

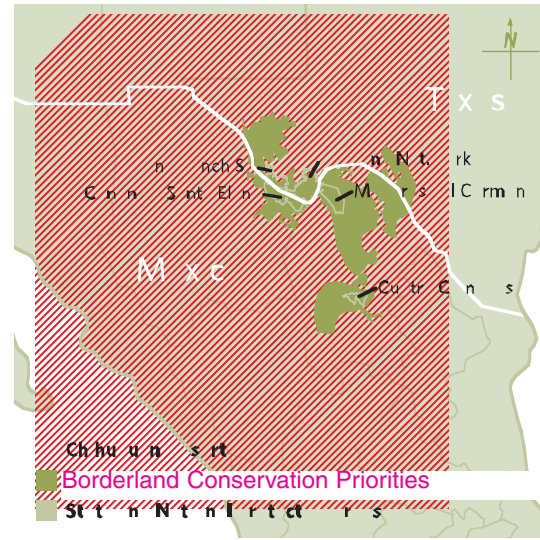
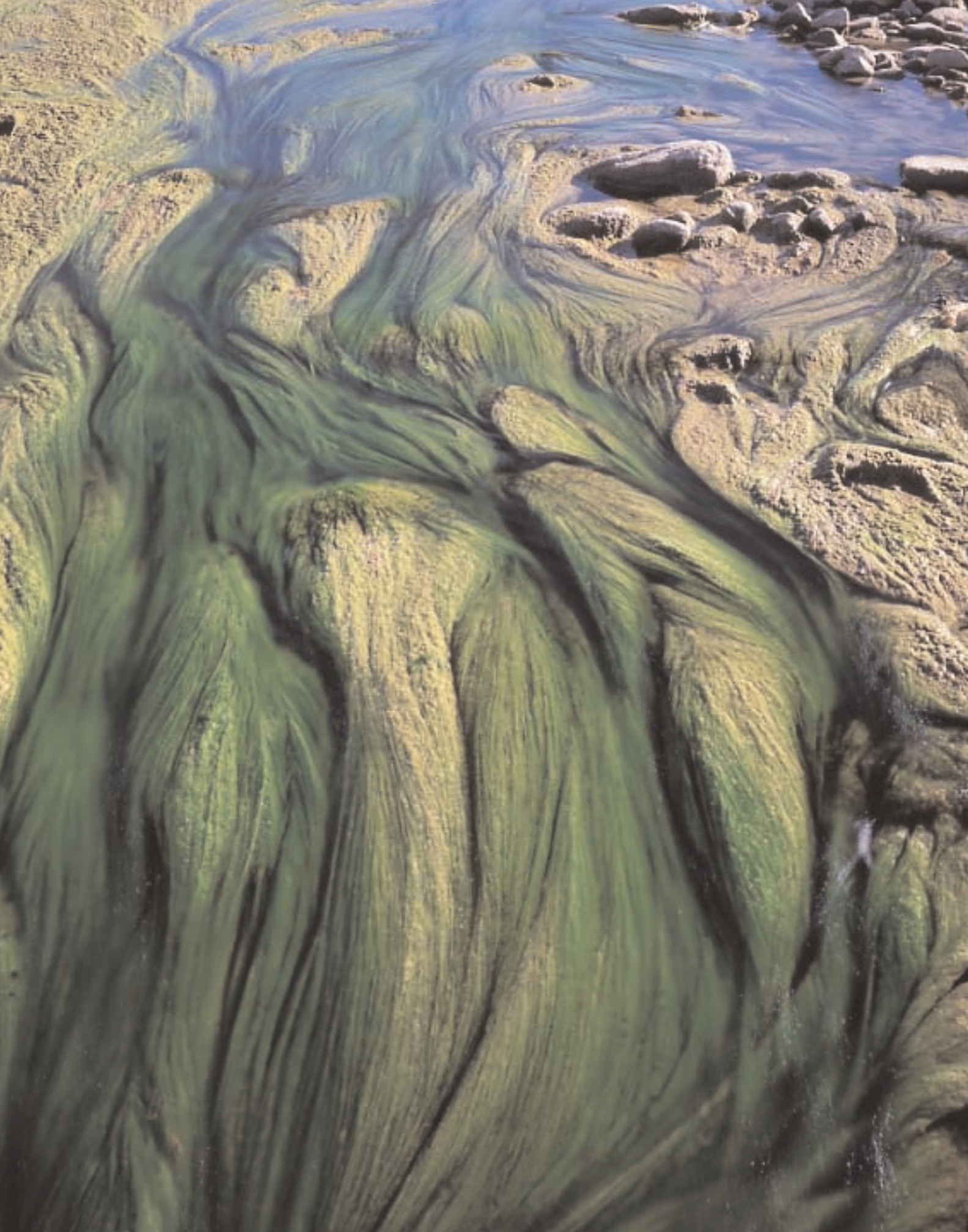


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In the
Chihuahua
Desert,
Cross-Boundary
Conservation
Efforts Secure
North America's
Hidden
Wilderness

by JOE NICK PATOSKI

SKY ISLANDS On its way from the Chihuahuan Desert to the Gulf of Mexico, the southeast trending Rio Grande tacks briefly northward, creating the river's so-called "big bend" around the Chisos Mountains in Big Bend National Park. The Chisos are one of the most critical of the many "sky islands" in the borderlands, as they harbor numerous endemic butterfly and bird species. Far cooler than the desert lands below, the sky islands are flanked by life-supporting stands of oak, Texas madrone, alligator juniper and piñon pine.



SOURCE: TKTKTKTKTKT

In the heart of North America's largest desert

lies a biological oasis—a little-known expanse of basin and range straddling both sides of the boundary between the United States and Mexico. The Chihuahuan Desert Borderlands, as it is called, is a sparsely populated 30-million-acre wilderness where barren lunar landscapes, arid scrublands and cactus forests coexist with majestic canyons, lush grasslands and pine-oak woodlands.

To the abundant populations of year-round and migrating wildlife, the borderlands is a land *without* borders, a single ecosystem that rivals Greater Yellowstone in its biodiversity. Hundreds of animals use the borderlands as a migratory megacorridor, including monarch butterflies, black bear, and more than 10 species of hummingbirds. Populations of elk, pronghorn and desert bighorn sheep flourish as well.

Plant and animal life in the borderlands draws sustenance from hidden springs, exotic wetlands, high-country creeks and, most of all, from the river running through it. The Rio Grande, as it called by people living on its northern banks, or Río Bravo del Norte as those in the south know it, is the vital lifeline in this arid landscape, snaking through the desert for hundreds of miles.

Hovering several thousand feet above are sky islands—desert mountains whose peaks snag clouds and drain their moisture. These mountains nourish the Chihuahua's relict forests of oak and pine trees and isolated stands of Douglas fir and quaking aspen. This rich habitat is one reason why more than 400 bird species have been seen in the 800,000-acre Big Bend National Park—more than in any other national park in the United States.

THE BORDERLANDS ARE THE linchpin of one of North America's most vital wildlife corridors. And yet the region is also the focus of plans that would fashion a barrier along the border, although it is difficult to imagine a more effective deterrent than the canyon walls that rise as high as 2,000 feet above the river.

While most of the discussion about fences has centered on urban areas, concern is being voiced about the potential impact barriers in more remote areas would

have on wildlife. "The specter of any kind of barrier that would preclude the movements of native and migratory wildlife back and forth between the United States and Mexico causes us a great deal of consternation," says Carter Smith, director of the Conservancy's work in Texas. Other, more conservation friendly tactics should be considered in the Chihuahuan Borderlands, he says, such as vehicle barriers, surveillance technologies, and stepped-up border and aerial patrols.

Whatever the outcome, the Conservancy and partners plan to press ahead. "The borderlands is one landscape, irrespective of political boundaries," says Smith. "We are participating in an extensive binational conservation effort." Private landowners; farming cooperatives; corporations; governments; and conservation groups have banded together to place more than 2 million acres on both sides of the Rio Grande under some kind of protection. And more land is being added every year. Through their efforts, the borderlands remains one of the continent's wildest places.

MAP BY DAN MARSIGLIO

DESERT OASIS In 1994, Mexico designated 685,000 acres of the majestic Cañon de Santa Elena as a protected area, ensuring binational protections for the Rio Grande's life-giving waters. The preserve shares 100 river miles with the 801,000-acre Big Bend National Park and the adjacent 300,000-acre Big Bend Ranch State Park. Protected area director Pablo Dominguez says his immediate priority is educating the 3,000 inhabitants within the area about why conservation is in their best interest. One of his first tasks was distributing thousands of wildlife coloring books to school children. "This undertaking will take three generations," he says.



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“TK TK TK TK TK TK TK TK TK TK,” says Jeff Weigel, the Conservancy’s liaison in northern Mexico. “We’ve got to convince farmers on collective lands to protect this area in ways that provide a livelihood.”

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HOT PURSUIT The second fastest land animal next to the cheetah, the pronghorn antelope was once nearly as common as bison. A century ago, however, the pronghorn was hunted from an estimated population of 60 million to near extinction. Records from the U.S. side of the border show that the population in the Chihuahuan Borderlands has rebounded from a low of about 600 pronghorn in 1925 to more than 10,000 today, thanks in part to a program to propagate the animals in northern Mexico more than a decade ago.



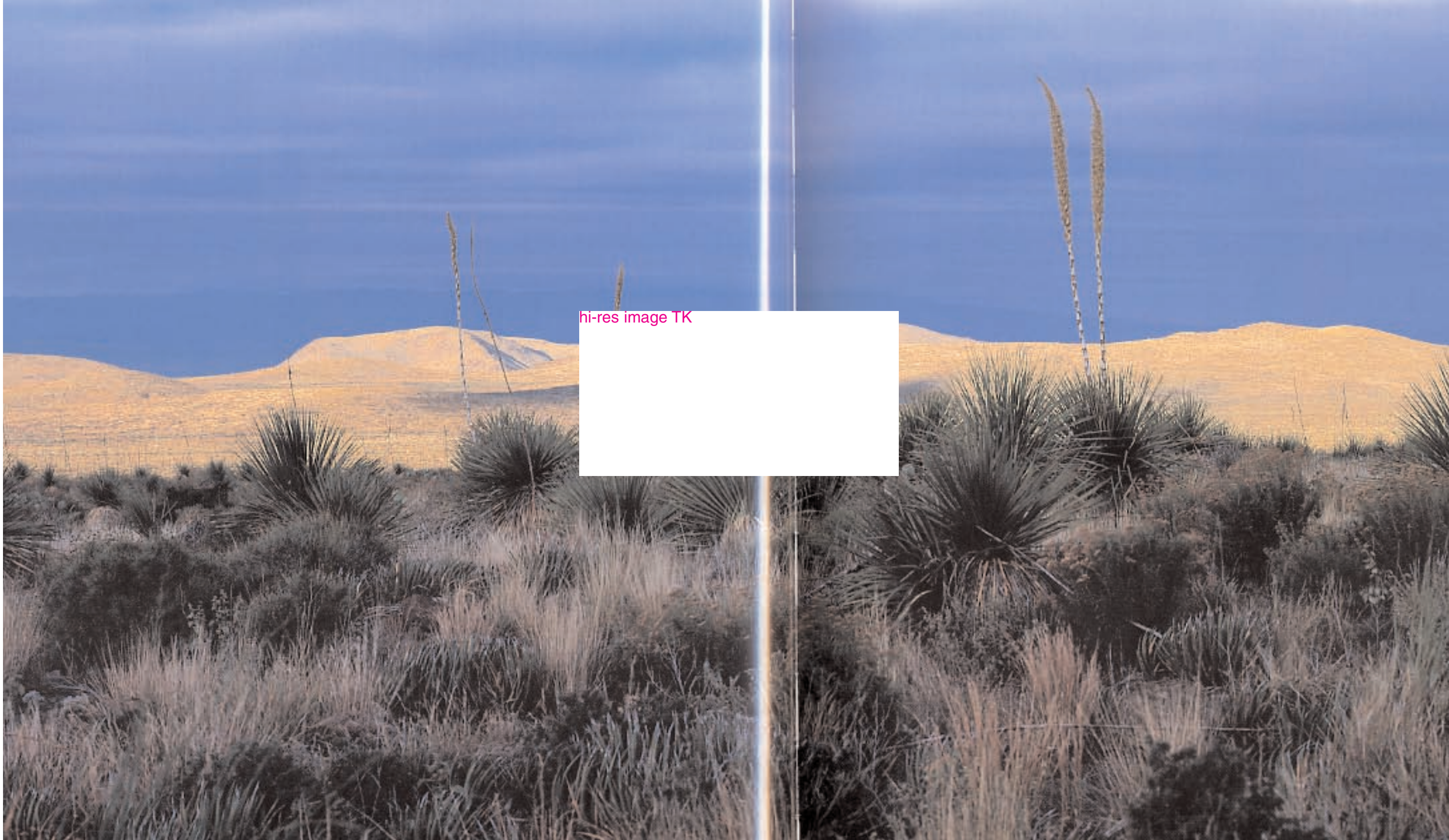
RABBIT CAPTION Rabbit caption TK

THE LIFE AQUATIC The crystalline pools of the isolated Cuatro Ciénegas—or “four marshes”—is the Borderlands’ version of the Galapagos Islands. Fed by surrounding sky islands and aquifers beneath the 200,000-acre valley, 500 springs nourish 77 species of plants and animals found nowhere else. After the Mexican government designated Cuatro Ciénegas a biological reserve in the late 1990s, the Conservancy and the Mexican conservation group Pronatura Noreste worked together to purchase the 7,000-acre ranch containing half of the valley’s springs.



REMOTE CONSERVATION “When you look at one of those night-time maps of the world, focus right here,” says Jeff Weigel, the Conservancy’s liaison in northern Mexico, pointing to a map of the Maderas del Carmen in northern Mexico. “You notice that the Borderlands is one of the darkest areas left in North America—and that’s why we can succeed here, because it’s also one of the most remote places in North America.”

CACTUS ROSE The prickly pear, which sports brilliant blooms in shades of red, pink and yellow, is one of the most common cactuses in the Chihuahuan desert and a critical food source for desert residents, including the piglike javelina, jackrabbits, deer, roadrunners, butterflies, and honeybees.



“Rainfall here is so sporadic that the birds follow the grass as it grows in response to rain,” says James King, the Conservancy’s Texas Director of Land Protection. “It’s a system of grasslands that work together, rather than a single grassland.”

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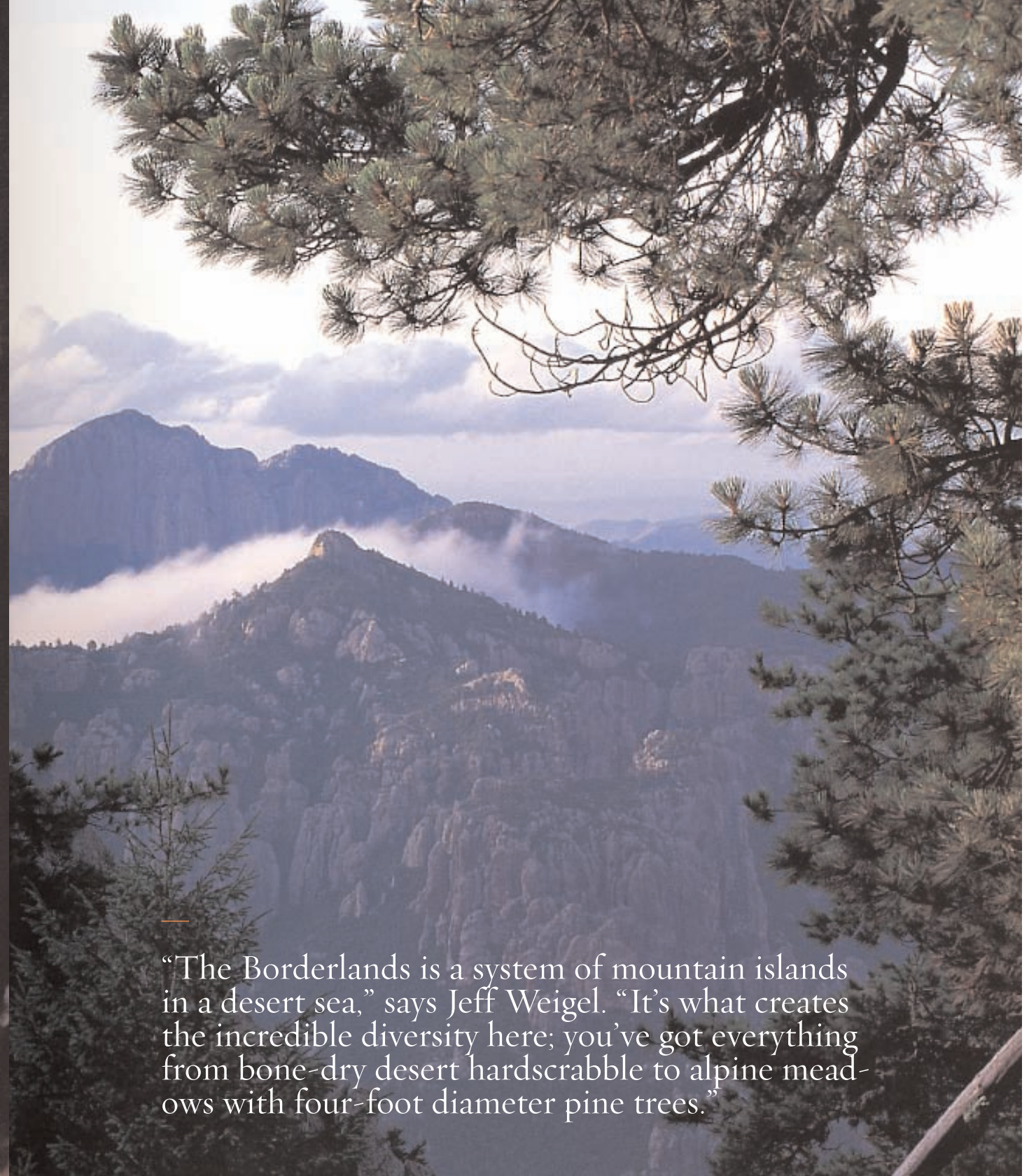
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DESERT DIVERSITY At 250,000 square-miles, the high altitude Chihuahuan Desert is North America’s largest desert. In total area, the desert is larger than the state of California. With more than 3,500 plant species—1,000 of which are found nowhere else in the world—it is also one of the most biologically diverse arid regions in the world. The desert is a global epicenter of cactus diversity, with more than 400 species found throughout the range.



BEAR WATCHING Northern Mexico's Serranías del Burro and the nearby Sierra Del Carmen mountains host one of the densest concentrations of Mexican black bear on the continent, thanks in part to the effort of one ranching family. "They're beautiful animals," rancher Guillermo Osuna Saenz says of the Mexican black bear. "I wanted to be able to see them around my house." Osuna pledged to stop hunting bear as a teenager 50 years ago, after he shot the mother of two cubs. His commitment led to a regional effort to protect bears and, in turn, helped restore the bear to its range on the U.S. side of the river.

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"The Borderlands is a system of mountain islands in a desert sea," says Jeff Weigel. "It's what creates the incredible diversity here; you've got everything from bone-dry desert hardscrabble to alpine meadows with four-foot diameter pine trees."

PRISTINE PEAKS Mexico-based CEMEX, the second-largest cement manufacturer in the world, has been a key conservation partner in the Borderlands. In 19[TK] the company created a 375,000-acre preserve in the Maderas Del Carmen mountain range, protecting the sky island and reintroducing the desert bighorn sheep, once completely wiped out in the region.

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