I am compelled to respond to the story in the Rockbridge Bird Club February newsletter about border barriers.

First, some facts about current border barriers. The US-MX border is approximately 1,950 miles long. Border barriers currently exist along approximately one third of the total border, or about 650 miles. Of the 650 miles of existing border barriers, 350 miles is pedestrian fence which is mostly constructed of steel bollards, surplus Department of Defense steel landing mats or wire mesh, and which ranges in height from 10 to 18 feet. The other 300 miles of border barrier is vehicle fencing, which is either post on rail or Normandy style fencing where the horizontal fencing member is approximately 42 inches above the ground. It would be impossible for vehicle barriers to restrict any wildlife movement. Therefore, any potential effects of the border barrier on avian or other wildlife species is limited to the pedestrian fence, or about 18 percent of the border. The pedestrian fence is mostly located in either urban areas (e.g. El Paso/Juarez) or in other developed areas with good access along the border, and therefore it is generally not located in areas of high wildlife concentration.

There has been much speculation that the border barriers are causing impacts on wildlife. In 2016, the US House of Representatives Natural Resources Committee requested the Department of the Interior to submit a list of peer- reviewed publications which characterize the impact of the border barriers on wildlife. In six month's time, the Department of the Interior was unable to identify a single peer-reviewed study of border barrier impacts on wildlife (in fact, 12 of the 15 citations provided by the Department were not even from peer-reviewed publications, but rather editorial opinions containing no data). CBP has funded several studies designed to examine potential impacts of the border barrier on wildlife. A study of bighorn sheep movement in California and a study of stream sedimentation in Arizona did not identify any impacts of border barriers or border patrol operations on wildlife. While there are no avian or butterfly species which could not navigate a pedestrian barrier, it is likely that pedestrian barriers do limit the movement of individual medium to large-sized mammals between US and Mexico in some locations.

While there are no studies which document impacts of US/MX border barriers on wildlife, the benefits of border barriers in terms of protecting US natural and cultural resources from adverse effects arising from illegal cross border violators are well known to the land managers along the southern border. These impacts include: huge amounts of trash and human waste (AZ Department of Environmental Quality estimates that 2,000 tons of trash are left behind by illegal cross border violators annually), direct disturbance of wildlife from illegal traffic, destruction of historic properties (properties on the National Register of Historic Places within Organ Pipe Cactus National Monument have been dismantled and burned), creation unauthorized roads (Cabeza Prieta National Wildlife Refuge reported 7,739 miles of illegal roads were created within the refuge wilderness area), and wildfires resulting from illegal warming fires (see GAO Report 12-73 (2011)).

To address the impacts from cross border violators both the National Park Service and US Fish and Wildlife Service have used their agency funds to erect border barriers on lands they administer. At the time the 35-mile long border barrier was constructed along the entire southern boundary of Organ Pipe Cactus National Monument in 2008 (following the murder of Park Ranger Chris Engle by drug smugglers), it was one of the longest barriers on the southern border. Despite the construction of this barrier, the monument remained unsafe due to the level of illegal cross border traffic. As a result, more than 70% of the monument remained closed to visitors for 11 years. Only after US Customs and Border

Protection constructed surveillance towers within the monument and upgraded the road network within the designated wilderness was the National Park Service able to open the entire monument to visitors in 2014.

In 2008-2009, border barrier was constructed along approximately 50 miles of border within the Rio Grande Valley Sector. A total of 255 acres of existing vegetation was removed to accommodate the new barrier and adjacent road. At the request of the US Fish and Wildlife Service, 352 "cat holes" were constructed in the Rio Grande Valley border barrier, to facilitate movement of ocelot (even though that species had been extirpated from the area for more than 20 years). These wildlife openings may be used by other species, but the US Fish and Wildlife Service has never collected any data on the use of these wildlife openings. More than 300 mature sabal palm trees in the disturbance footprint were successfully relocated. US Customs and Border Protection provided \$3 million to the Department of the Interior to purchase replacement habitat and develop wildlife waters north of the new border barriers.

Additional border barrier construction in Texas is currently the highest priority because this is the location currently experiencing the greatest amount of illegal border traffic. Of course, the illegal cross border traffic is greatest in this area due to the lack of border security, including barriers. Two things I am certain of after working as an environmental specialist for US Customs and Border Protection on border security for the last 10 years. First, wherever border barriers have been deployed they have resulted in a significant reduction in illegal cross border traffic. Second, in any location where there is reasonable vehicular access to the border, border security is effectively impossible without border barriers.

In the future, I recommend that all members be invited to contribute before a policy position is adopted by the Rockbridge Bird Club. This will help ensure that any policies adopted are based on the best available information. Thank you.

Steve Hodapp