

The Environmental Impacts of a Border Fence

Author: Cohn, Jeffrey P.

Source: BioScience, 57(1) : 96

Published By: American Institute of Biological Sciences

URL: <https://doi.org/10.1641/B570116>

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

The Environmental Impacts of a Border Fence

A group of Arizona park and refuge managers, wildlife biologists, and conservationists has charged that building a wall along the US–Mexican border to keep illegal immigrants and drug smugglers out of the United States will fragment the Sonoran Desert ecosystem, damage the desert's plant and animal communities, and prevent the free movement of wildlife between the United States and Mexico. A border wall would affect any animal along the border that “walks, crawls, or slithers,” argues Brian Segee, a staff attorney with Washington, DC–based Defenders of Wildlife. “Anything that doesn't fly would find its routes blocked.” Actually, low-flying birds such as the cactus ferruginous pygmy owl might be affected as well.

Congress passed and President Bush signed the Secure Fence Act last fall. It authorizes the US Department of Homeland Security to build a \$2.2 billion wall in five sections along 700 miles of the 2000-mile-long US–Mexican border. One section would run from Calexico, California, to Douglas, Arizona. In some places, it would replace current or planned barriers that block vehicles but allow people and animals to pass through. Other areas would have lights, movement sensors, cameras, and unmanned airplanes as a “virtual fence.” To date, Congress has allocated no money to build the full wall, but it has appropriated \$1.2 billion for infrastructure plus \$67 million for a 28-mile segment in Arizona. Another law known as the REAL ID Act allows the secretary of homeland security to exempt the wall from environmental assessments or legal challenges because of national security.

So far, the political debate surrounding a border wall has focused mostly on illegal immigrants and drug smugglers. Few outside of the conservation and biology communities have looked at the consequences of building a wall for wildlife. But a symposium on border ecology in Tucson, Arizona, last fall,

sponsored by Defenders of Wildlife and the Wildlands Project, has helped refocus attention on the proposed wall's biological effects. The symposium, the second held by the two groups, brought together local and regional environmental and conservation organizations, state and federal wildlife and land agencies, and university researchers. It examined issues and information gaps relating to border ecology and the proposed wall, says Jenny Neeley, Defenders of Wildlife's Southwest representative.

Symposium participants expressed concern that the proposed wall would cut off US from Mexican populations of such species as javelinas, ocelots, and Sonoran pronghorn. A wall would also prevent jaguars from repopulating the southwestern United States from a population in Mexico's Sierra Madre Occidental forests. Jaguars from Mexico have shown up from time to time over the past decade in southern Arizona and New Mexico. Altogether, says Brian Nowicki, a Center for Biological Diversity conservation biologist, 30 endangered, threatened, or candidate species live along the US–Mexican border in Arizona and Sonora, 15 in the area where the wall would be built.

Moreover, building a wall, along with the roads and support facilities it necessitates, would not only plow under saguaros and other fragile desert plants but scare Sonoran pronghorn and other wildlife from important sources of food and water, Neeley says. “We want landscape permeability,” adds Janice Przybyl of the Sky Island Alliance, speaking of the ability of wildlife to move unencumbered by fences.

While recognizing the validity of those arguments, Roger DiRosa, manager of Cabeza Prieta National Wildlife Refuge near Ajo, Arizona, points to habitat loss and harm to wildlife caused by illegal immigrants and drug smugglers crossing the refuge. With new fences and increased Border Patrol and private group activity

to stop illegal border crossings elsewhere in the Sonoran Desert, a growing number of people now enter the United States at Cabeza Prieta, about 100 miles west of Tucson. At 860,000 acres, 800,000 of which are designated wilderness, Cabeza Prieta is the third largest national wildlife refuge outside Alaska.

DiRosa reports that Cabeza Prieta now has about 400 miles of illegal roads plus another 800 miles of unauthorized foot trails. Border issues take up to 85 percent of DiRosa's time and up to 75 percent of that of all refuge operations. Biologists working in the desert at night have to be accompanied by law enforcement officers. And the Border Patrol has built a one-acre base within Cabeza Prieta that includes roads, fuel tanks, a barracks for 10 officers, and a helicopter pad. “It's a war zone here,” he says. “We're into triage in deciding what to sacrifice in the environment to achieve border security.”

DiRosa wants to build a vehicle barrier along the 56 miles of border within Cabeza Prieta, similar to the one already in place along the border at Organ Pipe Cactus National Monument. Officials at Buenos Aires National Wildlife Refuge and the Tohono O'odham Nation in southern Arizona also have plans to build barriers. By contrast, the Secure Fence Act mandates a wall that allows no movement by most animals between the United States and Mexico.

“Border activities have supplanted environmental protection,” DiRosa says ruefully. “Our operations have been turned on their heads. We have to find a way to keep from pitting the environment against homeland security.”

Jeffrey P. Cohn (e-mail: jeffcohn@sbcglobal.net) is a freelance science writer living in Takoma Park, Maryland.

doi:10.1641/B570116
Include this information when citing this material.