

Roadkill survey will study endangered salamanders

Small amphibians are the only animals that exist solely in Santa Cruz County

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When animals cross paths with vehicles, carnage ensues. And when the victim is the endangered Santa Cruz long-toed salamander — the only local animal found nowhere else on the planet — the loss could be significant.

COUNTY The first rains of the season trigger a primal urge in these shiny, black, orange-speckled, finger-sized animals to migrate from breeding ponds to higher ground. Traveling at night to avoid predators, they are often killed crossing roads.

"We may be inflicting severe harm on an already endangered population," says Wesley K. Savage, a biology doctoral candidate at UC Davis.

Which is why researchers and volunteers will set out in the pre-dawn hours after the first seasonal rains this year to survey the damage. Braving rain, fog and traffic, they will patrol key highways in Santa Cruz and Monterey counties to locate, photograph and identify each amphibian traffic victim.

"We can get an idea of how much the roads affect the breeding population," says Savage. "If we know which roads flank breeding sites, we could temporarily divert traffic when the salamanders

are migrating."

To many, the Santa Cruz long-toed salamander may be just another slimy lizard, but to researchers like Savage, it is a rare and endangered animal. Only a few thousand of them are left, he believes, clustered in an approximately 15-mile strip of land between Aptos and the Elkhorn Slough reserve.

"Urbanization and fragmentation of their habitat is their primary threat," said Bill McIver, biologist at the Ventura office of the Fish and Wildlife Service.

Salamander conservation is taken seriously in Santa Cruz County; development projects could be delayed, altered or canceled if they are found to adversely affect this endangered animal.

Earlier this year, a \$24 million construction project at Aptos High School was on the verge of stalling after an endangered salamander was found on the site. While the school principal joked about adopting the salamander as school mascot, some others were unhappy about the possible delay in the construction project.

"This is known as environmental protection. A few years ago it would have been called insanity," wrote Don Parkhurst of Scotts Valley in a letter to the editor in April. "My heart bleeds for the salamander, but what can be said for



The endangered Santa Cruz long-toed salamander is often the victim of passing vehicles.

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our endangered school system?"

In another instance, a golf course planned in the late 1990s near La Selva Beach was canceled to protect a salamander breeding site.

Related to frogs and toads, Santa Cruz long-toed salamanders live on land, but breed in water.

"They are a link between the land and freshwater systems," said Antonia D'Amore, a UCSC biology doctoral candidate who is organizing the roadkill survey. "They are like canaries in a coal mine. If they are disappearing, some-

thing is wrong with the ecosystem."

Roadkill surveys are part of an effort to study and conserve these animals. This year's survey "will not only tell us how many of these animals were killed, but also help us find new breeding ponds," said D'Amore.

Roadways covered in the survey include roads in the Seascapes area, Freedom Boulevard, Valencia, San Andreas, Elkhorn and Dolan Roads.

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