat use within the wider river system. Following a traditional ceremony in a nearby village to bestow blessings on the terrapins for their survival and reproduction, the terrapins were placed in a soft release enclosure (a large oxbow lake fenced off from the river) to allow them to adjust to their new environment. They will be released into the wider river system later this month.



Staff work on transmitter affixed to southern river terrapin that will enabling monitoring of movements after release. Credit: Thida Leiper

"This is an important year for the southern river terrapin," said WCS Regional Herpetologist, Dr. Steven Platt. "We have just trebled the wild population of the species in the first of a series of releases which we hope will restore it to its former function within the landscape."

The project will be expanded in the coming year. Plans are underway to develop a new facility in Koh Kong Province to expand our headstarting program as well as breed southern river terrapins in captivity, along with other endangered species such as the Siamese crocodile (*Crocodylus siamensis*). WCS and the Cambodian Fisheries Administration have partnered with the Turtle Survival Alliance, Wildlife Reserves

Singapore, and Building Trust International to develop a sustainably-designed facility that will house a greater number of animals and encourage natural breeding. This will enable the project to supplement the wild population on a larger scale.

"We hope that this project can serve as a model for other turtle conservation recovery efforts where populations are so low that their continued survival depends on hands-on management of all life stages," said Andrew Walde, Executive Director of the Turtle Survival Alliance.

"The conservation of Asia's turtles is a top priority for WCS," said WCS Freshwater Turtle and Tortoise Coordinator Dr. Brian D. Horne. "We have long partnered with the Fisheries Administration on the conservation of the southern river terrapin but our new partnerships with Wildlife Reserves Singapore and the Turtle Survival Alliance will enable us to be more effective in our efforts to recover this iconic species to its full ecological role."

Provided by Wildlife Conservation Society

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