

## **Increasing Our Impact Through Community Science**

## Expanded community science study areas support protected open spaces in Pima County

CSDP's community science projects (wildlife camera monitoring and occasional roadkill surveys) help support our policy and advocacy efforts to realize the Sonoran Desert Conservation Plan and to protect desert open space and wildlife movement corridors throughout Pima County. In 2021, with your support, we will have five distinct community science study areas.

#### **Oracle Road Wildlife Crossings**

Our first wildlife cameras have been in place near the Oracle Road wildlife crossings since 2012. Since then, we have gathered over 200,000 photos

of wildlife across 52 sites. We have seen over 62 species, including bighorn sheep, badger, coati, and mountain lion. We currently have 28 active cameras.

In 2021, we will be reducing the number of cameras in this area and settling in for a

more focused monitoring effort as we finish re-vegetation efforts on the crossings and work to resolve a few remaining gaps in the wildlife fencing. We are working in partnership with Arizona Game and Fish who is monitoring the animals using the crossing structures (over 10,000

crossings thus far!), conducting roadkill surveys, and mapping desert tortoise and mule deer movements with GPS trackers.

#### Safe Passages for Wildlife I-10 East

In our project area focused on I-10 near Cienega Creek, staff and volunteers have finished roadkill surveys. We have 34 active cameras tracking the passage rates of animals using culverts under I-10. With over 300,000 images gathered so far (and plenty of blanks to weed out), we are still catching up on photo sorting (thank you Desert Identifiers!), but we have seen mule deer, whitetail deer, black bear, coati, mountain lion,

ringtail, a badger, four different skunk species, and wild turkey, among many others.

We will be extending this monitoring another year under our Arizona Game and Fish Heritage Grant. So far, this data has

helped contribute to Pima County's Cienega Corridor Management Plan. Improved crossings structures and wildlife funnel fencing along this section of I-10 is our ultimate goal.

continued on back cover

Thank you for supporting the protection of open spaces through community science!







The Coalition's mission is to protect the biodiversity of the Sonoran Desert in southern Arizona through science-based advocacy, education, and collaboration.

We are grateful for the opportunity to live and work on traditionally Native lands, including those belonging to the O'odham, Tohono O'odham, and Pascua Yaqui.

#### **Coalition Member Groups**

Arizona Center for Law in the Public Interest Arizona Native Plant Society **Bat Conservation International Cascabel Conservation Association** Center for Biological Diversity Center for Environmental Ethics Defenders of Wildlife **Desert Watch Environmental Law Society** Friends of Cabeza Prieta Friends of Ironwood Forest Friends of Madera Canvon Friends of Saguaro National Park Friends of Tortolita Gates Pass Area Neighborhood Association **Genius Loci Foundation** Native Seeds / SEARCH Protect Land and Neighborhoods Safford Peak Watershed Education Team Save the Scenic Santa Ritas Sierra Club - Grand Canyon Chapter Sierra Club – Rincon Group **Sky Island Alliance** Society for Ecological Restoration Southwestern Biological Institute Tortolita Homeowners Association **Tucson Audubon Society Tucson Herpetological Society Tucson Mountains Association** 

Website: www.sonorandesert.org 738 N. 5th Ave., Suite 205, Tucson AZ 85705

Wildlands Network

Office: **520.388.9925** 

Friends of the Desert is printed on 100% recycled paper.

Design & Layout: Julie St. John

# Carolyn's Corner **Getting Creative**

### New strategies for protecting Sonoran Desert open spaces

Over the years, we have worked hard to ensure that our important desert habitat has been protected and *stays protected*. While smaller patches have been set aside in developments, the bulk of acreage has been acquired and preserved with voter-supported Pima County open space bonds, paid for with property taxes. **With close to \$200 million approved for habitat acquisitions, we worked with scientists to identify those lands that were** *the most important* **<b>for native species.** Large ranches on the outskirts of town that are now publicly owned provide a "growth boundary." More urban lands have been acquired and preserved to provide habitat connectivity, which we know is needed to give wildlife "room to roam." Additionally, lands have been acquired by the County to expand Tucson Mountain and Tortolita Mountain parks.

The funding from the open space bond has all been spent. Yet there is so much more that needs to be protected. The lands identified for protection total another ½ million acres. Our region continues to expand and with that, we need to preserve more habitat before it is all gobbled up by subdivisions and roads. Connectivity is not yet accomplished. Species are not yet safe from extinction. And with climate change here, there is an even greater urgency to act.

The Coalition continues to work toward the goal of preserving Sonoran Desert lands. But we must get creative! Fortunately, Congress has recently fully funded (restored) the federal Land and Water Conservation Fund; private foundation grants are now being made available for land acquisition; and the County is implementing the off-site mitigation option in conservation lands for new developments more and more. With this, a property owner must buy and preserve habitat at

Our region continues to expand. Connectivity is not yet accomplished. Species are not yet safe from extinction. There is an urgency to act.

two to four times the amount they have disturbed. These are all ways to increase protected habitat. We also hope to ask the voters again, in the future, to support public funding for habitat acquisition in Pima County.

Thank you for all your support for these goals. Having supporters that truly understand the need for protected open space is encouraging and inspiring. With your help, we have been able to continue to achieve these successes and work for more!

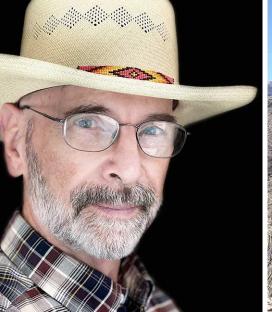
Carolyn amplell

## **Check out our new Strategic Plan!**

Last year we finished our 2020 Strategic Plan and we'd love to share it with you. Head over to bit.ly/35kg0pM and check it out today!

Carolyn Campbell Executive Director
Kathleen Kennedy Associate Director
Jessica Moreno Conservation Science Director
Whelan Program & Operations Manager

The Coalition for Sonoran Desert Protection is an independent, nonprofit, tax-exempt 501(c)(3) organization. Contributions to the Coalition for Sonoran Desert Protection are tax-deductible to the extent permitted by law. Our EIN # is 82-2156664.







## Thank you Volunteers! Coalition volunteers continue to make an impact

While the past year brought many challenges for all of us, we are more grateful than ever for our wonderful Coalition volunteers. 66 volunteers logged over 1,200 volunteer hours in 2020. Volunteers hiked through the desert to check wildlife cameras, adapted to a new virtual system for sorting thousands and thousands of wildlife camera photos, stuffed envelopes with our new virtual mailing parties, and advocated from home for protected open spaces and wildlife habitat. While we are highlighting a few volunteers below, please know **we appreciate each one of you**. Thank you for everything you give to the Sonoran Desert — every hour matters and has a positive impact.

**Virgil Swadley** (left) "Tending to Coalition critter cameras and identifying animals in the photos is my way to help CSDP in their program to protect and enhance our desert wildlife."

Virgil Swadley reached a milestone last August when he marked 20 years as a CSDP supporter. He is also a longtime volunteer, monitoring several cameras as one of our first Desert Monitors in the Tucson Mountains starting in 2017. Last year he also stepped up as a Desert Identifier, and with

Desert Monitor Kieth Kleber has become instrumental in our current expansion of monitoring in the Tucson–Tortolita Mountains Wildlife Linkage.

Andres Martinez (center) "The desert is very much alive."

Andres Martinez became a Desert Monitor last summer and has leapt into pandemic-era field work by recruiting his sister and parents as teammates to help check cameras near the Oracle Road wildlife crossings. From seeing the wildlife photos, he has found that there is a lot more going on in nature than it may appear.

**Peter Vollmer** (right) "I'm just another guy who loves being outside with his friends and family, plain and simple."

Peter Vollmer is an engineering student at the University of Arizona and president of the UA Ramblers Hiking Club. He joined us last year as a Desert Monitor after organizing a Zoom outreach talk by CSDP for the club. Peter now leads friends and Ramblers, a few at a time, out in the field to check wildlife cameras for our I-10 East project, hiking in from Cienega Creek.



# Today is a wonderful day to become a **Desert Champion!**

Are you interested in giving regularly and automatically to support the Sonoran Desert and local wildlife? Our **Desert Champions** set up an automatic, recurring gift through our online giving webpage or through their personal banks (typically monthly or quarterly). Head to **sonorandesert.org/donate-now/become-a-desert-champion** to learn more. We can't wait to have you on board!





Left: A large deer traverses one of the wildlife fencing gaps near the Oracle Road wildlife underpass. *Photo taken by our COYOTE camera, monitored by Pat and Henry Miller.*Above: An artistic rendering of the gate design that will help close remaining wildlife fencing gaps near the Oracle Road wildlife crossings. *Artistic rendering courtesy RTA/Town of Oro Valley.* 

## **Closing the Gap**

### Fencing gaps near the Oracle Road wildlife crossings are coming to a close

Five years ago, when the Oracle Road wildlife bridge and underpass were built, the red ribbon was cut, the first critter crossed, and we celebrated. But the work was not quite over. In addition to wildlife monitoring, Phase II of the project involved final placement of the last sections of wildlife funnel fencing. Wildlife fencing is an essential part of every successful wildlife crossing. It effectively reduces wildlife-vehicle collisions and helps maintain a connected landscape for wildlife populations and gene flow. But a few jurisdictional issues and challenges to fencing placement threatened to hold

Wildlife fencing is an essential part of every successful wildlife crossing.

up the whole project. As a result, project partners made the decision to complete the difficult pieces after the crossing structures were done.

One of these fencing gaps was on either side of the wildlife underpass, at the Rancho Vistoso neighborhood of Vista Mirabella. We placed wildlife

cameras to monitor the fencing gaps and reached out to the residents and the HOA to help solve the problem. The solution, made possible thanks to the leadership of the Town of Oro Valley and the RTA and the wise suggestion of one of the residents, is an elegant one. And it may very well be the first of its kind for wildlife exclusion: wildlife fencing will close the gaps at the north and south ends connected to the sound wall, while specially designed automatic gates will secure the neighborhood entrances.

This is a unique circumstance since these are public streets and the gates, which are designed like a gated community entrance, will open to any approaching vehicle. The gates will remain open during high volume traffic hours and close at night. The Regional Transportation Authority is covering the cost out of what remains from the original crossing construction budget, including re-vegetation and ongoing maintenance, and Oro Valley will maintain the gates into the future.

After four years of outreach and problem solving as a community, we hope construction on this final piece of the puzzle will begin this summer.

## Increasing Our Impact Through Community Science continued from front cover

#### **Tucson Mountains & the Avra Valley Wildlife Corridor**

We have been advocating for protected open spaces in the Avra Valley Wildlife Corridor across I-10 for many years, including the Tortolita Preserve and El Rio Preserve, the expansion of Tortolita Mountain Park, and protected open spaces within private developments. We also want to see wildlife crossings across I-10. Currently, only a single abandoned railroad underpass may provide safe wildlife passage.

Since 2015, we have monitored 23 sites in this area, photographing more than 30 species, including badger, mule deer, gray fox, and javelina. We have 16 active cameras now, but in 2021 we will be expanding this project to 22 camera sites, including in the El Rio Preserve and the Santa Cruz River. For the first time we will be placing cameras in the old railroad underpass and east of I-10 in newly acquired Pima County lands.

#### The Proposed I-11 Route

As part of our work to fight the proposed I-11 freeway west of the Tucson Mountains that would harm Saguaro National Park West and established

wildlife linkages, we placed cameras in this area in 2016 to gather images and help outreach to local residents. This data is also used as part of our Tucson Mountains project. We currently have two active cameras in Avra Valley and we have photographed 14 different species, including bobcat, red-tail hawk, mule deer, coyote, and javelina. In 2021, we plan to shift these cameras to new locations to expand our reach. We are also assisting a new study that is monitoring CAP canal wildlife crossing points and following Arizona Game and Fish's work to track mule deer and bighorn sheep movements in this corridor using GPS collars.

#### **NEW: Sopori Wash near I-19**

Just south of Canoa Ranch in the Tumacacori - Santa Rita Mountains Wildlife Linkage, Sopori Wash is a critical wildlife corridor that roughly follows Arivaca Road. We plan to work with partners and CSDP Member Groups in 2021 to start monitoring new sites here, in relation to the I-11 route co-locating with I-19 and the possibility for wildlife crossing improvements across I-19.