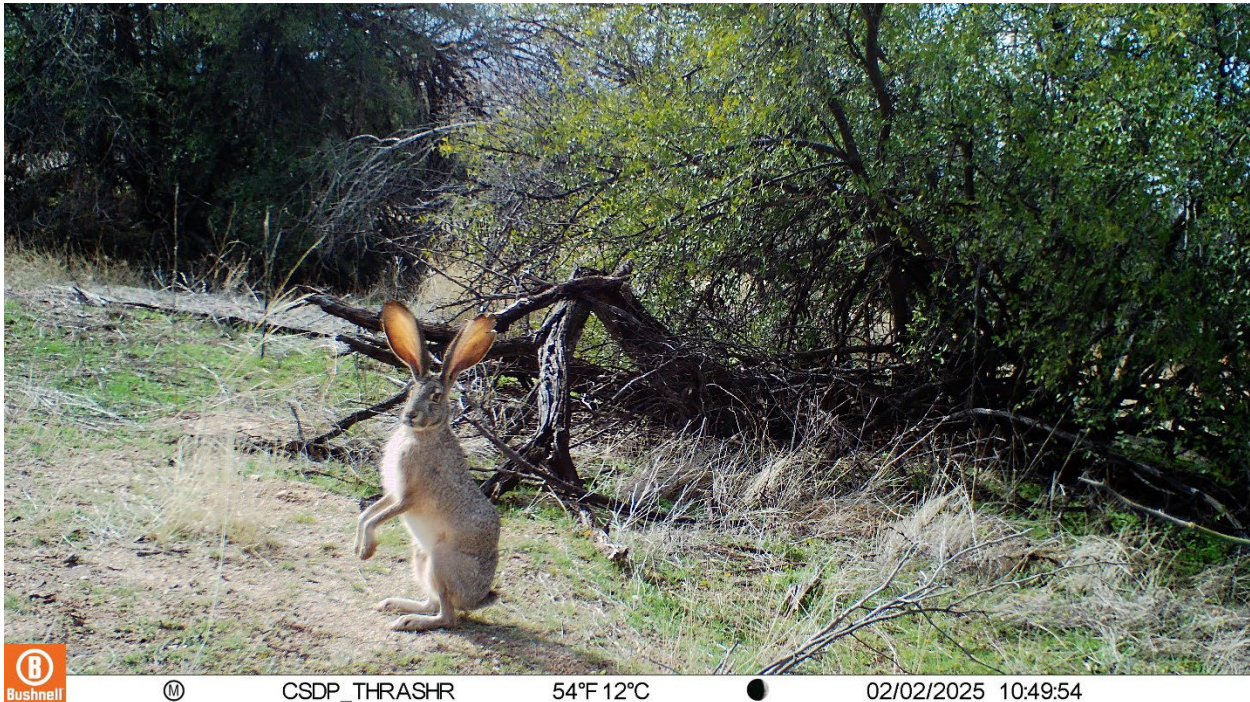


Oro Valley Wildlife Crossings Monitoring Project 2023 Annual Report



Background:

In 2012, CSDP launched a community science wildlife camera monitoring effort in Oro Valley to track species presence, species richness, and wildlife activity patterns east and west of Oracle Road near the (then future) sites of the Oracle Road wildlife bridge and underpass, which were constructed in 2016. This long-term monitoring effort has been in partnership with the Arizona Game and Fish Department, the Rancho Vistoso Homeowner's Association, and Catalina State Park.

Sites are stratified into three categories, 1) West of the crossings (Big Wash, HOA), 2) East of the crossings (Catalina State Park), and 3) grouped near the underpass approach (HOA). This project includes sites within the Big Wash parcels managed by Pima County Floodplain Control after 2021. Monitoring on Arizona States Lands near the wildlife bridge ceased in 2019 after the permanent expiration of our research permits, but Arizona Game and Fish Department continues to monitor the structures themselves.

Results to Date:

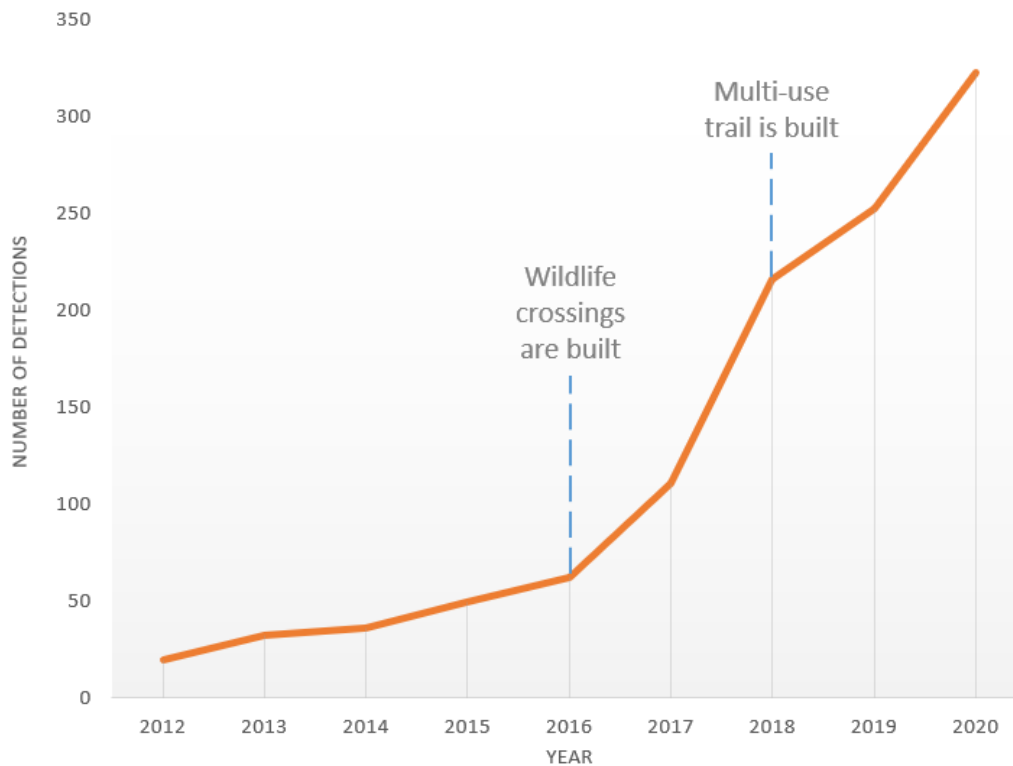
We currently have 24 cameras actively deployed across the entire study area, with 12 east of the highway and 12 west of the highway. Four of these cameras are located in Big Wash on Pima County Floodplain Control property.

In total, the project has documented over 400,000 photos of more than 65 species, including a few notable records of mountain lion, bighorn sheep, badger, and white-nose coati.

In addition, this year we also deployed a video camera on the wildlife bridge and wildlife underpass in partnership with the Arizona Game and Fish Department, with the aim of gathering outreach quality video footage of wildlife using the crossings.

Volunteer Desert Monitors visit and maintain their cameras once per month. We continue to process these images and verify species identifications with the help of our trained Desert Identifier volunteers and our Desert Wildlife Interns. Every image is identified by two separate observers and verified by CSDP staff. Data and photos are stored and organized in Microsoft Access using the Colorado Parks and Wildlife Photo Warehouse Database.

Cumulative Detections of Mule Deer
(*Odocoileus hemionus*) on the DEER camera (2012-2020)

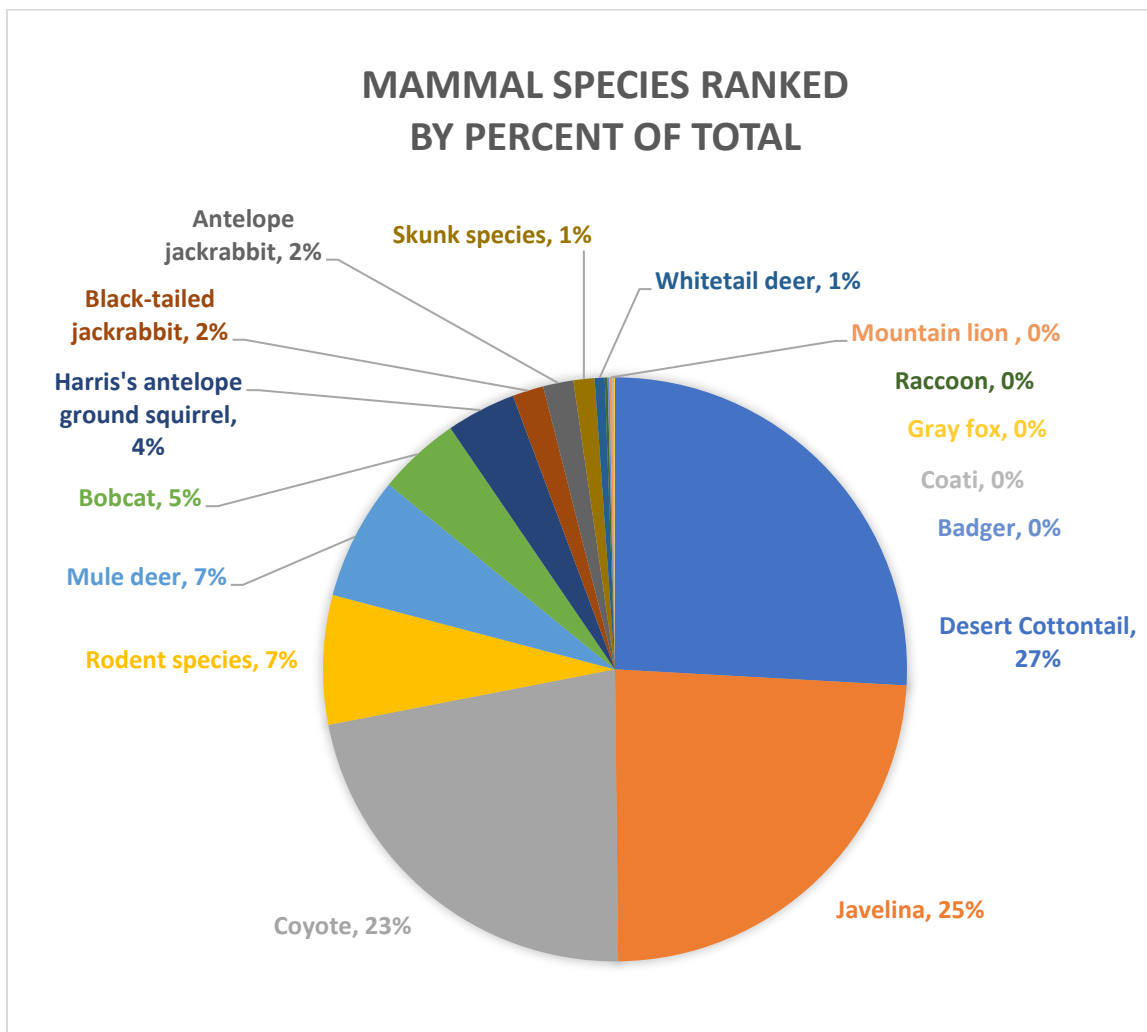


Camera results have shown a marked increase in mule deer activity west of the highway after the construction of the wildlife bridge in 2016. The DEER camera illustrates this well, as one of the

4 cameras in Big Wash just west of the wildlife crossings that has been continuously monitoring since 2012.

Approximately 46% of species detections were of birds, primarily Gambel’s quail, mourning dove, and roadrunner. When independent pictures are calculated at 1-minute intervals of the mammal species detected, desert cottontail, javelina, and coyote continue to dominate the scene. There appears to be a good balance of predator and prey, with an abundance of cottontail rabbits, quail, and woodrats in evidence.

We continue to closely watch for mesocarnivores including gray fox, skunks, raccoons, ringtail, and badger. These species are present but in much smaller numbers than in previous years. Badgers have appeared on cameras we have in agreement with the HOA near the wildlife underpass approach.





On October 18, 2023, we documented an adult male mountain lion on the DEER camera, located in Big Wash, west of the wildlife bridge and underpass. This is the third image of a mountain lion recorded for this project, of what we believe to be two different individuals.

Original photos and video, as well as the data in Excel or Access, are available upon request.

You can view and download photo highlights from these cameras here:

<https://bit.ly/OroValleyProjectPhotos>.

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