



A Landowner's Guide to Pronghorn-friendly Fences



Ensuring Texas' pronghorn populations can move in search of food and water, and evade predators

The importance of pronghorn-friendly fencing

Pronghorn inhabit the grasslands of Texas. Prior to settlement, they occupied wide open landscapes without man-made barriers. This enabled them to move across large expanses in search of food and water as well as escape from predators. The ability to move to areas with better range conditions (e.g., moving to an area that has recently received precipitation) is critical for pronghorn. Fences can be barriers to these movements. Ultimately, this can affect the distribution and survival of pronghorn, especially during drought.

Pronghorn have learned to traverse fences by crawling underneath them, but if the fence is net-wire or if the bottom wire is too low, movements are impeded (Figure 1). A few pronghorn learn to jump fences; however, the vast majority are reluctant. In fact, many pronghorn attempt to cross restrictive barbed-wire fences (bottom strand too low) between strands with little success (Figures 2-3).

Fence corners have proven to be focal areas for pronghorn movements (Figure 4). Pronghorn trying to traverse a fence or escape predators often follow fences into corners. In fact, it is common for coyotes to use fence corners to aid in capturing pronghorn. Therefore, it is imperative that all fence corners be modified to allow for pronghorn movements (Figure 5).

Tumbleweeds can also be a major barrier when the plants get blown into and hang up along fences (Figure 6). Having an appropriate pronghorn-friendly fence will help minimize fence blockage by tumbleweeds. In some cases, this can happen regardless of fence type. In areas where tumbleweeds are a problem, unnecessary fences should be removed to eliminate this from occurring and stretches of modified fence (openings) should be kept clear of tumbleweeds.

Right-of-way fences along highways can be impenetrable barriers to pronghorn. However, if one makes it through a right-of-way fence, it may get trapped between the fences of the right-of-way. This increases the chance of pronghorn being hit by a vehicle. Cooperation between landowners in providing fence modifications along highways is an important element in facilitating safe pronghorn movements across highways.



Figure 1. A net-wire fence severely impacts pronghorn movement.



Figure 2. A translocated pronghorn unsuccessfully passed through a restrictive 5-strand barbed-wire fence.



Figure 3. A pronghorn buck attempted to pass through a restrictive 5-strand barbed-wire fence.

What to consider when fences are necessary

Ideally, open habitat with no fences is best for pronghorn, but where fences are necessary here are a few things to consider:

- **Purpose of fence**
- **Location of fence**
- **Daily and seasonal movements of pronghorn**
- **Presence of food, water, and cover**

A 3- to 5-strand fence with the bottom strand being smooth and properly set above the ground can effectively accommodate pronghorn passing underneath. The bottom wire should be at least 18 inches above the ground (Figure 4, 7).

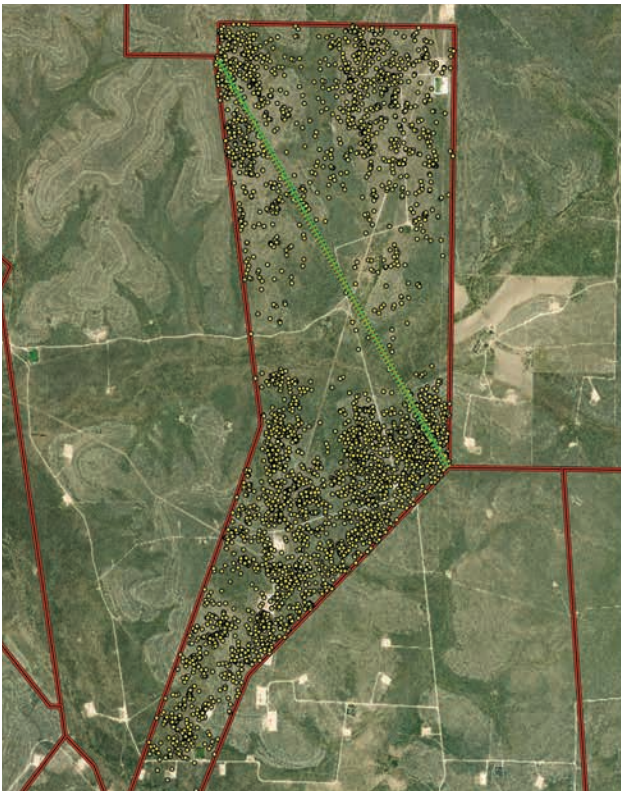


Figure 4. 2-hour GPS locations (yellow dots) from a radio-collared pronghorn illustrate the negative impact restrictive fences (red lines) have on pronghorn movements. Note the green line, which denotes a pronghorn-friendly fence. The radio-collared pronghorn was able to move freely across the pronghorn-friendly fence. Also, note GPS locations clustered in fence corners.



Figure 5. A translocated pronghorn uses a fence modification near a fence corner.



Figure 6. Fence obstructed by tumbleweeds—this can be a complete barrier to pronghorn.





Figure 7. A newly constructed pronghorn-friendly fence is built with three strands of barbed wire and a smooth-wire bottom strand set at about 20 inches above the ground.



Figures 8 and 9. Translocated pronghorn safely pass under modified 5-strand barbed-wire fence.

Figure 10. A 4-strand barbed-wire fence is modified by raising the bottom strand from 12 inches above the ground to more than 18 inches.



Figure 11. TPWD staff modify a net-wire fence by folding up the bottom to provide at least 18 inches of clearance. Wire is used to tie the bottom half of the fence to fence posts and stays. Tumble weeds are also cleared from the opening.

Remedies for existing fences

- 1** Raise bottom wire or net-wire a minimum of 18 inches above the ground for at least 20 yards every half mile of fence (Figure 10)
- 2** Replace bottom strand of restrictive barbed-wire fence with smooth wire and set at least 18 inches above the ground wherever possible
- 3** Modifications should also be placed near fence corners and in natural travel corridors
- 4** Remove old fences that are no longer necessary (removal of posts and stays is essential; if not removed pronghorn will think the fence still exists)

These recommendations are based upon field experience and research, and have proven to successfully facilitate pronghorn passage through fences without increasing the incidence of calves crawling underneath. The negative impacts restrictive fences have on pronghorn movements and survival cannot be overstated. When building a new fence in pronghorn range, be mindful of their requirements and their need to travel across vast expanses of landscape in search of resources and to escape predators. Please contact the Texas Parks and Wildlife Department for technical assistance regarding pronghorn-friendly fencing.

