In the Shadow of the Wall
Wildlife on the line in the U.S.-Mexico borderlands
A ‘big beautiful wall’ would devastate wildlife populations on both sides of the border

Silver tresses of Spanish moss sway beneath a mesquite tree’s thorny crown on a breezy August afternoon along the Texas border in Santa Ana National Wildlife Refuge. The chatter of an Altamira oriole and a great kiskadee fills the air, plain chachalacas search for seeds in the leaves, and black-crested titmice feast on hackberry fruit. Presiding over it all is the Rio Grande.

In the dry season, when the sky withholds and the river withdraws, these birds know how to persevere, having lived in relationship with
this land through the ages. But for all species there is a breaking point, a culmination of challenges that exceeds an animal’s ability to adapt. Such a challenge may soon present itself at Santa Ana—and to all the wildlife along the entire U.S.-Mexico border.

Early last year, the Department of Homeland Security began planning construction of a border wall through the northern third of the refuge, which, if built, would bisect the largest remaining remnant of a globally rare ecosystem and isolate much of the 2,000-acre preserve on the Mexican side of the border barrier.

“Santa Ana is a real jewel of the refuge system,” says Ken Merritt, former manager of the South Texas Refuge Complex. “It’s about the worst place you could put up a wall.” And this precious gem of a refuge is just the beginning. President Donald Trump has vowed to expand wall construction across the entire 2,000-mile border, dividing ecosystems and human communities, amputating the North American landscape at its knees.

Trump’s intention is not new—the federal government built approximately 650 miles of border barrier nearly a decade ago before aborting the idea. In the process, it severed ecological connections on a landscape that wildlife scientists consider one of the most biologically diverse in the Western Hemisphere.

This rare ecological complexity along the southern border comes largely from its topographical variety. Steep climbs in elevation give rise to mixed mountain ecosystems—known as “sky islands”—surrounded by vast desert communities. And because
the borderlands are located within the gentle transition zone between tropical and temperate climates, species that don’t coexist anywhere else in the world live side by side.

The borderlands are home to more than 180 federally threatened and endangered species, including the jaguar, Mexican gray wolf, peninsular bighorn sheep and Sonoran pronghorn. A viable future for each of these and many more wild creatures depends on open migration pathways to and from Mexico.

Given the threat a border wall poses to North American wildlife, many advocates—along with Defenders—are gearing up for a hard fight. “Santa Ana is the first battle in the war against a Trump wall,” says Bryan Bird, Defenders’ Southwest program director “If the refuge is damaged a major wildlife corridor is seriously compromised.”

Last August, Defenders and wildlife advocates from across the nation supported hundreds of local organizers to converge on Santa Ana. Forming a line nearly a mile long on the Rio Grande levee, they held hands in a show of support for the wildlife that rely on Santa Ana. Zulema Hernandez, a 76-year-old valley resident who attended the protest summed up the feelings of many that day saying, “I’m opposed to the wall. I don’t want to lose this habitat for animals.”

In fact, just weeks before, the founder of the National Butterfly Center—a 100-acre sanctuary dedicated to the conservation and study of monarchs and 200 other butterfly species east of the refuge—was shocked to find a work crew with chainsaws and mowers cutting down trees and vegetation on restored habitat to make way for the wall. The sanctuary’s private property lies a few miles north of the border.

Director Marianna Trevino-Wright says when she confronted the crew and told them to leave, the supervisor told her that U.S. Customs and Border Protection would be in touch, and she was later informed that the agency had the authority to enter any property within 25 miles...
of an international border. The sanctuary mounted a legal fight, and in October filed its intent to sue the Department of Homeland Security for violating private property rights and the Endangered Species Act.

If constructed, the wall would leave two-thirds of the sanctuary’s land on the other side of the wall.

Federal lands—like Santa Ana National Wildlife Refuge—are even easier for the Trump administration to seize.

This refuge was established in 1943 when human development threatened to utterly erase the native habitat of the Lower Rio Grande Valley, along with the rich diversity of wildlife that had relied on it since the dawn of the modern era.

Jaguars, ocelots, and jaguarundis once roamed the valley with their more northerly cousins, the cougar and bobcat—a gathering of wild felines at an ecological crossroads where coastal climate meets deserts and grasslands. This landscape drew in all types of animals from coatimundi and Texas tortoise to one of the most complex insect communities in temperate North America, with more than 300 butterfly species including monarchs, malachites, queens and American snouts.

The Lower Rio Grande, sandwiched between the vast Gulf of Mexico to the east and the Chihuahuan Desert to the west, provides 80 percent of North America’s migrating bird species traveling the Central and Mississippi flyways with their safest route.

More than 500 bird species rely on the South Texas landscape, a dependence grown ever-tenuous since the Spanish arrived in the 1700s and began hunting and dividing the landscape.

By the early 1900s, U.S. agricultural expansion and flood-control measures had nearly erased the native thorn forest.

By 1939, the 12 million white-winged doves that had annually converged on the valley dropped to 500,000. The once-numerous chachalaca, dubbed the “wily Mexican pheasant,” had almost entirely disappeared here. But in 1936 the United States and Mexico signed
the Migratory Bird Treaty and the U.S. Fish and Wildlife Service (FWS) began buying land to provide refuge for birds and other wildlife.

Given its critical role in bird preservation, Santa Ana was one of the first refuges established in the state of Texas.

Standing on this land 75 years later, the importance of this designation is readily apparent.

Today Santa Ana is an island of habitat in a world of pavement and crops where human development destroyed more than 95 percent of the thorn forest. Many of the valley’s birds have grown rare, and the last jaguar in South Texas was shot in 1948. The ocelot and jaguarundi have barely escaped extinction in the United States but they still find refuge within Santa Ana.

FWS and others have worked for decades to transform the Rio Grande Valley’s tattered habitat remnants, using approximately $100 million in federal funding to buy and restore some of its last available land and to connect it with other protected lands in the United States and Mexico.

The cornerstone of this effort, the South Texas Refuge Complex, includes Santa Ana and the Laguna Atascosa National Wildlife Refuge—where one of the last breeding populations of ocelots live—as well as 115 refuge tracts along the final 275-mile stretch of the Rio Grande.

This collection of habitat, painstakingly gathered over the past 40 years under the Lower Rio Grande Valley National Wildlife Refuge, is fondly referred to as “a string of refuge pearls,” and it aims to preserve habitat and to create a travel corridor for a variety of species, especially the ocelot.

“For the cost of building only 14 miles of border wall, the ocelot could be completely recovered according to FWS figures,” says Rob Peters, Defenders’ Southwest senior representative. Similarly, ensuring full recovery of the critically endangered Mexican gray wolf would cost the same as building 10.5 miles of the wall. “By not building one-half-mile of border wall, the $12 million we’d save could pay for one year’s expenses toward full recovery of the wolf and ocelot plus the jaguar and Sonoran pronghorn,” he adds.

Much of the South Texas Refuge Complex sits between the Rio Grande and the river’s flood-control levee, which in some places sits two miles north of the river. Because the border wall would be constructed on the levee, large swaths of refuge land would sit south of the wall, preventing wildlife from reaching essential habitat like the Laguna Atascosa refuge and blocking wildlife attempts to escape flood waters during extreme weather.

“If they build the levee border wall, the current levee—which any animal can go up and over—will become a sheer 30-foot wall,” says Peters. “If wildlife can’t get over it, they are all going to drown.”

It’s happened before.

During the 2010 flood, sections of border wall built in 2008 blocked wildlife from escaping floodwaters on a nearby Lower Rio Grande refuge tract. When the rain subsided refuge staff found hundreds of Texas tortoise shells. Many other species, whose bodies were not as durable as the tortoise, also likely drowned.

The Trump administration also plans to scrape all vegetation from the ground within 150 feet of the new wall, which will amount to a catastrophic loss of the already critically rare thorn forest. Increased enforcement measures will introduce...
lighting, vehicles and agents, further diminishing the land for wildlife.

For the eight federally endangered species on the Santa Ana refuge and the hundreds of imperiled species who live along the 2,000-mile border, the prognosis is grim. In the past 10 years, scientists have documented javelinas, desert cottontail, deer, toads, snakes and cougars stranded in places where the wall already exists. Bobcat and pronghorn populations have also suffered increased mortality and decreased reproductive success because of the barrier.

For some endangered species, the wall may extinguish any hope of U.S. recovery. Mexican gray wolves have relied on border migration corridors in Arizona and New Mexico and international cooperation throughout their decades-long attempt to escape extinction. Biologists captured the last five Mexican gray wolves in existence in Mexico by 1980 to breed them in captivity in the United States. “In the last year, at least two crossed over the border searching for food or mates,” says Peters. “The wall would put a complete and total stop to that.”

The jaguar and ocelot—two of the world’s most beautiful cat species—are in similarly perilous positions. Their recovery in the United States is intrinsically tied to larger populations across the international boundary. Studies show that the ocelot’s genetic diversity is eroding as it becomes disconnected from larger ocelot populations south of the border. “With only about 70 ocelots left in the United States, if the wall is finished, they are finished.” Peters says.

U.S. laws could help protect the jaguar, ocelot, Mexican gray wolf and the birds of Santa Ana. But in 2005 Congress passed the Real ID Act, which gave the Department of Homeland Security the authority to waive all laws when constructing a border wall. The agency has already used its authority on four occasions over the past decade to waive 40 laws and construct more than 650 miles of barrier already at the border. Laws waived include the Clean Air Act, Wilderness Act, Endangered Species Act and the National Environmental Policy Act (NEPA), which mandates

ENDangered SPECIES RECOVERY COSTS IN BORDER WALL EQUIVALENTS

According to FWS numbers, the ocelot could be completely recovered for the cost of building only 14 miles of border wall, the Mexican gray wolf for the cost of 10.5 miles. Average projected annual cost for recovering both these species plus the jaguar and Sonoran pronghorn could be met by forgoing construction of just one-half mile of border wall at the current cost of $25 million per mile.

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<th>Species</th>
<th>Cost to completely recover endangered species</th>
<th>Border wall miles equivalent for complete recovery at $25 million/mile</th>
<th>Annual recovery cost per year</th>
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assessing environmental damage prior to any action. This law, had it been in force, would have required the federal government to consider how building a wall might exacerbate flooding and drown wildlife, fragment habitat and inhibit wildlife migrations and reproduction.

“Many people refer to NEPA as the ‘look-before-you-leap’ law,” Bird says. “It’s looking over the cliff before you jump. But the Trump administration decided to leap without looking when it circumvented environmental protections last summer to pave the way for wall construction in California. This threatens the existence of the endangered Quino checkerspot butterfly, snowy plover and other imperiled species.”

In September, Defenders filed suit against the administration in response, setting the stage for more legal battles as the Trump administration continues to ignore environmental protections.

“A U.S.-Mexico border wall in an era of climate change may represent the final breaking point for countless species,” says Peters. “In the decades to come drought and rising temperatures will demand wildlife move in search of water and food resources. The migratory stakes for wild species across southern North America could not be higher. Building a wall could be the final breaking point for many of our most cherished wild species.”

**Krista Schlyer** is a conservation photographer and writer in the Washington D.C. area. For the past decade she has documented the rich biodiversity of the U.S.-Mexico borderlands and the impacts of U.S. border policy on the region. She is the author of Continental Divide: Wildlife, People and the Border Wall, winner of the 2013 National Outdoor Book Award and Ansel Adams Award for Conservation Photography.

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**DEFENDER TO THE CORE**

**A Q&A with a Defenders expert**

**Q: How would a border wall degrade wildlife habitat?**

**A:** Patrol vehicles regularly go off-road, even in wildlife refuges. This along with construction crushes plants and animals and keeps them from using their habitat. Construction may also involve downing trees and clearing vegetation for better visibility. Invasive plants also spread when seeds catch a ride with vehicles, and many plants, including mesquite, have seeds that germinate best if first passed through the guts of javelinas, coyotes and other mammals. If seed-dispersing animals become rarer or excluded from some areas by the wall, healthy habitat may diminish.

**Q: What do you say to those Americans who back a wall for security measures?**

**A:** Border communities are home to the safest cities in the nation and some of our country’s most stunning mountains, rivers and wildlife refuges. Our government should protect these lands, preserve the shared histories of the region, and respect the rights of the roughly 15 million people who live, play and work in border communities. The wall is expensive—as much as $24.5 million for every mile—and it does not address the fundamental causes of human migration and drug smuggling. The GAO reported that the U.S. government “cannot measure the contribution of fencing to border security operations along the Southwest border.” There are far better uses of American taxpayer dollars such as investing in U.S.-Mexico trade and port of entry operations, improving border-community schools and investing in tourism that generates jobs and income for the border region.

**Q: Defenders filed a lawsuit to stop the building of the wall in California, but what else is being done to fight for wildlife facing a border wall?**

**A:** Defenders is part of a growing coalition of 160 organizations representing civil rights, faith, environmental, indigenous, LGBT and border communities working together to protect the community, culture, land, wildlife and environmental well-being of the border region. We are participating in border wall protests, educating Congress about the impacts on wildlife and the environment and bringing the most comprehensive information on the long history of binational conversation investments to our members and the public through a report to be published in 2018.