SAVING THE RIVER GIANT: THE SOFTSHELL TURTLE COMEBACK STORY – PRE-READ ARTICLE

In Cambodia, giant turtles come back from the brink

From Stefan Lovgren

KAOH TRONG, CAMBODIA — It was late last year when the owner of a popular restaurant in Kratie, a town in northern Cambodia, got a visit from local fishermen who had caught a live turtle in the Mekong River and were hoping to make a sale. The owner sometimes bought turtles, serving them to customers by special request. But the turtle the fishermen had brought this time was different. For starters, it was huge, weighing 37 pounds. Its broad head and eyes close to the tip of the snout resembled that of a frog. The owner, suspecting it was one of the endangered species he'd been told about, thought for a moment, then agreed to buy the turtle, for $75—not to cook it, but to save its life.

And so it was that the giant turtle ended up at the Mekong Turtle Conservation Center in Sambor, about 20 miles north. When the restaurant owner's son delivered it, Bran Sinal, who manages the center, immediately recognized it as a Cantor's giant softshell turtle, an extremely rare species in Cambodia that can grow to the size of a small sofa and live for more than a century. Sinal could also tell that the turtle was a female of breeding age. To lose it would have been a tragedy.

For the next three months, Sinal cared for the turtle at the center. Then, on a recent Friday morning, he and a large group of people, including local officials, villagers, and students, gathered on a pristine beach on the island of Kaoh Trong, in the middle of the Mekong, near where the turtle had been captured, to return it to the river. After two Buddhist monks recited a prayer, the turtle was placed on the ground. It instinctively began digging into the sand to hide. Leaving it there wouldn't have been a good idea, so the turtle was again picked up and this time released into the water. As it swam away, the students applauded.

"This is a special occasion," said Sinai afterwards. "It is the first time we have released a broodstock [of this species] back into the wild, so it's a very good sign."

Cantor's giant softshell turtle, known as the "frog-faced turtle," is found in a wide-ranging area, from Bangladesh in the west to the Philippines in the east, but only in a 30-mile strip of the Mekong River in northern Cambodia. The turtles were once plentiful here, but decades of people harvesting their eggs for food caused the population to plummet so

much that the species was thought to have disappeared completely. It was only in 2007 that it was re-discovered in Cambodia.

That year, the country's Department of Fisheries joined with several conservation groups to launch a program to resurrect the frog-faced turtle's population in Cambodia, focusing on protecting hatchlings. Three nests found in 2007 produced about 100 hatchlings, which conservationists nurtured into young adulthood before releasing them back in to the river. Since then, the number of nests found has increased each year, says Sinal, who estimates that more than 8,000 hatchlings have now been released into the Mekong. At the same time, he says, the population of adult turtles is unknown but probably still very low. "This is why it's so important to save every individual," he says.

Lethal Strike

Turtles, tortoises, and terrapins have been on Earth for more than 200 million years, but some species are now among the most endangered animals on the planet. Of the more than 300 turtle species, almost half are threatened with extinction, according to the Wildlife Conservation Society. The situation may be the most perilous in Southeast Asia, which has 89 species—the highest concentration of turtles anywhere in the world. (Read more: What if there were no more turtles?)

Populations of softshell turtles are particularly vulnerable in Asia, where they are often eaten as a delicacy. This month, Chinese state media reported that the last known female Yangtze softshell turtle died shortly after an attempt to artificially inseminate her, potentially dooming the species to extinction.

All aquatic turtles come up on shore to nest, which makes them—and their eggs and hatchlings — vulnerable to natural predators and human collection. Both freshwater and marine species have seen their nesting habitats dramatically shrink due to human activities, forcing them to congregate closer on shore, which only increases their exposure.

Freshwater turtles like the Cantor's giant softshell are confined to smaller waterways than sea turtles, which increases pressures from habitat loss and continued collection, says Andrew Walde of the Turtle Survival Alliance, an advocacy group based in Charleston, South Carolina. "Marine turtles disperse from nesting sites into a vast ocean, but freshwater turtles are stuck in that same pond, lake, marsh, or river and can continue to be targeted for food, traditional medicine, or the pet trade," he says.

Now, Sinal says, a new threat to the turtles has emerged: climate change. Spawning occurs during the dry season, and females will only lay their eggs in the three to four days

around the full moon during those few months. “The conditions need to be natural,” Sinal says. “But with the changing of the climate, it may get too hot or rain too much, and that could disrupt the spawning cycle.”

Without a hard shell to protect it, the turtle spends more than 95 percent of its life almost motionless in water and under the sand, surfacing just twice a day to take a single huge breath. It may lead a lethargic life, but it can strike as fast as a snake, shooting its neck out from under the sand like a chameleon shoots out its tongue, to catch shrimp or fish.

From Poacher to Guardian

After Cantor’s giant softshell turtle was re-discovered in 2007, the Cambodian Department of Fisheries partnered with nonprofit Conservation International and the World Wildlife Fund to start a community-led nest protection program. And a few years later, Conservation International established the the Mekong Turtle Conservation Center in Sambor, on the temple grounds of Wat Sorsor Moi Roi. It has served as a head-start facility for the turtles, with hatchlings gathered from natural nests along the river and kept indoors for 10 months before being released back into the wild.

As a tourist attraction, it also draws a modest stream of visitors wanting to learn more about Cambodia’s 15 native turtle species, most of which are endangered. The day after the release of the giant turtle, Sinal gave a Swiss-French couple a guided tour. “If people know more about these turtles, they can help us to protect them,” says Sinal, who has been named a “Mekong Conservation Hero” as part of a USAID-funded initiative called Wonders of the Mekong. (Read more: Will damming the Mekong River harness it or kill it?)

Meanwhile, a network of salaried “turtle guardians” patrol the river beaches where the turtles lay their eggs. Among the six teams of guardians are former poachers, like motorboat driver Kong Theary. He is partnered with his 60-year-old aunt, Chan Nin, who has been a guardian since 2010. She remembers going egg collecting with her mother as a young girl and how excited she would be if they found a nest. “Now I protect the eggs instead of putting them in a bowl to eat,” she says.

When they encounter fishermen poaching turtle eggs, Theary says he will try to reason with them, explaining the importance of protecting the eggs. Sometimes he offers to swap the turtle eggs for chicken or duck eggs. “It’s a tactic that works most of the time,” Theary says, adding that the best outcome is to make sure that the turtle nests are not plundered in the first place.

On a recent Saturday afternoon, the aunt-and-nephew team scour the beach of an unpopulated island by boat when they suddenly spot a set of tracks in the soft sand. Barefoot, the two make their way up the scorching riverbank and begin to poke the sand with short wooden sticks, soon finding what they were looking for about a foot down: several small, round turtle eggs.

"They must have been laid last night," Theary says, before filling the hole back up while his aunt carefully erases the tracks leading up from the water.
If all goes well, the eggs should hatch in the next 55 to 60 days.