

THE LAST NEARLY PRISTINE BIG SPREAD ON SOUTHERN CALIFORNIA'S COAST
IS NOW A NATURE PRESERVE—AND A LINK IN A TWO-MILLION-ACRE CHAIN
OF PROTECTED LANDSCAPE.

BY JONATHAN LERNER

ALMOST WILDERNESS, MAYBE FOREVER

THE JACK AND LAURA
DANGERMOND PRESERVE
The 24,000-acre property
is the largest single
donation ever received by
the Nature Conservancy.

THE NATURE CONSERVANCY/PETER MONTGOMERY



From Amtrak's Pacific Surfliner or Coast Starlight trains, unless you're staring out to sea, you'd catch a view of the property; the tracks run right along its oceanfront bluff. Or you could walk onto the place, at water's edge from the public beach next door, though you'd have to scramble up the cliff to escape an intruding tide. In theory, you might work there as a ranch hand—it remains a cattle operation—or on the nature preserve staff. But you can number those opportunities on your fingers and toes. Eventually there will be access for researchers and educational programs. Still, hardly anyone will ever visit this magnificent 24,000-acre spread at Point Conception, some 50 miles west-northwest of Santa Barbara. And that's a good thing.

"In Southern California, there's a storied legacy of establishing coastal parks and access points. Typically, your first question would be, 'How close can we get the parking lots to the beach? How easy can we make it for people to get there?' The paradigm here is the opposite," says the Nature Conservancy's Michael Bell, director of this newly established preserve. The nonprofit purchased it last December with a \$165 million gift, the largest single donation the organization has ever received. It came from the founders of Esri, Jack and Laura Dangermond, for whom the property is now named. Bell says, "What doesn't exist is a big preserved representation of coastal wilderness. What did this natural system look

ABOVE
The preserve's uplifted coastal terrace should mitigate the effects of sea-level rise.

OPPOSITE
Weathered rocks stud the terrain.

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like before the impact of development? This place is our best chance to have that, for the sake of science, research, and education—and just for the value of it, itself."

Pillowy hills tufted with chaparral. Gentle slopes carpeted with grassy open range. Broad savannas dotted with wind-twisted oaks. Folds in the land shadowed with forest. The topography here is more rolling and soft than rugged. The drama of the place is in its openness and scale, endless vistas, and nearly imperceptible human imprint. There are the couple of daily passing trains, a single paved entry road, a sparse network of jeep trails and fences, and two ranch compounds each

with a few buildings and corrals—not much, across so many acres. At Point Conception itself, where the coastline makes a 90-degree turn from east-west to north-south, 200 feet above the waves an old keeper's house is going to ruin. Originally a lighthouse stood with it. But in 1881 a replacement lighthouse was built on a natural terrace halfway down so that its beam would show beneath the recurrent layer of fog. It's like an early Spanish basilica in miniature. The building itself has a nave and transept form, while the beacon tower is like a campanile. The light has been automated. These few vacant buildings add an echo of solemnity, marking absence. In the tradition of the Chumash people, who inhabited this coast

JACK AND LAURA DANGERMOND PRESERVE



ABOVE
At Point Conception, the coast makes a 90-degree turn.

before Europeans arrived, Point Conception is the portal through which souls ascend to heaven.

Esri has brought the Dangermonds considerable wealth. They have generously supported environmental causes, but kept a low profile. Laura still avoids publicity, herself. But they chose to put their name on this big gesture to set an example for other wealthy people, and to make a point. “In today’s conservation world, people think small. Bold thinking, like what inspired the National Park System acquisition, has seemed to disappear,” Jack says. A landscape architect, he has been advocating for green infrastructure as a strategy for human, or maybe planetary, survival. He means the pro-

tection of large, connected sweeps of ecologically intact—or reparable—territory, to support habitats, natural systems, and ecosystem services. Esri recently created a free online mapping platform to aid such efforts (see “The Toolmaker,” *LAM*, April 2017). “Some places on our planet should be preserved so that they continue evolving and letting nature rule, and this is one,” he says. “Talking about it in abstract is one thing, but showing that it can be done—the world changes when those kinds of footprints get laid down.”

Putting any equally sizable, undeveloped property into conservation could be important. The Nature Conservancy’s scientists consider this

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one to be in “extraordinary” condition, despite its ranching history. Bell quips, “It’s been well managed environmentally for a century, by cattle.” But geographic factors give it special value. “It’s a transition zone,” says Mark Reynolds, a senior ecologist at the Nature Conservancy and scientific lead of the Dangermond Preserve planning process. “Four ecoregions meet, two terrestrial and two marine. There are [land] species here that are found in Northern and central coastal California, that don’t extend into Southern coastal California,” and vice versa. Because ocean currents from both north and south converge at Point Conception, “likewise, in the marine environment there are biota that

are pretty similar from Point Conception north, even to Oregon and Washington and up into the Gulf of Alaska, and different species that are similar from Point Conception south down to northern Baja.”

Immediately offshore is the 22-square-mile Point Conception State Marine Reserve, which Bell, whose academic training is in biology and marine science, describes as “a coastal system as pristine as we have in Southern California. You can see that in how the shorebirds and marine mammals utilize the interface between the beach and nearshore environment, in the incredible representations of the kelp forest.” The Nature

ABOVE
The topography is more rolling and soft than rugged.

OPPOSITE
The preserve is in a transition zone, where terrestrial species native to Northern and Southern California intermingle.

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Conservancy has ocean and coastal projects at other locations. Here, Reynolds explains, “We only have a controlling interest in the land part. But that adjacency is exciting for harmonizing our land, coastal marine, and ocean conservation strategies—for how we do smart conservation that extends from land to sea.”

The Dangermond Preserve also contributes to connectivity at a much larger scale. To the north, adjoining its 24,000 acres and eight miles of coastline is Vandenberg Air Force Base, 98,000 acres extending 35 miles up the coast. Department of Defense activity there may be intense, but “the impacts are localized,” Reynolds says,

and “often DoD operations do a great job of landscape connectivity, and even in some instances active management of biodiversity.” Immediately east of the Dangermond Preserve is the roughly 14,000-acre Hollister Ranch, with another eight miles of coast. Ranching continues there, and 130 hundred-acre residential lots have been platted, but construction and density are strictly controlled. The stated intention is responsible stewardship, and aside from some visits by school groups, Hollister Ranch is not publicly accessible. Hollister’s eastern boundary touches Gaviota State Park, about 3,000 acres. The park then adjoins Los Padres National Forest; that’s another 1,950,000.

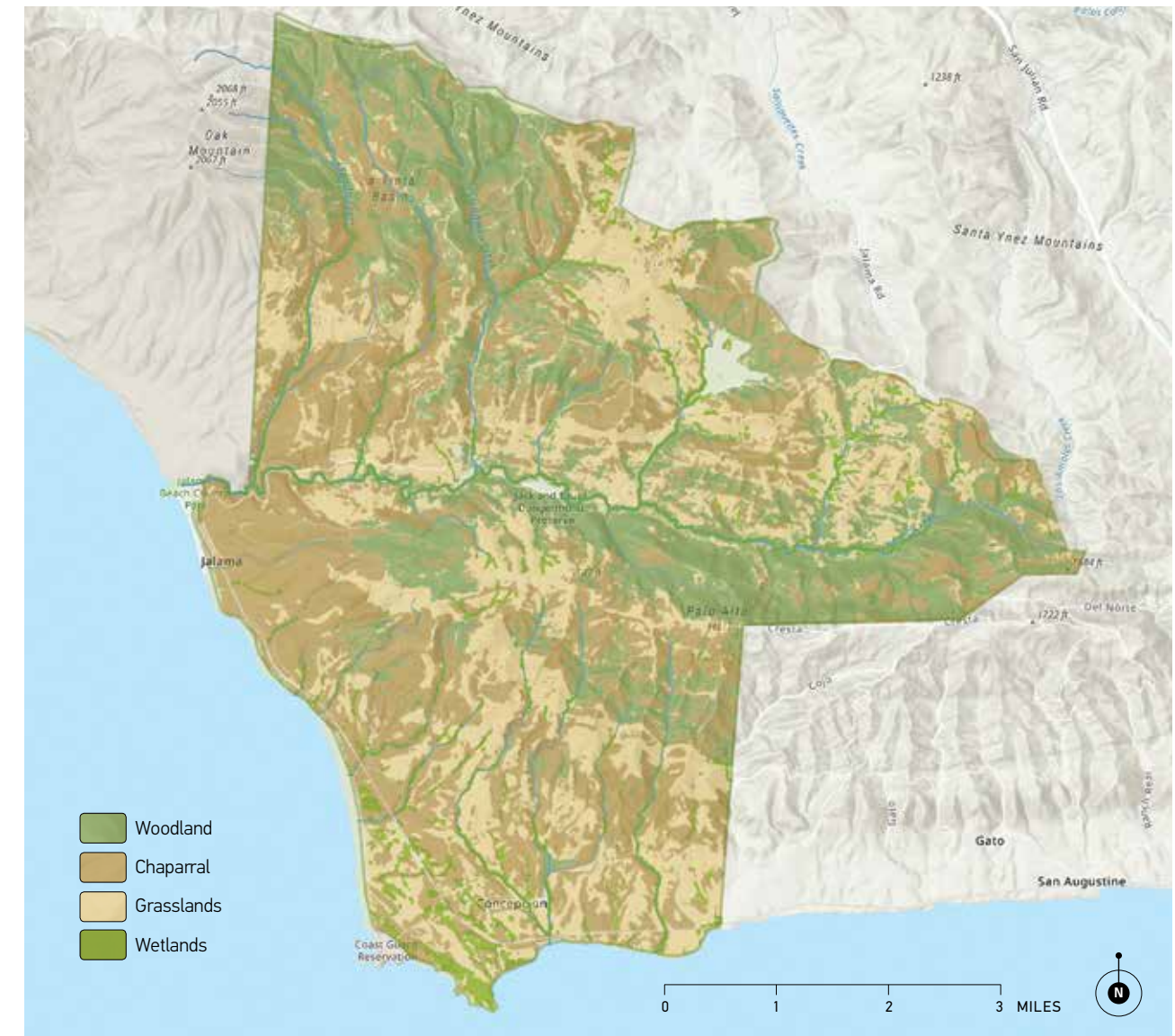


ABOVE
The coastal chaparral community supports a rich array of wildlife.

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THE NATURE CONSERVANCY AND ESRI

DANGERMOND PRESERVE – VEGETATION



None of this contiguous un- or lightly developed two-million-plus-acre stretch of landscape is wilderness, strictly defined. It has the convoluted shape of a gerrymandered election district, perhaps less than ideal for ecosystem connectivity. There are some narrow links, highway crossings, a multiplicity of ecoregions, and varying practices of environmental protection in its constituent pieces. There's logging in the national forest. The state park gets many visitors. More than 3,000 people live at Vandenberg, and surely there are insalubrious effects of the

missile tests conducted there. Ranching is to continue on the Dangermond Preserve, which may seem counterintuitive. But the Nature Conservancy has considerable experience with ranched lands in the West, and considers the scientific evidence to support well-managed grazing as a tool to decrease fuel loads, reducing wildfire risks; to increase and regulate nutrient cycling; and to enhance wildlife habitat biodiversity. There may also be a political benefit in demonstrating to dubious ranching constituencies that preservation can coexist with running

cattle. Still, significant further development within this vast patchwork of green would seem unlikely. The part with the strongest potential for ensuring the health of habitats, species, and natural systems would be the coastal sweep from Vandenberg to Hollister Ranch—centered on the preserve.

A management plan is being drafted. This will address obvious habitat remediation needs—for example, restoration of degraded riparian areas and removal of the invasive ice plant that now

dominates huge swaths along the oceanfront terraces. And it will propose a framework for balancing, and spatially arranging, future uses of the place. Bell says, "There are sensitive natural communities and activities we want to support—a research team or an educational enterprise. How are you going to locate those so one doesn't have an unintended consequence on the other? These are really principles of landscape architecture, and they're what GIS software is really good at." Once the conservation objectives are clarified, "some skill sets that haven't always been



commonplace for nature preserves to bring in, that is, landscape architects and designers,” will be brought in. “A lot of times you’re building these nature preserves with a constrained budget, as fast as you can, and it’s all done piecemeal by necessity. This is an opportunity to do it more holistically.” He suggests that this planning may eventually involve a forum or competition for landscape architecture professionals.

Jack and Laura Dangermond have also donated \$1 million to endow a chair in conservation stud-

ies at the University of California, Santa Barbara, for which the preserve will serve as a research and teaching venue. Synergies with the landscape architecture department at nearby California Polytechnic State University, in San Luis Obispo, are also in consideration. Reynolds says, “The design principle here is one of landscape-scale connectivity. We’re thinking about species range changes from climate change, species redistribution, landscape permeability, fluidity, all enhanced by a property that provides this amount of connectivity.”

ABOVE
The Dangermond Preserve includes more than eight miles of connected coastal habitat.

OPPOSITE
Oak savannas cover broad sweeps of the property.

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The site is already extensively mapped, and Esri resources are committed to doing more mapping. Damian Spangrud, an Esri geographer whose intriguing title is director of solutions, names some of the existing GIS layers, which number around 80. “Land cover, grasses and herbs, shrubs, trees, historic farming areas, historical landslides, coastal LiDAR, coastal marine substrate...” But, he says, “some of the unique treasures of the landscape are small. Come around a bend, and down in a wash there’s a giant oak? It’s not going to show up. It’s a question of scale. To manage it, to experience it, and to model it accurately, [mapping’s] got to be much finer grain. And ultimately, one to one.”

“Can we make the preserve come alive with real-time monitoring, sensors everywhere? Can we create a digital twin of landscape? In many ways, GIS is exactly that, a quantitative abstraction of nature, in a database,” Jack Dangermond says. “It’s valuable not only for science, so we can create better understanding of how our world works, but also a tool that can be applied to landscape planning, so that as we intervene in natural systems, we can better understand the impacts of those interventions.” Thus, the preserve becomes a laboratory whose discoveries can apply elsewhere.

Are there lessons from Point Conception, say, for coastal resilience? Reynolds says, “The Dangermond Preserve, even as we’re just getting to know it, seems to be something of a stronghold. The coastal terrace is uplifted here, so sea-level rise will not have a lot of direct impact on the



property, other than retreat and reduction of the beach areas. It's got rocky coast, at the point, so it's going to be less affected than many other places in the state. So we're thinking about how to use this as an area of study, a place where we can learn some lessons about how nature will help us adapt our coastal areas to all the changes to come."

Maybe the Dangermonds' example will inspire other wealthy individuals to purchase similarly scaled and pivotal places and dedicate them to conservation. Individuals and communities with shallower pockets can also assemble, protect, and ensure the vitality of large landscapes. In Montana, for example, the nonprofit American Prairie Reserve is acquiring "private lands that glue together a vast mosaic"—three million acres—of public lands. Since 2004, it has purchased

or leased about 90,000 acres connecting another 300,000 acres of federal and state land. A different model is in use along the borders between New York, Vermont, Massachusetts, and Connecticut. There, the Berkshire-Taconic Regional Conservation Partnership, an alliance of 15 land trusts, is developing a unified protection strategy for the Taconic Range and the agricultural valleys to either side. That's another area of more than two million acres. "It's an intact landscape, heavily forested, with a lot of ecological and working-land value, that has not received the attention from conservation entities that it might have if it were not in a boundary area," says Lee Alexander, the conservation projects manager at the Columbia Land Conservancy,

ABOVE AND OPPOSITE
The property has been ranched for a century.

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a member organization. In New England and New York, where, unlike out West, most land is in smaller private holdings, there are now 43 such regional conservation partnerships.

Jack Dangermond believes that landscape architects are uniquely positioned to participate in, and even lead, such efforts. "There's the landscape architect as designer and professional, and there's the landscape architect who is at the same time an advocate," he says. "How do we deal with managing nature? That is a challenging phrase,

because one would say we don't want it managed by humans at all. But we've got to figure out how to make sustainable natural systems. This is why I believe geography and ecology are so very important for landscape architects to embrace, as science foundations for their work." ●

JONATHAN LERNER IS THE AUTHOR OF THE 1960S MEMOIR *SWORDS IN THE HANDS OF CHILDREN: REFLECTIONS OF AN AMERICAN REVOLUTIONARY*.