

The Fresno Bee



Fresno Chaffee Zoo helping to restore tiny turtles to foothills

By Marc Benjamin
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Fresno Chaffee Zoo is joining an effort to save Northern California's only native turtles, which are dying off because non-native critters are taking their food and eating their eggs and young.

The northern western pond turtle may be tiny – 8 to 10 inches long and less than 2 pounds fully grown – but it's a big deal when it comes to research. Their range is from Washington state into California. A second species, which is struggling even more, is found along the Central and Southern California coasts and into Baja California.

Fresno Chaffee Zoo is part of a repopulation program that includes several West Coast zoos. All zoos dedicate employees and money from their conservation funds for the Association of Zoos and Aquariums' SAFE program, Save Animals From Extinction. The two western pond turtle species are among 10 species in the SAFE program.



A Western pond turtle in the sands of the North Fork of the Kaweah River in Tulare County. BRIAN TODD Special to The Bee

They are the only turtles native to rivers and lakes on the Pacific Coast.

Fresno Chaffee Zoo has participated in programs to save other regional species, including the Pacific fisher, a wolverine-type mammal found in dwindling numbers in the Sierra, and the mountain yellow-legged frog. The frog study was halted after dozens of baby frogs died at the zoo in 2011. Zoo officials say a new program could soon be underway. The zoo also may participate in a tiger salamander project.

Western pond turtles were once prominent along waterways in the foothills and mountains of Fresno, Madera, Tulare and other Valley counties. Recently, they were determined to be two species, one more coastal and found in Southern California and the northern version, which lives in Northern and Central California, Oregon and Washington.

Fresno's zoo will support efforts both financially and with a breeding program for the Valley region. The zoo has 17 turtles: 12 babies and five adults. None is on display.

"There is just not a lot known about western pond turtles and their populations," said zoo director Scott Barton.

The turtles' decline goes back more than a century, when they were a popular delicacy for soups, but later laws were passed prohibiting their slaughter.

The program will determine whether zoo-bred turtles can be sustained and introduced into the wild, Barton said.

The project also includes habitat mapping, improving knowledge of sites where species are found, learning why certain sites sustain them and finding ways to create more supportive habitat. Officials also seek public participation asking for information about sites where the turtles are observed.

More recently, western pond turtle territory has been diminished by development and by losing food sources to larger species, including domesticated turtles dumped into area waterways. Western pond turtle eggs and hatchlings are eaten by bullfrogs, which are not native to California, said Mark Halvorsen, Fresno Chaffee Zoo's curator overseeing reptiles.

The red-eared slider turtle, a common pet, thrives in streams after people dump them. Part of the plan for improving western pond turtle habitat is to find other options for people who no longer want to keep their pet turtles, Halvorsen said.

The pond turtle reintroduction effort in California includes San Francisco, Oakland and San Diego zoos. Zoos in Portland and Seattle are supporting a program for turtles in those states. In Washington and northern Oregon, turtles have suffered from a die-off from a shell erosion disease.

Initial meetings brought together federal, state and zoo officials, as well as environmentalists, research biologists and nonprofits that have been working to save turtles. Such efforts have never swept across so many agencies, said Debborah Luke, Maryland-based conservation director for the zoo association.

"This was the first time all these people were in the same room to talk about pond turtles," Luke said.

Turtles can either be removed from the wild as hatchlings to protect them from predators or born in zoos before being introduced into the wild, Luke said.

While the project is scheduled to last three years, some efforts could extend longer, she said.

Zoos, which have 183 million visitors, reach a large audience to educate visitors about species that the association is helping, Luke said.

"That's more people than attend all major sporting events in the U.S. combined," she said.

Listing is questioned

Research by zoos is cheered by environmentalists hopeful that it will reveal more about preserving western pond turtles.

“That the zoos are doing this work recognizes that there is a problem and they are trying to provide some support,” said Jenny Loda, a biologist and staff attorney with the Center for Biological Diversity in Oakland. “These local projects definitely help, but we need to be sure we have a comprehensive plan for their recovery.”

The federal government is in the process of considering listing one or both species of western pond turtles as threatened or endangered.

“Based on what we know at the moment they really should be listed under the Endangered Species Act, but that process takes quite a while,” she said. “As far as what is known, it’s in decline throughout its range.”

When waterways were dammed for agriculture, and recreation and development surged, the turtle population mostly disappeared from the Valley floor, Loda said.

San Francisco Zoo has taken a leadership role in western pond turtles’ reintroduction. San Francisco’s Mountain Lake in Golden Gate Park was emptied of all species and more than 50 young turtles were placed in there. In June, San Francisco Zoo released six western pond turtles in Yosemite National Park to start their return to the Yosemite Valley. Four more will be added to the population this week, and 12 to 15 more next year and in subsequent years.

Nobody knows when they disappeared from Yosemite Valley, said Jessie Bushell, director of conservation at the San Francisco Zoo.

The theory is that wetlands on the Yosemite Valley floor were drained decades ago to make way for roads and facilities for people. Those changes brought turtle predators, such as snakes, skunks and raccoons, and with more people came more trash and more turtle predators.

The turtles’ whereabouts will be tracked through radio telemetry, she said.

THIS CAN REALLY BE A BELLWETHER SPECIES FOR SIGNIFICANT CHANGES IN THE ECOSYSTEM.

Jessie Bushell, San Francisco Zoo, director of conservation

“This can really be a bellwether species for significant changes in the ecosystem,” Bushell said.

Down the road from Yosemite in the O’Neals area of Madera County, a study that concluded in 2013 examined the lives of western pond turtles. About a dozen turtles were tracked with radio telemetry. It was found that they stayed on land nearly two-thirds of the year when it’s dry, burying themselves just below the surface within a football field’s distance to water, said Brian Todd, a University of California, Davis, assistant professor and study co-author.

When it rains and the nearby stream begins to run again, the turtles go to the water to feed, he said.

But they require water for a portion of the year, he said, which means drought conditions likely have worsened conditions for the species.

“They will stay in water year-round if there is water,” he said.

And, they succeed best in places where there are fewer people and more water. The most successful populations are found in sparsely populated areas of extreme Northern California where rain falls more often and there are fewer people.

Both Bushell and Todd say they’re not sure the western pond turtles in Northern California would benefit from federal status as threatened or endangered, but it’s a different story for the Southern California species.

“We need to be gravely concerned about its viability and whether it will still be here in 10 or 20 years,” Todd said of the Southern California turtle species.

Dumped invaders

One aspect of Fresno Chaffee Zoo’s plan is working on public education programs to ensure that turtle owners know the best ways to give up their unwanted pets, especially those that pose threats to the western pond turtles.

The non-native animals not only eat pond turtles’ food and hatchlings but also crowd the turtles out for the best spots for lying in sunshine, which is important to a turtle’s health, Bushell said.

But groups that take in those predator turtles species have been overwhelmed.

The most common pond turtle competitor is the red-eared slider, a popular pet – until it gets too large – that is dumped into local ponds or streams where the native western pond turtles live.

The red-eared slider can carry salmonella, said Walter Salvari, spokesman for the Central California Society for Prevention of Cruelty to Animals.

In the past year, he said, the SPCA confiscated about 50 that were destined for a swap meet but were too small to sell.

Right now, he said, the SPCA has four larger ones available for adoption.

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Yvonne Gomez, Clovis Turtle and Tortoise Rescue

Yvonne Gomez, who runs the Clovis Turtle and Tortoise Rescue, said she was taking in 100 red-eared sliders a year and finding many of them homes. But she had to stop because homes no longer were available.

“For the past couple years, I have no way to find homes for the red-eared sliders,” she said. “I only know so many people with fenced-in ponds.”

Still, despite her prohibition on taking more, she had owners bring 10 more to her home this year.

Gomez recommends calling animal shelters, a pet store or finding someone with a pond willing to take them. It’s illegal, she said, to dump a red-eared slider into California waterways.

The turtles are cute when they’re small, she said, and they continue to grow until they are up to three times larger than western pond turtles. They also can live 50 to 60 years.

“They are just as cute as they can be when they are little,” Gomez said. “Then you have to keep buying larger and larger aquariums ... soon they’re dinner-plate sized, and nobody else wants them either.”