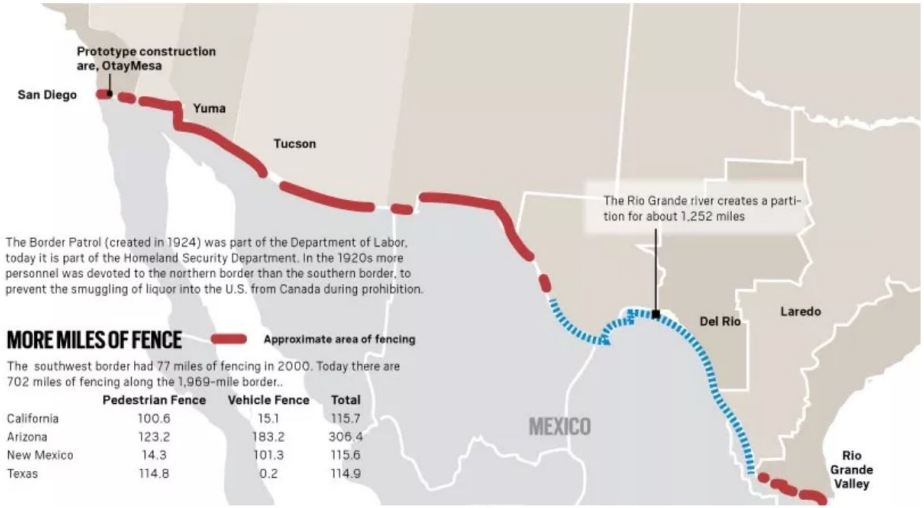
The US-Mexico Border Wall and its Impact on Biodiversity

Suki Lee • 12 November 2019

Facts



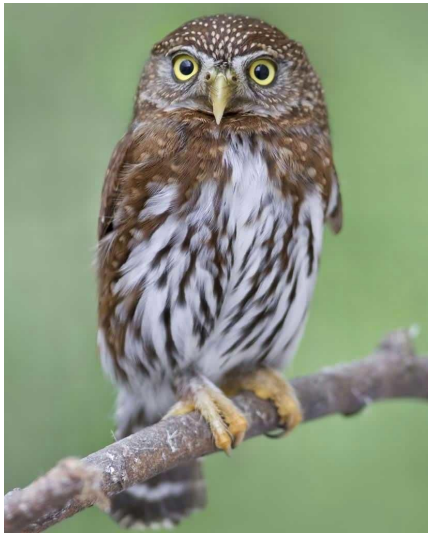
	Pedestrian Fence	Vehicle Fence	Total
California	100.6	15.1	115.7
Arizona	123.2	183.2	306.4
New Mexico	14.3	101.3	115.6
Texas	114.8	0.2	114.9

Length:

- 1,954 miles (3,145 km)

The Wall:

- Includes San Diego, California and El Paso, Texas
- Divides the border town of Nogales between Arizona in the U.S. and Sonora in Mexico



Risk 1: Systemic harms to wildlife

The US-Mexico Border Wall...

- disconnects one-third of the region's 346 native wildlife species from 50% or more of their habitat range lying on the south side
- isolates animal populations while limiting their ability to search for food, water, and mates
- prevents animals from escaping fires, floods, or heat waves
- Example wildlife at risk: the pygmy owl & the quino checkerspot butterfly (both ESA-listed endangered species)

Risk 2: Wider threats to diverse landscapes

- The harm to wildlife has a corresponding negative impact on wider ecosystems and landscapes
- The Wall disrupts annual or seasonal migration and dispersal routes for both plants and animals
- Example species especially affected: Peninsular bighorn sheep & Mexican gray wolf

Risk 3: Direct disruptions to wildlife

Any large-scale development (e.g., operating roads and lights):

- eliminates or degrades natural vegetation
- kills animals directly through machine accident and destruction
- erodes soils
- alters hydrological processes, leading to increased flooding

NEWS: Exacerbated flooding

In 2008, a five-mile-long segment of a fifteen-foot-high wire fence trapped debris flowing through a natural wash during a ninety-minute summer thunderstorm at the Organ Pipe Cactus National Monument in southwest Arizona.

The fence caused water to pool 2-7 feet high, posing an immediate threat to public health and causing longer term damage to environmental systems.

In 2011, another deluge at Organ Pipe knocked over a segment of the fence.

Then in 2014, the twin cities of Nogales, Mexico, flooded after border barriers clogged with debris during a rainstorm.

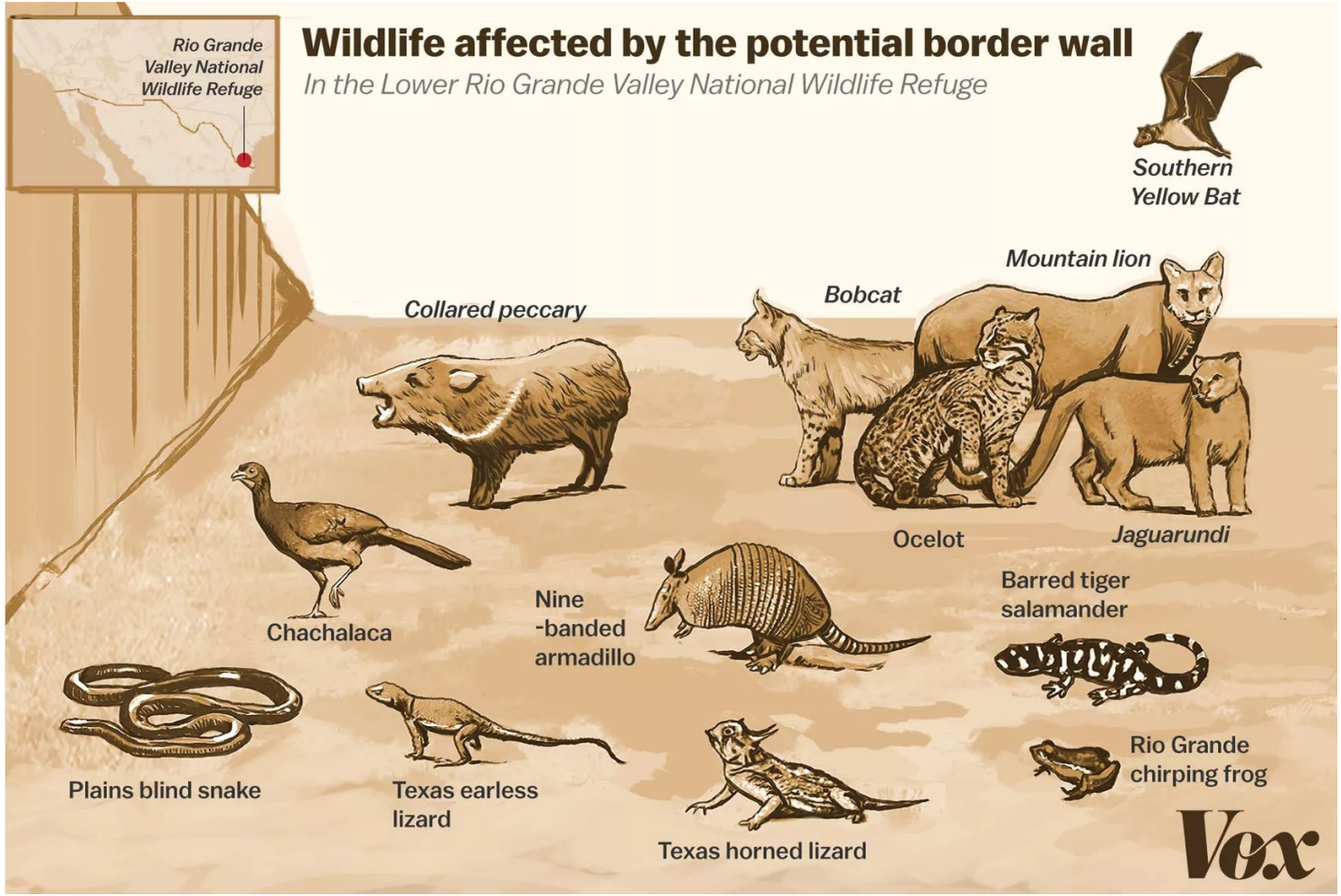


Photo credit: https://www.vox.com/energy-and-environment/2017/4/10/14471304/trump-border-wall-animals

Risk 4: Reduced conservation investment and scientific research

- 18% of the borderlands contain protected lands
- Numerous binational collaborations have targeted specific species
- Example: The *Sonoran pronghorn*

Risk 4: Reduced conservation investment and scientific research (contd)

- US and Mexican scientists have shared stories of being intimidated, harassed, and delayed by border security officers
- Binational meetings and other collaborative activities become inconvenient and constrained by the hours required to pass border security checkpoint

see Peters and Clark 2018

What can we DO?

Call for Action

1. Educate yourself
2. Teach others
3. Sign this petition and share the link to express your concern about the negative impacts of the US-Mexico Border Wall on biodiversity and binational conservation: *defenders-cci.org/sign-on/border-wall*

Learn More:

- http://www.nbcnews.com/id/26396487/ns/us_news-environment/t/border-blunder-security-fence-causes-flooding/
- https://www.vox.com/energy-and-environment/2017/4/10/14471304/trump-border-wall-animals
- https://www.voanews.com/usa/more-border-wall-work-begins-arizona-new-mexico
- https://academic.oup.com/bioscience/article/68/10/740/5057517
- https://earth.stanford.edu/news/how-would-border-wall-affect-wildlife#gs.f855o6
- https://www.nationalgeographic.com/environment/2019/01/how-trump-us-mexico-border-wall-could-impact-environment-wildlife-water