Bordering on Disaster
NEW HOMELAND SECURITY LEGISLATION JEOPARDIZES WILDLIFE

By Laura Bies

Wildlife professionals across North America must navigate through challenges every day, working around the impediments of shrinking budgets, aging equipment, and shortages of staff. However, wildlife professionals working on the United States-Mexico border are faced with a set of new problems different from those of many of their colleagues. Their problems? Walls. Miles and miles of walls.

In December 2005, the House of Representatives passed a border enforcement bill, the Border Protection, Antiterrorism, and Illegal Immigration Control Act of 2005 (H.R. 4437). The following May, the Senate passed the Comprehensive Immigration Reform Act of 2006 (S. 2611). Both proposals call for varying amounts of wall, fence, and vehicle barrier construction along the border between the United States and Mexico. In September 2006, it became clear that the chances of passing comprehensive immigration reform in the dwindling days of the 109th Congress were slim, so instead of delaying action, Congress included the fencing provisions of the House bill in another, shorter piece of immigration legislation, the Secure Fence Act of 2006 (H.R. 6061).

The Secure Fence Act, which passed both the House and Senate in October 2006, was signed into law by President Bush, who noted, “We have a responsibility to enforce our laws. We have a responsibility to secure our borders. We take this responsibility serious [sic].” Absent in the legislation, however, was a provision for financing the construction, although it does require that the Department of Homeland Security (DHS) have funds in place by the end of 2008.

With these laws in place, wildlife professionals working along the U.S.-Mexico border must now do their work in the midst of intense debates not only about the potential impact of physical barriers on the welfare of wildlife populations, but also about immigration policy and human rights, and about the limits of power invoked to protect homeland security.

Specially designed fences such as this one in Organ Pipe Cactus National Monument in Arizona prevent off-road vehicle traffic but do not impede wildlife.
Homeland Security Leads the Way
In 2005, President Bush also signed the REAL ID Act into law. Section 102 of the Act contains a landmark provision giving the Secretary of Homeland Security, a position currently held by Michael Chertoff, the power to waive any and all federal laws to expedite construction of fences and barriers along the border and to remove any obstructions to the detection of illegal immigration. According to the Act, “notwithstanding any other provision of law, the Secretary of Homeland Security shall have the authority to waive, and shall waive, all laws such Secretary, in such Secretary’s sole discretion, determines necessary to ensure expeditious construction of the barriers and roads under this section.”

Such power to waive all federal laws is extraordinary. “I’m struck by the REAL ID waiver,” says Stephen Mumme, professor of political science at Colorado State University and an expert on environmental policy in border regions. “It’s absolutely, categorically, definitively unprecedented. This is the first time in American history we’ve put so much power over domestic law into the hands of a single administrator.” The lack of public concern regarding an unprecedented waiver of federal law is surprising, notes Mumme. “People need to be appalled.”

The provision allows the Secretary of Homeland Security to exempt from any federal law fence construction or other activities in the vicinity of the Mexican and Canadian borders. “The waiver authority is quite sweeping,” says Gary Bass, executive director of OMB Watch, a government watchdog group. Bass notes that implementing the law could sideline everything from environmental impact statements to prevailing wage requirements to civil rights protections. “It is surprising that Congress would give away its legislative powers to someone in the Executive branch,” says Bass. The Act does require that the DHS publish its decision to waive federal law in the Federal Register, although notification is not required until after the decision to waive a law is final.

Which Walls Where?
The United States-Mexico border stretches nearly 2,000 miles, running from San Diego, California, eastward across the northern end of the Baja Peninsula, across the Sonoran and Chihuahuan deserts in Arizona, New Mexico, and Texas, to El Paso. From there, it follows the Rio Grande to the Gulf of Mexico. Nearly half of the U.S. land along this border is federally owned and includes national wildlife refuges, national parks, and national forests. This federal land, as well as the private land along the border, contains many unique ecosystems that are home to a diverse array of spectacular wildlife. According to Jenny Neely, southwestern representative for Defenders of Wildlife, there are dozens of endangered species living along the border, including jaguar, ocelot, and lesser long-nosed bats. Elizabeth Slown, acting assistant regional director of External Affairs for the U.S. Fish and Wildlife Service (FWS), says that although the actual number of endangered species living along the United States-Mexico border is difficult to conclusively verify, the estimates developed by Defenders of Wildlife sound reasonable to her.

The Secure Fence Act requires construction of double steel walls along approximately 700 miles of the United States-Mexico border, to be built in five segments in regions that are known for significant levels of illegal border crossings. In all, these walls—complete with floodlights, surveillance cameras, and motion detectors—would cover nearly a third of the border with Mexico, fencing almost all of the Arizona border and large portions of California and Texas.

About 100 miles of the border are already fenced, mostly with welded panels of corrugated

Fences designed to block human movement may also hinder ocelot (Leopardus pardalis) border crossings.

Credit: Tom Smylie/USFWS
steel once used in the Army’s portable landing strips in Vietnam. Much of this fencing is near urban areas, such as San Diego, California; El Paso, Texas; and Nogales, Arizona. In other areas, however, the border is delineated with a simple six-strand barbed wire fence. Along some stretches, vehicle barriers, made up of vertical posts connected by one continuous horizontal rail, stop vehicle traffic but allow humans and animals to pass through. Often placed on federal lands, these structures are more wildlife-friendly and have even earned kudos from natural resource managers for protecting habitat from damage caused by illegal off-road vehicle traffic. One rail and wire barrier is currently under construction at Buenos Aires National Wildlife Refuge where, according to Refuge Manager Mitch Ellis, the Fish and Wildlife Service supports the construction because the design limits habitat damage from vehicles without impeding wildlife passage. John Hervert, a wildlife biologist with the Arizona Game and Fish Department, notes that rail and wire barriers have helped to protect other areas, such as pronghorn habitat in southwest Arizona.

These vehicle barriers do stop cars; however they do little to prevent the passage of people on foot. The porosity of these barriers makes them less effective than solid walls at controlling illegal human traffic and, therefore, less popular with Homeland Security and Congress. Although vehicle barriers are used in some border locations, solid walls and fences seem to be preferred in high traffic areas. Immigration legislation enacted over the past few decades has encouraged rapid construction of these solid structures, which prevent border crossing of wildlife as well as humans.
Potential Impacts of Fences on Wildlife

More walls and fences could have serious effects on wildlife populations along the border, with the severity of the impact depending on the species, the location, and the health of the population. The possibility of negative environmental impacts worries wildlife professionals like Steve Spangle, field supervisor for the Arizona Ecological Services Field Office of FWS, who, he says, has “great concerns about the total impediment of wildlife across the border.” For many species, a solid wall such as the 15-foot steel walls proposed by Congress could bar movement between habitats in the United States and in Mexico. Such an impediment would likely have population-level impacts. According to Phil Rosen, a research scientist with the University of Arizona, walls can create genetic barriers, preventing interbreeding between U.S. and Mexican populations in species such as the desert tortoise.

Debbie Sebesta, district biologist for the Nogales District of the Coronado National Forest in Arizona, agrees, adding that the construction of a solid wall runs the risk of limiting movement of larger species such as jaguars. Although several male jaguars have been seen in the area recently, jaguars were assumed to be extinct in Arizona until 1996 and there is still no known breeding population in the state. And construction of the mandated wall “closes the door on any potential for jaguars inhabiting our region north of the border,” says Matt Skroch, executive director of the Sky Island Alliance.

Pronghorn antelope that inhabit eastern Arizona and western New Mexico are another population that might fare poorly with fenced ranges. At present, there are about 100 of these speedy creatures in the southwestern United States and approximately twice that in Mexico, all of which have been able to move freely across the border. Unable to jump fences taller than six feet, their movement would be severely limited. Splitting this fragile population could create genetic “bottlenecks” and limit diversity in the years to come. Another threat to the pronghorn, in addition to the wall itself, is the phenomenon known as “squeezing the balloon,” says Spangle. If additional walls are installed in other areas of Arizona, such as along the Goldwater Range, illegal vehicle and foot traffic will be pushed further out into the desert, likely increasing pressure on the already tenuous pronghorn populations.

On the other hand, walls in some places may have positive impacts. Hervert of Arizona Game and Fish Department says, “There’s tremendous habitat damage due to the open border.” He argues that while a wall will certainly impact border wildlife, it may be the only way to protect that wildlife and habitat from the overwhelming effects of illegal border crossings. Gerry Perry, the southeast regional supervisor for the Arizona Game and Fish Department, adds, “There’s disturbance in wildlife habitats 24/7. Whatever effect we might have from a fence would pale in comparison to the effects of thousands of people moving through [the area]. Even if the border is sealed so that terrestrial wildlife has difficulty moving across the border, it may be for the better.” There is some hope that if solid walls are constructed, design modifications can allow at least some small species to pass through or under the walls. Of course, little can be done to allow passage of larger animals such as jaguars without also allowing human passage.

Whatever concerns wildlife managers may have, however, the consequences of walls on border wildlife are not well studied or well understood. Mary Kralovec, chief of resources at Organ Pipe Cactus National Monument in Arizona, notes that the park staff does not have much data about the possible effect of a wall on the park’s wildlife, although there is already a vehicle barrier in place. Kralovec speculates that the monument’s coyotes, bobcats, pronghorn, and reptiles could be affected by a barrier that precludes wildlife movement across the border, but no conclusions can be drawn without support from properly collected data. Glenn Frederick, district biologist for Sierra Vista District of the Coronado National Forest says that while a wall could affect the migration of amphibians across the border, that potential has “not been evaluated in a lot of detail.”

Some fences may be constructed in such a way as to allow species like the desert kangaroo rat (Dipodomys deserti) and the sidewinder rattlesnake (Crotalus cerastes) to slip under them.
Wildlife managers are, however, starting to collect data on populations, habitat preferences, and other factors that can be used to assess the potential impact of barriers on the health of wildlife populations. In addition, federal agencies are beginning to work together to improve their relationship with Border Patrol. For example, Dale Bosworth, chief of the Forest Service, and David Aguilar, chief of Border Patrol, recently met to develop a strategy to work collaboratively in securing the border while at the same time minimizing impacts to natural and cultural resources. “There’s a fundamental disconnect between homeland security and the rest of the policies—social and environmental—that occur in border areas, and in the nation at large,” says Colorado State’s Mumme. “We need to connect the dots between security and the environment. They’re going to impact each other.”

Regardless of combined efforts, extensive construction of impenetrable walls along the United States-Mexico border risks irreparably harming some of the fragile wildlife populations that live in the unique environments along the border, both through habitat damage from wall construction and the prevention of migration and genetic flow. The task of balancing pros and cons remains: Is the construction of walls that may effectively reduce illegal border crossings by immigrants worth the cost of curtailing the movement of wildlife across natural landscapes? Is the strength the nation may gain in securing its borders with walls worth the potential cost of building without regard to federal regulations that were set in place to protect wildlife and its habitat?

“Homeland security and illegal immigration are certainly legitimate concerns, but then so is the survival of the many native wildlife species that inhabit our border lands,” says Michael Hutchins, executive director of The Wildlife Society. “Wildlife does not recognize the artificial geographical boundaries that we impose on the landscape, and its future depends on unencumbered movement from one country to the next. Erecting a barrier between Mexico and the United States may be the simplest and most expedient solution to the illegal immigration problem, but is it the best way to ensure our nation’s security or preserve its wildlife heritage over the long-term?”

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See this article online at www.wildlifejournals.org for links to laws and policies that relate to the U.S.-Mexico border fence construction.