

Desert Fence Busters

Annual Report: Jan-Dec 2025

BACKGROUND

In 1916, a group of Tucson residents created the first organized wildlife conservation group in the area, called the Tucson Game Protective Association. This group was concerned about rapidly declining wildlife populations in the Tucson Mountains and worked to establish wildlife preserves in surrounding areas with regulated hunting and other conservation measures. More than a century later, wildlife populations in the Tucson Mountains have rebounded, but now face a new wave of challenges from continued urban expansion and increasingly arid conditions.



Figure 1. A tuft of fur snagged on a barbed wire fence in the Tucson area.

In 2021, a group of stakeholders working in the Avra Valley (west of Tucson) began to document widespread obsolete fencing crisscrossing the valley. While many animals can cross over, under, or through individual barbed wire fences, sequential fences have a compounded effect and can significantly deter animals from using these areas. The Desert Fence Busters is a volunteer-based organization that works with landowners across jurisdictions to identify unnecessary fencing and remove it to improve wildlife connectivity across the landscape.

PARTNER ORGANIZATIONS

Because wildlife do not recognize land ownership boundaries, effective management of wildlife corridors requires robust partnerships across jurisdictions. The Desert Fence Busters' success has relied on a shared vision and support from numerous partners:

- **NGO:** Coalition for Sonoran Desert Protection, Friends of Ironwood Forest, Arizona Wildlife Federation, Friends of Buenos Aires National Wildlife Refuge, Tucson Bird Alliance, Friends of Saguaro National Park
- **Business:** BKW Farms
- **Municipal Government:** City of Tucson (Tucson Water); Town of Marana
- **County:** Pima County (Conservation Lands & Resources Department; Regional Flood Control District)
- **State:** Arizona Game and Fish Department
- **Federal:** National Park Service, US Bureau of Reclamation, US Fish and Wildlife Service, Bureau of Land Management
- **University:** University of Arizona, Arizona State University

WILDLIFE CONSERVATION PLANNING

The Desert Fence Busters' annual work plan prioritizes areas with high conservation value as identified in regional planning documents focused on the Avra Valley. Removal of obsolete fences in these areas supports the goals identified in established ordinances, planning, and conservation efforts:

- **1929** – Establishment of the Tucson Mountain Park
- **1961** – Establishment of the Tucson Mountain District of Saguaro National Monument
- **1986** – “Shaw Corridor” identified in the Avra Valley in Critical and Sensitive Wildlife Habitats in Eastern Pima County Study for the City of Tucson
- **1988** – Pima County Buffer Overlay Zone
- **1990** – Establishment of the Tucson Mitigation Corridor
- **1996** – Avra Valley Land Use Study
- **1997** – Establishment of the Tohono O’odham Nation’s 450-acre conservation easement along the northern boundary of the Garcia Strip, Schuk Toak District, immediately south of and adjacent to CAVSARP; Cactus Ferruginous Pygmy-owl listed as Endangered under the Endangered Species Act
- **1998** – Sonoran Desert Conservation Plan
- **2000** – Establishment of the Ironwood Forest National Monument; Establishment of CAVSARP Restricted Covenant
- **2001** – Pima County’s Maeveen Marie Behan Conservation Lands System
- **2006** – Establishment of Pima Association of Governments’ Regional Transportation Authority and Wildlife Linkages Working Group
- **2012** – Arizona Game & Fish Department. Pima County Wildlife Connectivity Assessment: Detailed Linkages. Coyote – Ironwood – Tucson Linkage Design. Report to the Regional Transportation Authority of Pima County.
- **2016** – Pima County Multi Species Conservation Plan
- **Proposed** - Establishment of Wildlife Safety Corridor, Tohono O’odham Nation’s Garcia Strip, Schuk Toak District
- **In Progress** – City of Tucson’s Avra Valley Habitat Conservation Plan
- **In Progress** – Pima County Brawley Wash Watershed Plan

Fence Impacts to Wildlife

The Desert Fence Busters recognizes the need for the judicious use of fencing to establish property boundaries and manage livestock; however, extensive obsolete and poorly maintained fencing is found throughout many of Pima County's most critical wildlife corridors.



Figure 2. Wildlife entanglements observed by Desert Fence Buster volunteers in 2025: great horned owl (top left), white-tailed deer (top right), and red-tailed hawk (bottom).

The Desert Fence Busters continue to refine strategies for prioritizing fence removals with a focus on:

- **Linkages/Corridors.** Prioritize work within the Coyote-Ironwood-Tucson Linkage, with secondary focus on the Tucson-Tortolita-Catalina linkages and Rincon-Santa Rita-Whetstone linkages.
- **Bottlenecks/Chokepoints.** Prioritize work that supports use of existing Central Arizona Project siphons, overchutes, and bridges, along with existing road culverts.
- **Fence Type.** Prioritize fence removals in this order:
 - Removal of double fences (leaving a single fence in place)
 - Full removal of obsolete fences
 - Conversion of fences to wildlife friendly standards
- **Obstructions.** Prioritize work that reduces impacts from roads and obsolete irrigation ditches.

2025 ACCOMPLISHMENTS

In 2025, the Desert Fence Busters was recognized by the Arizona Game and Fish Commission as the Conservation Organization of the Year, celebrating the group's collaborative partnerships and dedicated volunteers who have meaningfully improved wildlife welfare over the past four years.

Fence Removals

The group completed work events on City of Tucson, Pima County, and National Park Service lands. Additionally, the group worked with its first private landowner, the historic Santa Margarita Ranch in southern Pima County, to remove fencing within the Altar Valley wildlife corridor.

Table 1. Summary of Desert Fence Busters' Accomplishments (2021-2025).

	2021	2022	2023	2024	2025 ¹	TOTAL
Events	1	6	12	11	8	38
Jurisdictions	2	3	2	4	4	5 ²
Volunteer Workdays	71	246	176	339	364	1,196
Volunteer Hours	445	1,987	1,582	1,886	2,002	7,902
Miles of Fence Removed	3.4	21.6	11.5	28.8	29.5	94.8
Weight of Fence Removed	4,180	18,180	18,940	29,170	28,182	98,652
Scrap Value of Fence Removed³	\$251	\$1,460	\$1,339	\$1,530	\$1,549	\$6,129
Interior Acres Opened	635	2,268	2,836	7,064	3,075	15,878
Open Pipes Capped			34	362	246	642
Value of Volunteer Hours⁴	\$15,482	\$69,128	\$55,038	\$65,614	\$69,650	\$274,911

Open Pipe Capping

With facilitation from the Tucson Bird Alliance, a total of 246 pipes of various diameters were capped in collaboration with Desert Fence Busters events in 2025. As a conservative estimate, this prevents the death and suffering of more than 5,000+ animals that could have fallen in and become entrapped.



Figure 3. Wildlife trapped inside an open pipe found during a Desert Fence Busters event.

¹ In 2025, fewer large events but more volunteer hours were logged than previous years due to a focus on smaller cleanup crews revisiting properties to remove remaining fence materials taken down during previous large events.

² Across all years, fence removal events have been held at: City of Tucson, Town of Marana, Pima County, National Park Service, and private lands.

³ All wire and t-posts removed by the Desert Fence Busters are recycled.

⁴ National estimated value of a volunteer hour: \$34.79 (US Bureau of Labor Statistics 2024 estimate).

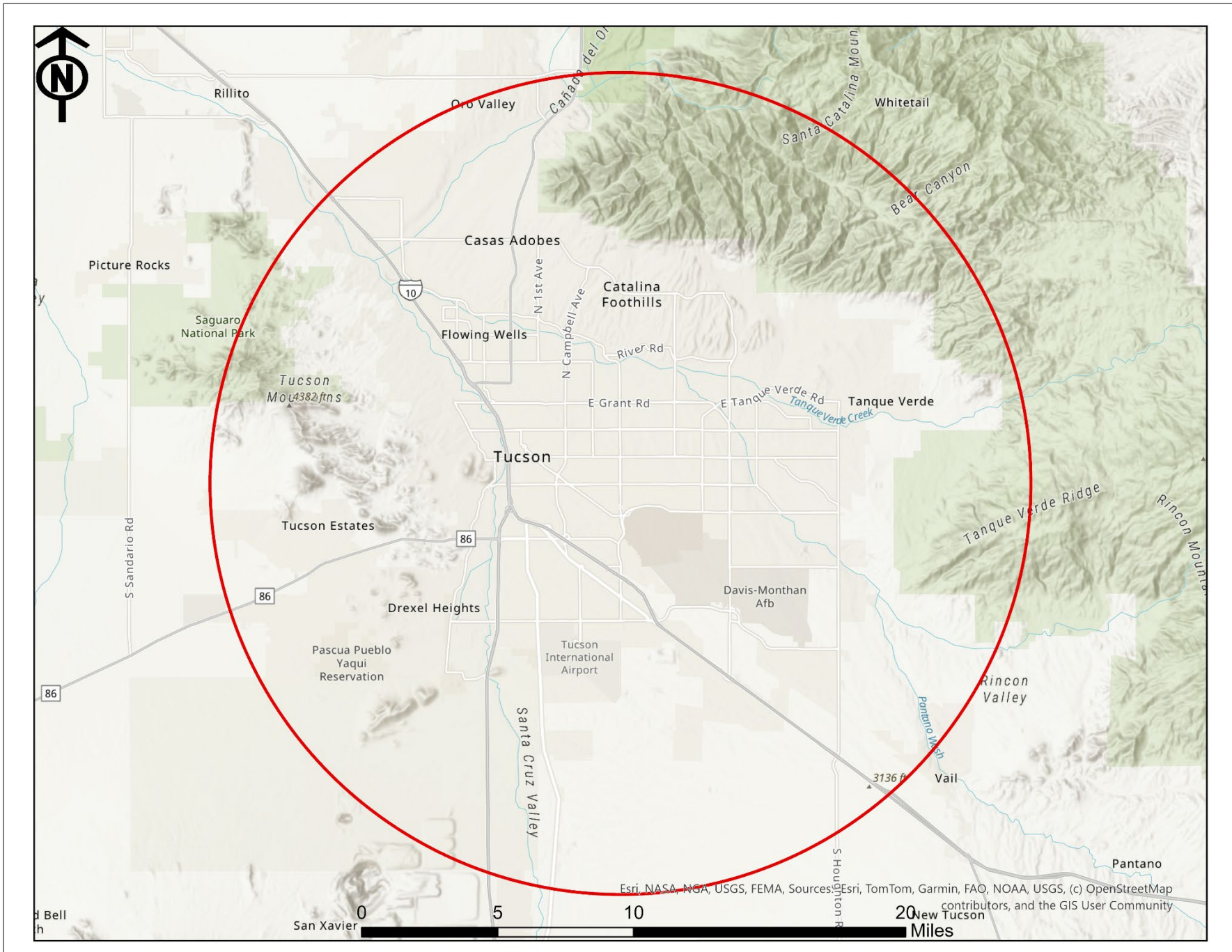


Figure 4. Since 2021, the Desert Fence Busters has removed 95 miles of obsolete barbed wire fencing. Placed end to end, this length would encircle the City of Tucson.

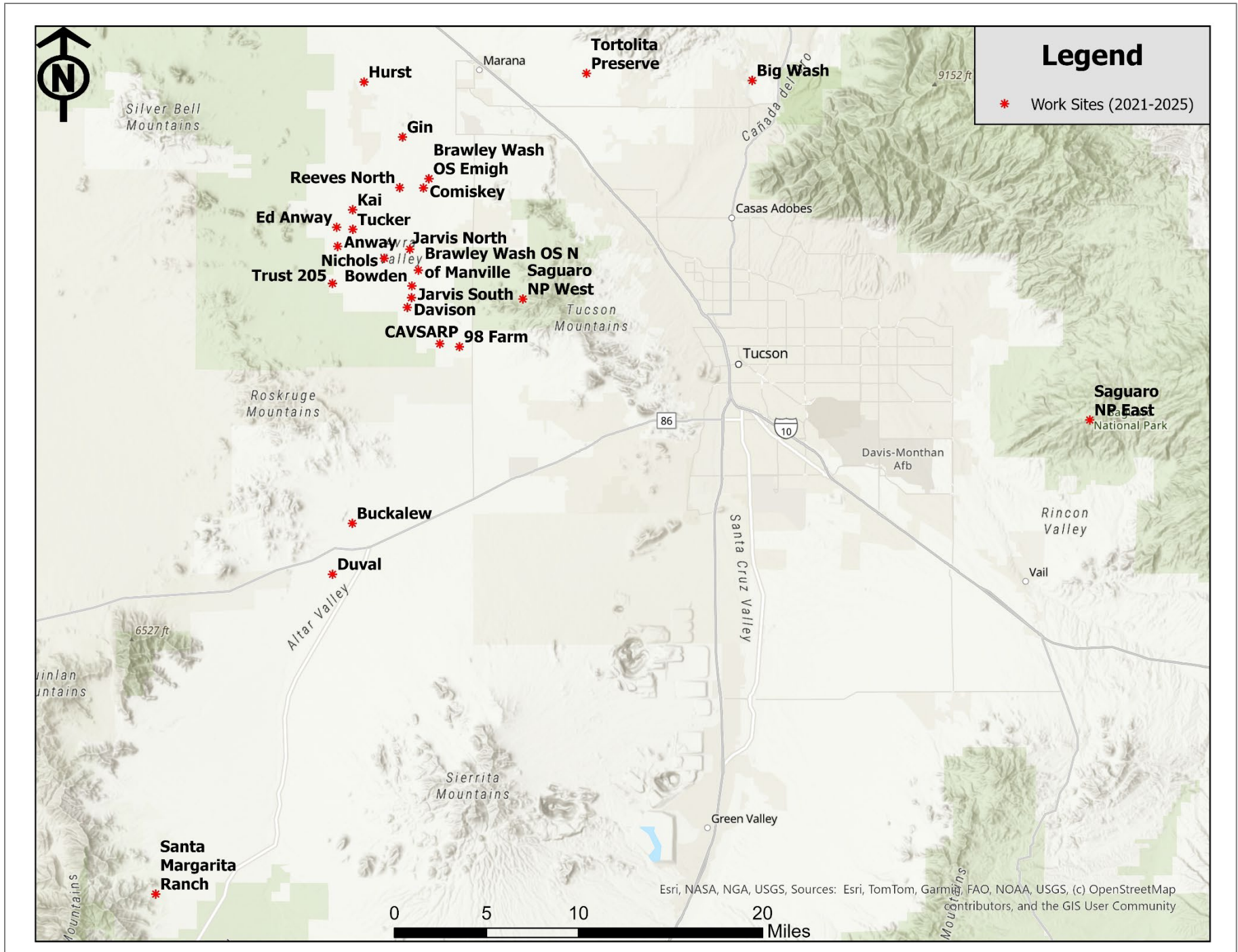


Figure 5. All Desert Fence Busters Work Sites (2021-2025).

Fence Removal Photos (2025)



Figure 6. Desert Fence Busters Event (2025). Photos: Kathleen Dreier.



Figure 7. Desert Fence Busters fence removal work (2025).

Open Pipe Capping (2025)

Open-top vertical pipes pose a grave threat to small wildlife. Birds, lizards, rodents and other critters explore such pipes for places to nest, roost or forage. Once inside, they become trapped, facing a slow and tragic end. Open pipes are most commonly found anchoring fences, making the collaboration between the Desert Fence Busters and Tucson Bird Alliance's Project Death Pipes a logical fit. Tucson Bird Alliance and a group of volunteers work alongside Desert Fence Busters during organized workdays. As fences come down or get replaced by wildlife-friendly ones, TBA permanently closes off anchoring pipes using cement or aluminum caps. Tucson Bird Alliance uses a durable and affordable method to permanently cap open pipes by creating a tight cardboard plug then topping it with cement. Once hardened, cement stays on top of the pipe for years to come ensuring no other wildlife can get trapped.



Figure 8. Volunteers capping open top "death" pipes in 2025.⁵

⁵ This work is made possible by the Arizona Sportsmen for Wildlife Conservation License Plate Grant and private donations. More information about Project Death Pipes: <https://tucsonbirds.org/deathpipes>

Saguaro National Park Wilderness Fence Removal

In spring 2025, a group of volunteers hiked seven miles to Juniper Basin Campground for the second consecutive year to remove obsolete grazing fences. Although cattle were removed from the park in 1976, the grazing fences have persisted on the landscape for nearly 50 years. This hardy group of volunteers have removed a total of 1.5 miles of obsolete fencing from these areas of rugged terrain and thick vegetation. Future events are planned in these areas.



Figure 9. Saguaro NP Wilderness Volunteer Fence Removal (2025).

FUTURE PLANS

Given the amount of legacy fencing that still exists on the landscape, the Desert Fence Busters will continue to work on fence removal in the Tucson area into the foreseeable future. The group has mapped more than 50 miles of fence for future removal; however, much more fence remains unidentified on the landscape. Also, as there are hundreds (if not thousands) of fence pipes that are uncapped and remain a threat to birds and other small wildlife, DFB will continue to work with Tucson Bird Alliance on capping projects into the future.

The Desert Fence Busters have been contacted by other organizations in Arizona regarding assistance with fence removal projects in other regions of the state. “Train the trainer” opportunities are being planned for 2026 to share lessons learned and help build capacity of other stakeholder groups to perform this much needed work in other geographic areas.

