

The Laguna de Santa Rosa

Efforts are underway to reverse the loss of wildlife habitat: but are we in time?

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Imagine wetlands – thousands of acres – stretching across the valley west of Santa Rosa. Ducks so plentiful that one hunter killed 6,200 in a single year. Or herds of elk and antelope hunted by mountain lions, and grizzly bears pulling salmon and trout from the water. This was the landscape that greeted early settlers to the Santa Rosa Plain. So much of what they saw depended on the vast Laguna de Santa Rosa, a combination of open water, marsh and mixed forest covering more than 7,800 acres.

Today we see a very different sight when looking from a vantage point in Fountain Grove or Sebastopol. Land that used to flood every year, now floods once in 100 years. The lakes of the Laguna – the site of boating, camping and resorts in the 19th century – are drained and ditched. Only three percent of the year-round marshes remain, and summer water quality is very poor. What used to be forest is now scattered oaks, pasture and houses. The small fragments that remain are unconnected pieces with diminished value for wildlife.

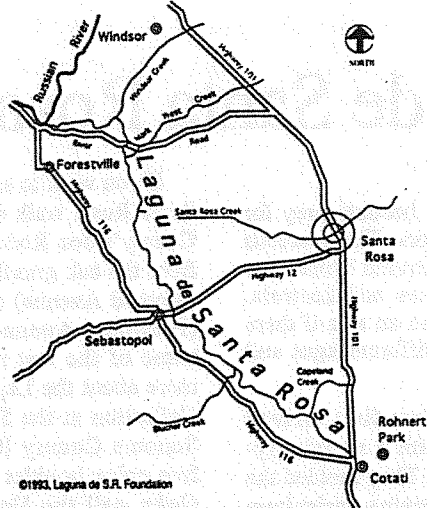
Disappearing Wildlife

What has happened to the animals that depended on this rich and diverse landscape? The herds of elk and antelope are gone, along with their predators. The sighting of a mountain lion in the Laguna watershed is now so rare that it merits space in Gaye LeBaron's newspaper column. The Laguna, like all of the Russian River system of which it is a part, has suffered a steep decline in steelhead migration. Yet some steelhead/ rainbow trout still spawn in Laguna tributaries and rear in the main channel, unlike the salmon that have long since disappeared.

Wetlands are home for a third of our country's bird species, and play host to half of its migratory species. When listening for a bird's song or looking for a bright flash of feathers among dark green foliage, we can best appreciate what has been lost in the Laguna. Wintering waterfowl flocks that once numbered in the hundreds of thousands, have been reduced to a few thousand. Although the Laguna still floods every winter, lack of cover and poor forage keep waterfowl numbers low. More than 230 bird species have been observed in the

Laguna since the 1950s. But with limited food, nesting and escape habitat, their visits can be short indeed.

The yellow-billed cuckoo, a beautiful migratory bird from South America, was last seen in the Laguna in 1968. The only nesting pairs remaining in California are found in the floodplain forests of the American and Kern Rivers. The yellow-billed cuckoo faces extinction in California



unless some of its former range – such as the Laguna – can be restored by replanting wetland trees.

Restoration Efforts

Efforts are now underway to reverse the loss of wildlife habitat. In 1989 California voters approved Proposition 70, a parks and wildlife initiative that included money for the Laguna de Santa Rosa. The California Department of Fish and Game is using these funds to purchase property and easements from willing sellers in the Laguna. The highest priority sites straddle the channel where late-spring flooding reduces their agricultural value, but makes them prime candidates for restoration. Other desirable sites shelter one or more of the Laguna's federally-listed endangered plants: Sebastopol meadowfoam, Burke's goldfields and Sonoma sunshine. The overall goal of these purchases is to once again unify habitat that has been broken into fragments. The larger blocks will allow more intensive wildlife use. Recreating escape routes and migration corridors will encourage the spread of plants and animals, and so increase genetic diversity.

If enough landowners agree to sell property or easements in the coming years,

wildlife habitat in the Laguna could eventually exceed 1,000 acres. But private ownership will continue to be the dominant pattern. The Laguna de Santa Rosa Foundation is committed to helping those landowners who wish to increase wildlife use of their property or to develop resource conservation plans. Often agricultural techniques – called best management practices (BMPs) – can be used to enhance native habitat. Fencing watercourses, maintaining filter strips, and managing grazing are examples of agricultural BMPs that also benefit wildlife and the public at large. The Foundation believes that it is important to acknowledge and support landowners who pursue multipurpose land management.

Enduring Value of Wetlands

Our wetlands can be as productive as tropical rain forests. A functional wetland can successfully process abundant nutrients. Plants and small invertebrate animals bind nitrogen and phosphorus into organic forms that can be used all the way up the food chain, producing a biologically rich system. In a degraded and overloaded system like the present-day Laguna, these same nutrients are converted into toxic pollutants that kill fish and reduce water quality. Given time, restoration projects can improve water quality, soil development, nutrient and carbon dioxide cycling, and habitat – a valuable return on the investment in restoration.

When we think of wetlands, we usually picture a marsh of reeds and bulrushes with redwing blackbirds and ducks. This is an important part of the Laguna wetlands, historically covering up to 4,400 acres. But riparian forest of the floodplain is another type of wetland that has nearly disappeared in the Laguna. Biologically productive and providing more diversity than any other habitat, woodland restoration is the key to increasing wildlife. And the valley oak is the jewel in the Laguna's riparian forest.

These stately trees rise above the smaller box elders, ashes and willows of the tree canopy. Animals depend on the shelter and shade they provide during our hot, dry summers. The oaks are important in other seasons, providing food from tender green leaves in the spring and acorns in the fall. More than 35 California mammals and 30 birds eat acorns, many depending on the high food value to carry them through the winter. Insects and small mammals that

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feed and nest in the oaks become prey for songbirds, owls, and raptors. The spacious cavities in aging oaks provide homes for birds such as woodpeckers and kestrels. These animals will abandon an area if there are not enough oaks of different ages and stages of development.

When American settlers first arrived here, they were faced with a seemingly-endless natural abundance. They molded the landscape to support a thriving agriculture community that grew rapidly in terms of both population and crop diversity. But somewhere in those years of growth, we lost the natural abundance and diversity of the Laguna. Perhaps now is the time to seek a balance among the many uses of the Laguna, finding a way to sustain our economic productivity while restoring a part of our rich natural heritage.

If you want to see more of the Laguna de Santa Rosa, walk or bicycle along Sonoma County's Joe Rodota Trail which stretches from the oak grasslands of west Santa Rosa (Merced Avenue) to downtown Sebastopol (Petaluma Avenue), and passes through some of the last riparian forest. To read more about the Laguna, ask for the Laguna Collection at the Sebastopol branch of the Sonoma County Regional Library. For a free color booklet on *Wildlife Among the Oaks*, call the University of California, Berkeley, at (510) 643-5428. For additional information, call the Laguna de Santa Rosa Foundation, (707) 823-8810.

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