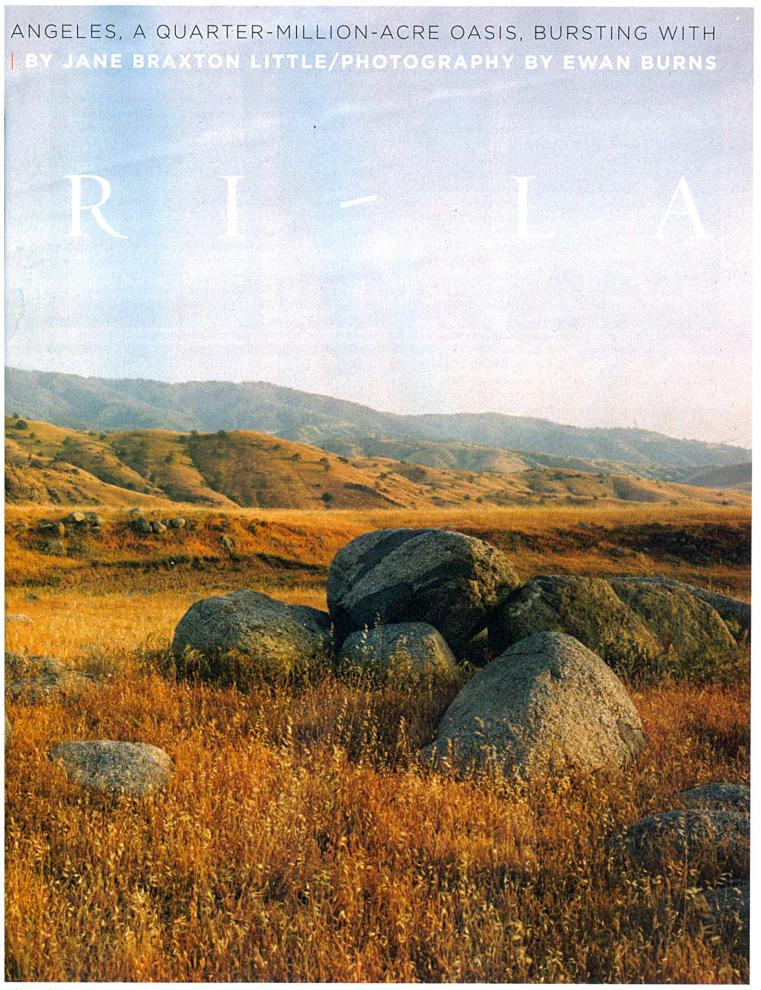


Desert, grassland, coastal, and mountain ecosystems converge at Tejon Ranch, part of a region recognized globally as one of 25 irreplaceable biodiversity hot spots.



The ranch's 270,000 acres range in elevation from just above sea level to nearly 7,000 feet. These textured rocks mark the southern fringe of the San Joaquin Valley.

## A GOLDEN EAGLE CIRCLES OVER TEJON

Ranch's steep slopes, soaring in arcs that bring it eye-level with my perch atop a bald peak. Its bronze head glints in the spring sun as it flies over hillsides blazing orange with California poppies and purple with lupine. The bird's widening rings take it within sight of the Tehachapi Mountains' rocky spine, but it veers northeast toward the Sierra Nevada, where I lose it against the dark green of the pine and fir forest. My peak settles into a quiet as immense as the surrounding panorama.

Tejon Ranch is the old California: wild, vast, and virtually unknown. Desert, grassland, coastal, and mountain ecosystems converge in a landscape that ranges from just above sea level to nearly 7,000 feet. Along with golden eagles, the ranch's dizzying diversity of species includes California condors, southwestern willow flycatchers, and Swainson's hawks, which ride wind currents up canyons and over the Tehachapi Mountains on their southward migration. Bears prowl the backcountry and elk graze on windswept mountain slopes. This is a working ranch, where cowboys run cattle across 422 square miles—a range bigger than Rocky Mountain National Park and 18 times the size of Manhattan.

Scientists with Conservation International have recognized the region encompassing most of Tejon Ranch as one of 25 irreplaceable biodiversity hot spots worldwide, a designation reserved for just 1.5 percent of the land on earth. It is an untamed terrain where mountain lions prey on unsuspecting fawns and trees twisted by storms cling to remote ridges. A mere hour's drive away, steeped in its sophistication and smog, lies Los Angeles, the nation's second-largest city.

With urban sprawl spilling out of the L.A. basin into neighboring valleys and hills, Tejon Ranch has been vulnerable for decades. Today, thanks to a landmark agreement between the ranch owners, Audubon California, the Sierra Club, the Natural Resources Defense Council, the Endangered Habitats League, and the Planning and Conservation League, 90 percent of this private ranch will be protected. In 2008, after 20 months of painstaking negotiations, the parties signed a conservation accord that will keep up to 240,000 of Tejon's 270,000 acres permanently free of development. The remaining 30,000 acres—some of it habitat for endangered condors—will be parceled and sold, some for luxury homes, spas, and boutique hotels. The agreement also created the Tejon Ranch Conservancy to protect the natural resources and to provide opportunities for the public to learn about and experience them firsthand. Among the Conservancy's primary goals is scientific documentation of this largely uncharted territory.

The pioneering accord is a new approach to conservation as bold and far-reaching as the land it protects. Instead of prolonging traditional trench fighting, which promised to drag on for years, the environmental partners opted to accept inevitable development on 10 percent of the ranch to safeguard the hundreds of rare and endemic species living on the other 90 percent. The scale of the biodiversity it sustains may make the Tejon agreement the greatest victory he will see in his lifetime, says Graham Chisholm, Audubon California's executive director. "This is conservation on a staggering scale."

venture into this newly protected land the way the first explorers did: on horseback. To reach my steed, I join hundreds of thousands of travelers on Interstate 5, a major highway that runs north out of Los Angeles through Tejon Pass over the Grapevine, a hectic four-lane vestige of the winding route that gave it its name. I mount up at the adobe ranch house, built

in the late 1850s by Edward Fitzgerald Beale, who paid \$90,000 in gold pieces to consolidate several Mexican land grants and establish Tejon Ranch. Cattle grazing and hunting have kept his legacy intact for 150 years.

Bruce Ryan heads our small posse—a photographer, a ranch hand, and me—through the rolling hills covering the ranch's southernmost section. Dressed in a black Stetson, western shirt, and fringed chaps, the 63-year-old Ryan is a dead ringer for the mature Marlboro Man. After 36 years as a Tejon cowboy, he knows this landscape, and he guides us across hillsides of purple paintbrush, goldenbush, and knee-high grasses rippling in the wind. When a western meadowlark sings from a patch of dried grasses, Ryan whistles right back. In the distance, clouds flirt with the 6,803-foot peak of Tejon's highest mountain, on the Tehachapi ridge.

Although our horses tromp through patches of volunteer wheat and nonnative grasses, Tejon's dry creek beds and rock-strewn slopes have a timeless quality that makes me wonder how my view differs from what Jedediah Smith and Kit Carson saw when they passed through more than 170 years ago. My reverie evaporates when Edwards Air Force Base looms in the distance on the eastern horizon and a cement factory appears to the northeast. Although here on its southern fringe, the fragility of Tejon's hedge against development is most obvious, the ranch is bounded by a major thoroughfare, and cut by powerlines and the California aqueduct. Discovering Tejon's wild heart takes delving into the backcountry beyond what a horse can travel in one day.

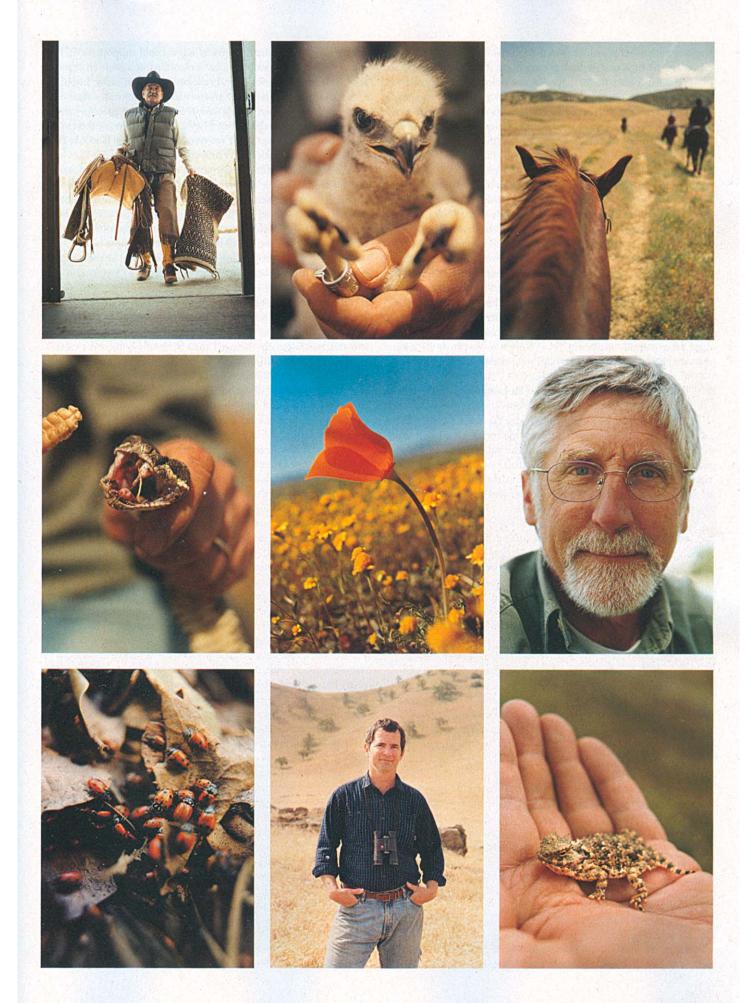
The next morning I head out in a Ford Expedition with Mike White, a biologist and the Tejon Ranch Conservancy's new director of conservation science. We travel east, leaving the highway hum, exhaust, and pavement behind. The road soon narrows, and the land-scape shifts from oil-pumping derricks to pistachio groves, vineyards, and fields where cattle bear Tejon's cross-and-crescent brand, one of the oldest registered in the United States. I spot the distinctive white eyebrow and crown stripes of a lark sparrow munching a grasshopper from its perch on a fence beside the road.

The first true sign of Tejon's natural splendor is Monte Field, a 500-acre grove of valley oaks rising out of pale-green grasslands. With branches stretching skyward from trunks more than five feet in diameter, these trees are gracious and dignified native Californians, some as old as 400 years. They are among the nine oak species found on the ranch—more than a third of all oak species in California. The beauty of Tejon's oak savannahs has attracted filmmakers, who have used them to shoot scenes for *Seabiscuit* and *Star Trek*. This valley oak grove also appealed to Tejon Ranch's owners, who established their original offices in the basin that surrounds it.

White, 49, is a compact, affable man who spent months as a conservation biologist studying the ranch's flora and fauna through the scientific record before he ever set foot on the property. He was

Opposite, clockwise from top left: Bruce Ryan has been a Tejon cowboy for 36 years; a day of banding raptor chicks included golden eagles and this red-tailed hawk; exploring the southernmost section of the ranch by horseback; raptor specialist Pete Bloom; a coast horned lizard; Graham Chisholm, executive director of Audubon California, led months of challenging negotiations that resulted in the Tejon Ranch agreement; ladybugs among the moist rocks along El Paso Creek; Bloom tends to a southern Pacific rattlesnake. Center: California poppies are part of the riot of wildflowers that blanket the ranch in early spring.

THE PLACE IS HUGE, TO BE SURE, AND IT HARBORS MORE THAN 25 RARE, ENDANGERED, OR THREATENED SPECIES, INCLUDING THE TEHACHAPI BUCKWHEAT, THE TEHACHAPI POCKET MOUSE, AND SEVERAL OTHERS FOUND NOWHERE ELSE ON EARTH.



working with other scientists to evaluate Tejon's conservation significance as part of a project that preceded the 2008 agreement. Like most scientists before them, they were not welcome on Tejon Ranch. The agreement opens access for scientists and the public, too, making management of the conserved lands the responsibility of the Tejon Ranch Conservancy. On today's trip White exudes the enthusiasm and curiosity of an adventurer setting out on the expedition of a lifetime. The low hills forming a bowl around the flat already hint of summer brown, but in early spring, he says, this place is "ridiculous with wildflowers—poppies, a sea of white popcorn blossoms, and just tons of natives in bloom." White hops out of his vehicle. Among the heavily grazed nonnative grasses that dominate the valley floor, he spots a mariposa lily's delicate white petals. Finding this fragile spring jewel raises unexpected questions about the effect Tejon's 12,000 head of cattle will have on native plants. Even in these seriously affected grasslands, White sees ideal habitat for the endangered San Joaquin kit fox, a secretive cat-sized canine with erect ears and a long bushy tail, and for blunt-nosed leopard lizards, four-inch reptiles with cream-colored crossbands on their backs. "No one has documented these endangered species here because no one has taken a comprehensive look," White says. Systematically exploring Tejon Ranch to inventory its natural resources is one of the Conservancy's top priorities.

s the dirt double-track climbs through rolling hills, incense cedars begin to show among the oaks, then sycamores and cottonwoods. We are following Tejon Creek, a perennial stream that forms a luxuriant riparian corridor before disappearing into the valley floor. The higher we go, the lusher things get. Near a small pool in the stream, two tiger swallowtail butterflies are locked in the synchronized flight of a mating ritual. I sample the watercress near willows where a purple finch flits among the branches.

In a matter of minutes we have left San Joaquin Valley species for birds and plants found in the southern Sierra Nevada. Pushing on up the ridge, we hear woodpeckers as we pass Jeffrey pines near the Tehachapi crest. Once we enter the Cottonwood Creek watershed everything changes again. Clumps of sagebrush, even an occasional yucca, now dot the roadside. The creek flows southeast into Antelope Valley, the westernmost arm of the Mojave Desert.

This rare biological crossroads at the confluence of ecosystems harbors at least 25 rare, endangered, or threatened species, documented in a record scientists eked out for the past 150 years. Among them are the Tehachapi buckwheat, the Tehachapi pocket mouse, and several others found nowhere else on earth. "What I find so absolutely fascinating," White says, "is all the stuff sloshing around this place—rabbitbrush growing under an oak savannah and yuccas around the corner from a gray pine stand. It's just so unique."

And it's all but unexplored. Take the slender salamander, a lung-less amphibian with four-toed feet that rarely strays beyond the six feet of its mostly underground niche. A series of slightly different species of slender salamanders evolved throughout the Sierra and Pacific Coast ranges. At least two of these live on Tejon Ranch, including the Tehachapi slender salamander, a candidate for listing under the federal Endangered Species Act. Brick-red and stealthy, this salamander can coil its body like a snake when threatened. Once scientists look, they may find new species of slender salamanders that have not yet been described, White says. The occurrence of several species on the ranch may also help scientists better understand evolution and how it shapes new species.

As we wend our way through the pine and Douglas fir forests near the Tehachapi crest, White is intent on finding a sooty grouse, a twopound turkey cousin with a long neck, dark plumage, and breathy bass hoot. Sooty grouse have never been sighted on Tejon Ranch, but the old-growth trees at its canyons' edges could support them. Ever the optimist, White stops to play a recording of a male in breeding season, when they hoot from branches over open areas, hoping to entice their paramours. Sooty grouse males are known for their deep, booming calls—whoop, whoop, whoop, whoop, whoop—audible more than a quarter-mile away. They are also known for their vigorous territorial defense. "So if we were to attract one, it would fly in the window and attack us," White says half-jokingly.

We are heading for a backcountry cabin to join other scientists for the night when a specter with a nine-foot wingspan suddenly appears, whooshing across the road and down into the canyon below. "Condor!" yells White, practically leaping out of his seat. One of the world's 189 wild California condors has just missed our SUV. And it's not alone. Soon we are all but surrounded by these birds. One is waiting to greet us from a live oak when we arrive at the cabin—a young bird, maybe four years old, with splotches of yellowish pink marking the promise of an adult's distinctive orange head. Across the canyon are six more condors: an adult perched in a tree above five juveniles on the ground. One youngster hops, landing so close to the next one that it jumps, too. These birds are practicing social maneuvers that will later help them get their share of a dinnertime carcass.

The sight of wild condors in the Tejon backcountry inspires infinite hope. In 1982 the species was on the brink of extinction, with the population down to 22 individuals. Although they were foraging for food and reproducing successfully, condors were dying of lead poisoning caused by bullets left in gutpiles after hunters field-dressed their wild game (see "Project Gutpile," November-December 2002). Fearing the species' complete annihilation, federal biologists captured all the California condors in the wild and launched a controversial captive-breeding program.

In captivity, condor numbers grew steadily. Biologists began releasing birds into the wild in 1992, monitoring their every move and supplying lead-free carcasses for food. Even with these precautions, more than half the population of released birds continued to suffer from lead exposure. In 2007 Tejon Ranch's owners took the decisive step of banning lead ammunition. A year later California officials followed suit, regulating the use of lead bullets throughout condor country.

Once they were back in the wild, the birds found Tejon Ranch on their own, says Jesse Grantham, a former Audubon biologist who now heads the federal condor recovery program charged with protecting the endangered birds here and elsewhere. From nesting areas in coastal mountains, condors catch air rising up through the canyons and ride it over the foothills that wrap around the toe of the San Joaquin Valley to Tejon and the Tehachapis. They are roosting here in the exact same canyons and the exact same trees that condors used in the 1980s, Grantham says. From these canyons, the birds are close to the southern Sierra, making the ranch an important link to millions of acres of historical foraging habitat. "So far today's condors have not made that move," says Grantham, "but we expect them to any day."

Suddenly the condor flies from the tree above me, ascending over the canyon, where it joins another bird that appeared from nowhere. The two fly in perfect formation, dipping and soaring, circling so close together that their wing tips almost touch. The next day we see 16 of them high in the sky. There are 351 condors on the planet (including those in captivity), and nearly five percent of them are right over my head.

California condors are one of Tejon's most iconic species—wondrous for their size and miraculous recovery. To critics they also represent the conservation agreement's failures. Plans to build 3,400 luxury homes in critical habitat drive a stake in the heart of the condor recovery program, they say. Along with the loss of irreplaceable condor territory, the deal is "a poster child of bad

planning, growth, and exurban sprawl," says Adam Keats, senior counsel with the Center for Biological Diversity. Nine months before the final agreement, the CBD split from the five other conservation groups attending the closed-door negotiations—largely because of the development in condor habitat. The CBD is fighting the Tejon development at the county level, where officials must approve each separate housing proposal.

Protection for all 270,000 acres would have been preferable, but in a negotiation you don't get something for nothing, responds Joel Reynolds, senior attorney with the Natural Resources Defense Council. Before the agreement was reached, Tejon Ranch had a master plan that identified more than a thousand building lots across these secluded canyons. Conservationists throughout the state have been battling piecemeal development for years—winning some and losing some. "The result is too often a patchwork of housing subdivisions, commercial projects, and unconnected open space," Reynolds says. "California can't afford more of that."

Without the agreement, Tejon's owners might have developed the ranch one project at a time over decades, or sold off parcels to other developers. Over the next 50 to 100 years, conservationists could have found themselves in court, fighting potentially hundreds of different projects. Reynolds calls the deal and the 240,000 acres it safeguards "a chance to protect an unfragmented piece of land almost a quarter of a million acres that was not going to come along again."

arly the next morning I leave the backcountry cabin with White. We are joined by Audubon California's Chisholm and Pete Bloom, a wiry, silver-haired raptor specialist who worked on the federal condor program for five years. Today will include a trek to one of five golden eagle nests Bloom has found on the ranch. He has been surveying eagles, hawks, and other raptors for Tejon Ranch's owners for the past two years, tracking their nest locations, survival rates, and how far young birds venture to establish their own nests. His observations will be combined with the scientific data that White is just starting to compile to find out what roosts, preys, roams, and flowers on this place.

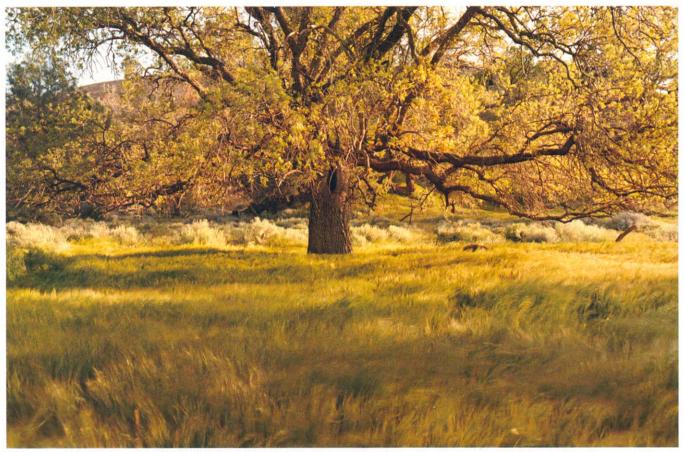
We trudge up a slope toward a nest 50 feet off the ground in a huge valley oak. Bloom's assistant uses climbing ropes to reach the aerie, a five-foot-diameter bed of small boughs, twigs, and needles built in the crotch of a six-inch-diameter limb. He speaks softly to the two chicks, then lowers them in a duffel bag, one at a time.

Bloom hands a bird to Chisholm, who is part of a citizen science team conducting bird surveys here. The half-grown hatchling is a bundle of soft white down, its talons harmless on rubbery feet. It blinks. Chisholm smiles dreamily and returns it to Bloom, who clips a tiny metal band around one leg. Next time he encounters this eagle, Bloom will know where and when it was hatched. After information on both chicks is logged into a database, we make our way down the slope, pausing for Bloom to pull a spiky plant seed out of the mouth

## THE SIGHT OF WILD CONDORS IN THE TEJON BACKCOUNTRY INSPIRES INFINITE HOPE. IN 1982 THE SPECIES WAS ON THE BRINK OF EXTINCTION. THE WORLD POPULATION WAS 22 INDIVIDUALS, ALL OF THEM IN SOUTHERN CALIFORNIA.



California condors have returned to the canyons in Tejon Ranch that they historically used, roosting in the trees and on the branches of their forebears.



Majestic valley oaks grace the ranch from Monte Field in the north to this savannah in Sacatara Canyon, on the eastern edge of the Mojave Desert.

TEJON RANCH IS THE OLD CALIFORNIA: WILD, VAST, AND VIRTUALLY UNKNOWN. SCIENTISTS ARE JUST NOW STARTING A COMPREHENSIVE DOCUMENTATION OF THE SPECIES THAT HAVE EVOLVED IN THIS RARE ECOLOGICAL CROSSROADS.

of a southern Pacific rattlesnake. "Don't try this at home," he says, holding the snake behind the jaw with practiced skill. Left alone, the seed could have worked its way into the snake and killed it.

ur focus on birds shifts from raptors to migrants as we move from the wooded canyons of Tejon's interior to its arid eastern flank. Here yucca trees edge out of the Mojave Desert into the shadow of gray pines. Chisholm and six others are canvassing Sacatara Canyon to establish a baseline of local species. Birds are everywhere. In the first five minutes we see five different warbler species. Three birds on Audubon's Tejon at-risk list show up: an olive-sided flycatcher, an oak titmouse, and a Lawrence's goldfinch.

The birds are coming off the desert, moving into the cover of trees and shrubs to feed and rest while they gradually work their way north through the canyon. As the birders follow them, their conversation is reduced to code words like "ash-throated" and "MacGillivray's." When they tally their total at 65 different species, Chisholm pronounces the four-hour bird blitz "a kickass day of birding. We're finally getting to see just what treasures this property holds."

Like herpetologists, entomologists, and other researchers, ornithologists have conducted few surveys on the ranch. Now, for the first time in its history, they can explore Tejon's diversity firsthand. In addition to the scientists invited to conduct research, hikers will have access along a 37-mile section of the Pacific Crest Trail, a 2,650-mile scenic trek that runs from Mexico to Canada. Upon its completion,

the new section of trail will travel through Joshua trees and sagebrush into Big Sycamore Canyon, then climb through gray pines and white firs to the Tehachapi crest. There hikers will enjoy magnificent views of both the Mojave Desert and the San Joaquin Valley. The Tejon Ranch Conservancy is also offering a series of hikes and educational outings, which are free and open to the public. (To find out how to join one, go to tejonconservancy.org.)

For Chisholm, protecting Tejon Ranch for scientific studies and public enjoyment is the culmination of a lifetime of conservation work. "This is one big complicated place," he says. "Managing it may dispel some of the myths conservationists have long held. Having responsibility for this piece of land—it's humbling."

As darkness moves into the valleys, we head to a cedar canyon where Chisholm barks the raspy call of a California spotted owl into the shadows. Silence. White tries again for a sooty grouse with his recorded guttural grunts. Nothing. Then a deep, resonant growl freezes us in place: barely audible, insistent, hair-raising. Another low rumble. It's unmistakable, says Bloom. Somewhere nearby in the night a mountain lion is calling to her cub.

How many lions are out there, I wonder. How many grouse? And how many species scientists have yet to discover? What is most precious about Tejon Ranch may not be what we know we are protecting but what we have yet to discover.

Contributing editor Jane Braxton Little last wrote about restoration efforts in San Francisco Bay ("Bay Watch," November-December 2008).