## 'Hot Spot of Biodiversity'

Mountains, ocean influence make region rare

02:12 PM PST on Thursday, December 7, 2006

By JENNIFER BOWLES

The Press-Enterprise

Pockets of a natural world teeming with wildlife exist in western Riverside County, beyond most people's daily experience of commuting on bustling roadways and shopping in strip malls.



Caitlin M. Kelly/ The Press-Enterprise

A wash under I-15 is like a freeway for wildlife, biologists such as Monica Bond say.

Rare turtles live in a willow-draped creek tucked between sage-covered hills near Murrieta. Burrowing owls hang onto existence among trash and graffiti-scarred rocks in an otherwise-empty field west of Perris that is within earshot of Interstate 215. Mountain lions slip through passages under Interstate 15 to wander between the Cleveland National Forest and a reserve built around Estelle Mountain south of Lake Mathews.

Altogether, 146 rare plant and animal species, some of them slipping toward extinction, share the region with the growing human population, now hovering near 1.5 million in western Riverside County.

"We're a hot spot of biodiversity, because we have things found nowhere else on Earth," said Tom Scott, a natural resource specialist with the University of California.

The abundance, Scott and other experts say, comes from the region's wide spectrum of terrain, climate and soil, which creates at least a dozen habitats that provide shelter and food for animals.

"There are very few places on the planet where you get mountains 10,000 feet so close to the ocean; start with that," Scott said. "It means the first thing to look at is the geology of the region."

Between the region's sprawling valleys and mountains nearly two miles high are rolling hills, streams, plateaus, grasslands, foothills, wetlands and earthquake faults.

The weather is diverse, too -- hot and dry in most areas, but with cool ocean breezes that sweep into Temecula and winter snow in the mountains that separate inland valleys from the desert. Together, the landscape and climate support 14 different habitats, from chaparral to pine forests and coastal sage scrub, fostering an interdependent array of wildlife.

As patches of various ecosystems disappear under houses, shopping centers and industrial buildings, the animals that depend on them begin to disappear, too. Many of them, especially the endangered ones, depend on a single habitat and can't just pick up and move next door or across town as humans can.

"You can't take a species that lives near a river and put it onto a grassland and expect it to know what to do and how to survive," said Ileene Anderson, an ecologist who works with the Center for Biological Diversity, an environmental group.

Speaking above the gurgle of Temescal Wash, south of Corona, Anderson said most animals need to be in familiar areas, where they know how to use the resources, whether it be a certain kind of soil, tree or plant they use for food or shelter.

For example, the wispy branches of a willow by the wash cradle the nests of such endangered species as the least Bell's vireo and the southwestern willow flycatcher. The birds feed on insects that land on the leaves or crawl into crevices in the bark of trees. The habitat is called riparian because it's anchored by a waterway, where willows thrive.

Within western Riverside County, crown jewels of biological diversity include Vail Lake east of Temecula, the Gavilan Hills near Lake Mathews and the Santa Rosa Plateau Ecological Reserve near Murrieta, said Steve Boyd, herbarium director at Rancho Santa Ana Botanical Garden in Claremont.

Boyd spotted his first Munz's onion while scouring for rare chocolate lilies in the hills of Harford Springs Reserve southwest of Lake Mathews in the late 1970s.

The Munz's onion, an endangered plant with clusters of white flowers that turn pink as they dry, grows only in certain clay soils, and nowhere on the planet but western Riverside County, Boyd said. The plant has lost much of its habitat, in part because the clay is mined for building materials.

Boyd said the remaining patches of wild Munz's onion should be protected, and not just because it has a potentially marketable aspect: a small, edible cocktail-style onion grows in the bulb.

"It's cool, it's ours, it's western Riverside County's," he said.

Beyond that, he said, it's difficult to impart the importance of saving endangered species like the Munz's onion.

"What I try to suggest is, why protect the 'Mona Lisa'? It's a painting. It's not that great of a painting. What would it mean to my daily life if it were gone?"

But the painting, like rare species, has compelling facets.

"It's something done by this incredible Renaissance genius, it's an enigmatic painting," Boyd said. "There's just sort of a moral imperative that this is something worth making that effort to retain."

Reach Jennifer Bowles at 951-368-9548 or jbowles@PE.com