

A family of javelinas encounters the wall on the U.S.-Mexico border near the San Pedro River in southeastern Arizona.

In the Shadow of the Wall: Executive Summary

rom the Pacific Ocean to the Gulf of Mexico, the 2,000-mile U.S.-Mexico border passes through regions rich in biological diversity and communities engaged in conservation. For decades, U.S. and Mexican agencies, nonprofits, universities and ranchers, retirees and others have teamed up to restore rivers, streams, forests, grasslands and at-risk wildlife, to keep habitat linkages intact and to protect large natural areas.

The border wall puts this binational conservation legacy at risk by:

- Destroying vegetation and harming wildlife in the construction and maintenance of the wall and related infrastructure and the execution of enforcement activities.
- Disrupting and altering wildlife behavior as animals avoid border infrastructure, lights, noise, patrols and other enforcement-related disturbances.
- Cutting the cross-border connectivity necessary for the genetic health and persistence of species like bighorn sheep, bison, Mexican gray wolves and pronghorn.
- Preventing jaguars and other species from crossing the border to establish new populations.
- Crushing the spirit of cooperation and complicating or ending the cross-border collaboration among agencies, scientists, nongovernmental organizations and citizens.
- Wasting billions of dollars that could otherwise be spent
 on conservation or other worthwhile endeavors. The
 cost of just one mile of wall would cover all the annual
 conservation work called for in the recovery plans for
 endangered Sonoran pronghorn, ocelots, jaguars and
 Mexican gray wolves.
- Decreasing revenues in municipalities that depend on ecotourism and other outdoor recreation. Proposed construction of a border wall segment through Santa

Ana National Wildlife Refuge in Texas could cut local revenues from ecotourism by \$35 million per year.

In the Shadow of the Wall, a two-part Defenders of Wildlife report, explores these and other conservation consequences of extending the wall along the U.S.-Mexico border in detail. Part I: Wildlife, Habitat and Collaborative Conservation at Risk provides an overview of how the wall affects wildlife, habitat, human communities, conservation and binational collaboration. Part II: Conservation Hotspots on the Line profiles five hotspots along the border—areas with high biological diversity created and preserved by significant investments in conservation lands and conservation projects. Hotspot by hotspot, Part II gives voice to the scientists, agency and conservation group employees, tribe members and citizens whose stories make a compelling case against the wall.

The five borderlands conservation hotspots are:

1. The Californias. Native species in the populous coastal zone of southern California and northern Baja California are under tremendous pressure from development. The region supports over 400 species of plants and animals classified as endangered, threatened or at risk, including the endangered California condor, Peninsular bighorn sheep and Quino checkerspot butterfly. The U.S. side of the border has many protected areas, but northern Baja California has relatively few, underscoring the need and urgency of binational efforts to protect Mexican habitat. Unfortunately, with 72 percent of border in the Californias already blocked by pedestrian fencing, habitat connectivity between California and Baja California is limited and security procedures complicate cross-border conservation collaboration. The border wall and development have

- already blocked two of three cross-border wildlife linkages identified in 2004 by the Las Californias Binational Conservation Initiative, and border construction has harmed habitat and rare species in San Diego County, including the Tijuana Estuary and rare Tecate cypress.
- 2. Sonoran Desert. This western Arizona desert's fauna is remarkably diverse: 60 species of mammals, 350 birds, 100 reptiles, 20 amphibians and 30 native fish, many of them imperiled. A complex of large nature reserves sandwiches the border, including Cabeza Prieta National Wildlife Refuge in the United States and Mexico's El Pinacate y Gran Desierto de Altar reserve. So far, these reserves are divided at the border by vehicle barriers only, passable by animals like the endangered Sonoran pronghorn, which needs a large, cross-border population to survive. One hundred and twenty-four miles of Arizona border is blocked to wildlife by existing pedestrian barriers. Extending these barriers would further split populations of the Sonoran pronghorn and other species that depend on cross-border connectivity.
- 3. Sky Islands. This area in eastern Arizona and the southwestern corner of New Mexico derives its name from scattered mountains that rise from the surrounding deserts and grasslands. Altitudinal variation and a convergence of tropical and temperate climates gives the Sky Islands one of the world's most diverse biotas. Although much of the Sky Islands has existing border walls, enough gaps remain to allow bison, bighorn sheep, jaguars and ocelots to cross between the many public and private protected areas on either side. Walling off these openings would jeopardize bighorn sheep near the border and prevent jaguars from re-establishing themselves in the United States.
- 4. Big Bend. This region, where the Rio Grande-Rio Bravo heads southeast and then bends north boasts a large complex of protected areas on both sides of the border, including Big Bend National Park in Texas and Mexico's Maderas del Carmen biosphere reserve. These areas are the focus of extensive conservation cooperation. Binational teams control the invasive exotics giant cane and tamarisk along the river, while U.S. and Mexican bat researchers study endangered Mexican long-nosed bats. So far Big Bend has no border wall to hinder this work, but, if built, binational control of exotics

- would be more difficult and populations of bison and black bear could no longer freely cross the border.
- the Gulf of Mexico has been so extensively developed for agriculture and other uses that only a tiny fraction of natural vegetation survives—99 percent of original delta riparian forest is gone. With most of the land privately held, protected land is at a premium. The U.S. government has spent millions of dollars since the 1940s to acquire enough tracts along the river to protect migratory birds and ensure survival of vanishing species like the ocelot, a cat with a U.S. population of fewer than 100. The ultimate conservation goal for the region is to link habitat for ocelots and other wildlife with Mexico's huge Laguna Madre y Delta del Rio Bravo biosphere reserve—an impossible dream if the Trump administration walls off the rest of the border in the Lower Rio Grande Valley as planned.

In the Shadow of the Wall clearly illustrates how border walls and associated infrastructure and operations harm wildlife and habitat and undermine binational investment in conservation.

DEFENDERS AGAINST THE WALL

Defenders of Wildlife has long fought to restore imperiled species and to protect national wildlife refuges and other sensitive federal lands along the U.S.-Mexico border. We have worked for decades to support the reintroduction and recovery of the Mexican gray wolf and to protect the habitat of the jaguar, ocelot, Sonoran pronghorn and cactus ferruginous pygmy-owl and other wildlife on the edge. We have stood against the border wall since Congress first mandated its construction in 2006 and taken legal action to halt construction of wall segments and to challenge the constitutionality of waiving the Endangered Species Act and other environmental laws to construct border barriers and roads. We are a strong voice against the wall on Capitol Hill and work closely with a diverse broad coalition of environmental, Latino, immigration rights, religious rights and civil rights groups to oppose funding for the damaging, wasteful walling off of our southern borderlands.

