

HABITAT CONNECTIONS

Pronghorn-Friendly Fence Modifications in West Texas Grasslands



Pronghorn are adapted to inhabit open spaces such as the grasslands of the northern Chihuahuan Desert. Man-made barriers such as railroads, highways, and fences impede the movement of pronghorn and ultimately restrict distribution and reduce survival. Fences in particular represent a problematic barrier that can be easily modified to allow pronghorn passage. Texas Parks and Wildlife Department (TPWD) and the Borderlands Research Institute (BRI) in Alpine, Texas, work with local landowners to prioritize areas for pronghorn-friendly fence modifications.



Pronghorn Bucks Face a Barrier of Unmodified Fence

KEY ISSUES ADDRESSED

Habitat fragmentation caused by man-made barriers has impacted distribution and survival of pronghorn within their native range in west Texas, contributing to population declines over the last several decades. Restrictive fences make pronghorn more susceptible to drought, predation, and disease. In order to persist in the area, pronghorn must be able to move across the landscape in search of better range conditions. As an endemic and charismatic big-game species in the region, efforts have been made to reduce fragmentation and facilitate movement of pronghorn, making needed resources more accessible.

PROJECT GOALS

- Decrease habitat fragmentation through targeted fence modifications
- Increase distribution and survival of a native wildlife species
- Reverse population declines of pronghorn within the Trans-Pecos region of far-west Texas

MONITORING SUCCESS

Recently translocated pronghorn are outfitted with GPS collars to help researchers evaluate the efficacy of strategic fence modifications on pronghorn movement and habitat connectivity.



Volunteers and Biologists Modifying Fences

LESSONS LEARNED

Many local residents have been concerned by the decline of this iconic species. Outreach efforts were effective in engaging regional landowners and showing them how they can directly help improve pronghorn habitat through fence modifications. Showing landowners mapped results from GPS movement studies has helped illustrate how much of an impediment fencing can be and has inspired action.

This program has led to improved range access for pronghorn. More than 310,400 acres of grassland habitat have been connected via fence modification.

Regional pronghorn translocation efforts have benefited from fence modification programs. Recently translocated pronghorn are moving greater distances across the restored landscape than those from previous translocations into the region. Additionally, greater habitat connectivity has contributed to higher survival and fawn production rates of translocated pronghorn.

NEXT STEPS

- Continue outreach and fence-modification efforts throughout west Texas grasslands
- Continue to communicate with landowners about cost-sharing incentive programs through the NRCS and other partners such as National Fish and Wildlife Foundation (NFWF) for fence modification and replacement on private lands

PROJECT HIGHLIGHTS

Learning from Research: Recent studies on translocated pronghorn with GPS collars have shown the extent of fencing impacts on pronghorn, determined that many fences are absolute barriers, and helped pinpoint problem areas.

Outreach: Using local media outlets, social media, brochures, presentations, and direct meetings with landowners to communicate the problems associated with fencing, and how these problems tie into the behavior and needs of this charismatic species, has given residents information to apply effective management strategies and has increased understanding of ecosystem function.

Landowner Involvement: Landowners and state agencies are working together to implement work on private lands. Fostering strong relationships through personal communication and outreach is essential in Texas, where roughly 95% of land is privately owned.

On-the-Ground-Actions: Project partners have put in over 1,700 fence modifications to existing restrictive fence. The work is done free of charge to the participating landowners. The Natural Resource Conservation Service (NRCS) also provides financial assistance through their pronghorn priority areas of the Environmental Quality Incentives Program (EQIP) to help replace restrictive fencing.

Collaborators and Funding Partners

- See online for full list of collaborators and funding partners

Case study support provided by the US Fish and Wildlife Service, US Bureau of Reclamation, US Forest Service, and Cross Watershed Network. Updated July 2018. Photos courtesy of Texas Parks and Wildlife Department and The Borderlands Research Institute

PROJECT RESOURCES

For more information on this project, contact Shawn Gray: shawn.gray@tpwd.texas.gov

For additional project resources and case studies, visit the Collaborative Conservation and Adaptation Strategy Toolbox: WWW.DESERTLCC.ORG/RESOURCE/CCAST



Pronghorn Pass under Modified Fence