

Search

PE.com

Search

WEB SEARCH by YAHOO!

PE.com

LANDSOCAL

HS

BIZPRESS

LA PRENSA



Comments 3 | Recommend 0

Species gets a jump on recovery

Just-found habitat for yellow-legged frog has ecologists rethinking population estimates

PLAY TO LISTEN TO

Download story podcast

04:36 PM PDT on Saturday, August 15, 2009

By JANET ZIMMERMAN
The Press-Enterprise

Hopes for a once-plentiful Southern California frog that is now nearly extinct lie with an unlikely creature known as Han Solo.

That's Solo the amphibian, not the "Star Wars" character. His parents were rescued three years ago from a drought-depleted creek in the San Bernardino National Forest and brought in to breed at a San Diego Zoo facility. Solo is the first successful offspring of a southern mountain yellow-legged frog bred in captivity, and now he lives happily among his few remaining relatives.

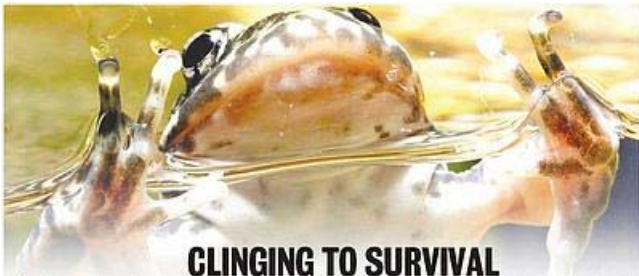
Solo and the other captive frogs will serve as an assurance colony, "in case something goes wrong in the wild," said Jeff Lemm, research coordinator for the zoo's Institute for Conservation Research in Escondido.

When Solo's ancestors, then tadpoles, were scooped up from a tributary of the north fork of the San Jacinto River near Idyllwild, there were believed to be only 122 of the species left in three mountain ranges where they once thrived, Lemm said.

But in June, a U.S. Geological Survey team stumbled onto an adult frog in Tahquitz Creek, northeast of Idyllwild. Two weeks later, a crew from the San Diego Natural History Museum discovered another adult frog 2½ miles away, in Willow Creek, a tributary of the Tahquitz.

They were the first sightings of the frog in the San Jacinto Wilderness in 50 years, leaving scientists to wonder if the population and habitat are much larger than they first thought.

Story continues below




CLINGING TO SURVIVAL

Biologists hope that captive-bred mountain yellow-legged frogs can repopulate places where they have vanished. In the wild, a small number of the frogs live along a handful of creeks in the San Jacinto, San Bernardino and San Gabriel mountains.

RARE: A small population of mountain yellow-legged frogs lives near the San Jacinto River's north fork. Recently, single frogs have been found along Tahquitz and Willow creeks.

Size: 1.5 to 3.5 inches long
Life span: 10 years
Population low: 122
Number in wild: Unknown
Number in captivity: 64

Natural habitat: Mountain creeks, lakes, pools
Status: Endangered
What's next: September frog count



Source: U.S. Geological Survey

THE PRESS-ENTERPRISE

[Click to enlarge](#)

"What we're thinking is that it's a connected population" along the 2½ miles between the two spots, said Adam Backlin, the Geological Survey ecologist who found the first frog. "There may be more animals in this creek than our population estimates for the species as a whole."

Amphibian losses

The disappearance of the frog is part of an overall decline of amphibian populations worldwide.

One-third of all amphibian species are threatened with extinction largely from chytrid fungus, which affects the movement of water and oxygen through their skin, Lemm said. The frogs also are endangered by predatory fish, pollution and habitat loss.

"People don't understand how big the problem is. We're talking dinosaur extinction," he said. "These things are disappearing so fast we can't keep up."

Anne Poopatanapong, a wildlife biologist with the San Jacinto Ranger District, found tadpoles in 2006 floundering in the creek's smallest pools, some of which were entirely dry.

She and other scientists dispatched by U.S. Fish and Wildlife used small nets to scoop 82 tadpoles into sterilized Tupperware containers. They were hauled out of the wilderness in backpacks and transported to the zoo program.

The operation was risky, but the tadpoles would have died anyway, she said.

"It was impromptu and it worked. It was awesome," she said.

Lemm took over from there.

'Huge' Find

In the wild, transformation from tadpole to juvenile can take three years. But because of the warmer temperatures in the institute's eight, 250-gallon tanks, the process was shortened to a year, he said.

Nineteen of the tadpoles died, but 63 grew into juvenile frogs, a high success rate, Lemm said. One pair bred in December, laying a clutch of about 200 eggs, a handful of them fertile. Of the three that hatched, two died. The other was Solo.

"He's eating and growing and doing well," Lemm said.

By next spring, he figures there will be as many as 1,000 eggs. Already out of space, the institute will share 40 of the adult frogs with The Living Desert in Palm Desert and the Los Angeles and Fresno zoos, he said. The frogs live about 10 years.

Some of the captive frogs eventually will be used to repopulate their natural habitats in the San Jacinto, San Bernardino and San Gabriel mountains.

Until the 1970s, the frogs lived virtually everywhere that had water and was above 12,000 feet, said Backlin, from the Geological Survey. He is hoping the reintroduction experiments will help determine why the frogs disappeared.

Backlin was scouting spots to relocate future populations when he stumbled upon one of the frogs on June 10. It was a surprise, since Backlin said he had searched about 300 sites in the animal's historic range.

Then on June 25, the museum's field biologist found another frog -- good news for one of the world's most endangered species.

"That was absolutely huge for an animal that is dying off left and right," Lemm said. "To rediscover an old population is just brilliant."

Reach Janet Zimmerman at 951-368-9586 or jzimmerman@PE.com

Yellow-legged Frogs

Size: 1.5 to 3.5 inches long

Lifespan: 10 years

Population low: 122

Number in wild: unknown

Number in captivity: 64

Natural habitat: mountain creeks, lakes, pools

Range: San Jacinto, San Bernardino and San Gabriel mountain ranges

Status: endangered

What's next: September frog count
