

RAIN BRINGS OUT RARELY SEEN REPTILES

This spring, the unusual sightings stacked up for herpetologist Steve Bledsoe, as he and his associates conducted their annual census of local reptiles and amphibians around the Upper Chiquita Canyon Conservation Area.

Years of severe drought have had a huge effect on local wildlife, Bledsoe said. But this winter's rains brought out more snakes, lizards and toads, including some rare specimens not recorded on the site before.

Lush grass and wildflowers gave the food chain a jumpstart in the protected land of Upper Chiquita Canyon—one of 16 open spaces set aside by the Transportation Corridor Agencies (TCA) with construction of The Toll Roads. Amid such abundant greenery, the volunteer herpetologists have recorded 16 out of the 28 reptile and amphibian species thought to live in the area, including several they'd not seen at the location before.



Red Diamond Rattlesnake -
Photo by Steve Bledsoe



Spadefoot Toad - Photo by Steve Bledsoe

Among those observed this year were several species considered of "special concern" by California's Department of Fish and Wildlife, due to the loss of much of their habitat in the coastal region. One was a red diamond rattlesnake, found curled up under one of the plywood cover boards put in place years before by specialists to bring snakes and reptiles above ground for study. The biggest snake species in California, the red rattler is a thick, impressive-looking snake with light diamond-shaped markings on a reddish background. This particular one was about three or four years old, Bledsoe said, and the first he'd seen on the site.

And, then there were the spadefoot toads. In land not far from Upper Chiquita and similar in habitat, winter rains formed a temporary and shallow pond, known as a vernal pool. In its clear water swam hundreds of spadefoot tadpoles, with scores of newly developed toadlets lining the edge of the pool. The spadefoot is rarely seen, as it spends most of its life buried underground. It's active for only a short period of time each year, depending on rainfall. Spadefoots are named for hard, sharp-edged spades on their hind feet, which biologists say helps them dig into soil.

They hadn't seen the elusive toads before, Bledsoe said, because the severe drought kept them in deep underground burrows for years.

Finding vulnerable species such as the red rattler and the spadefoot toad at and near Upper Chiquita Canyon is good news for the diversity of the habitat ecosystem and a sign that they had weathered the severe drought, Bledsoe said.

MUSTARD'S LONG LEGACY IN ORANGE COUNTY

Thanks to heavy winter rains, the stunning wildflower show on area scenic hills this spring included bursts of bright yellow mustard flowers atop long green stalks.

Orange County's mustard blooms may be just as eye-catching as the fields of California poppies, but they pose a challenge for land managers and owners interested in preserving coastal sage scrub and other native plant communities, according to Milan Mitrovich, science coordinator for the Natural Communities Coalition (NCC). TCA is a landowner and participant of the NCC, which coordinates the land management, monitoring and research across nearly 38,000 acres of Orange County open space.



Mustard — which has been in Southern California soil for hundreds of years — is a non-native, invasive species from Europe. It can out-compete the area's native plants, fighting them for water, light and space to grow. And, its tall stalks don't provide the diversity and structure of woody shrubs that create habitat and refuge for area wildlife like birds and lizards. Nor does it provide the kind of food that local wildlife has evolved to prefer.

"Given a choice, wildlife like the pocket mouse would pick native seeds over mustard seeds every time," said James Sulentic, NCC executive director.

Though no one is really taking a count of how widespread the mustard bloom is this year, Mitrovich estimates that it probably covers hundreds to thousands of acres within central coastal Orange County. It's part of the legacy of land use for cattle and agriculture. This year's abundant crop of mustard "is nothing to panic about," he advised. "But it is an important reminder of work we need to do to restore more coastal sage scrub habitat."

Mustard seldom invades existing and healthy coastal sage scrub environments. It thrives after winter rains and in ground that has been disturbed or dug up. Eradicating it from areas targeted for restoration can sometimes take a few years.

Seeds from many plants brought in over the centuries by settlers often lay dormant in the soil, waiting for just the right conditions. This year, conditions were perfect for mustard. Last year's monsoon season rains brought out the Russian thistle, also known as tumbleweed, said Sulentic.