

Built for Speed

Pronghorn Migration



Pronghorn are often called speed goats. ©Kenton Rowe

No creature may be happier to see Montana's spring thaw than pronghorn. This winter's record-smashing snowfalls along the north and central parts of the state took a toll on these graceful mammals. Unable to paw through the deep snow to reach grass, herds moved onto the open pathways created by rail tracks and roads, resulting in hundreds of deaths. But, pronghorn are nothing if not survivors.

Pronghorn have roamed the continent for millennia. They were contemporaries of the long-extinct Woolly Mammoth and Saber-toothed cat. Scientists theorize there was one major trait that allowed them to win the evolutionary race: Speed. Their ability to run up to 60 miles an hour makes pronghorn second only to cheetahs as the planet's fastest land animals. It also earned them monikers such as "speed goat" and "sagebrush rocket." Although commonly referred to as "antelope" that is a bit of a misnomer.

"Taxonomically, the pronghorn is the only animal left in its family," says Andrew Jakes, wildlife researcher and Ph.D. candidate at the University of Calgary. "They are not related to deer, elk, or moose," says Jakes. "Today, the pronghorn's closest relative genetically is the giraffe."

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Replacing woven wire fence with a more wildlife friendly type.
©Shawn Cleveland



Woven wire fences topped with barbed wire are difficult or impossible for many animals to jump. ©Shawn Cleveland

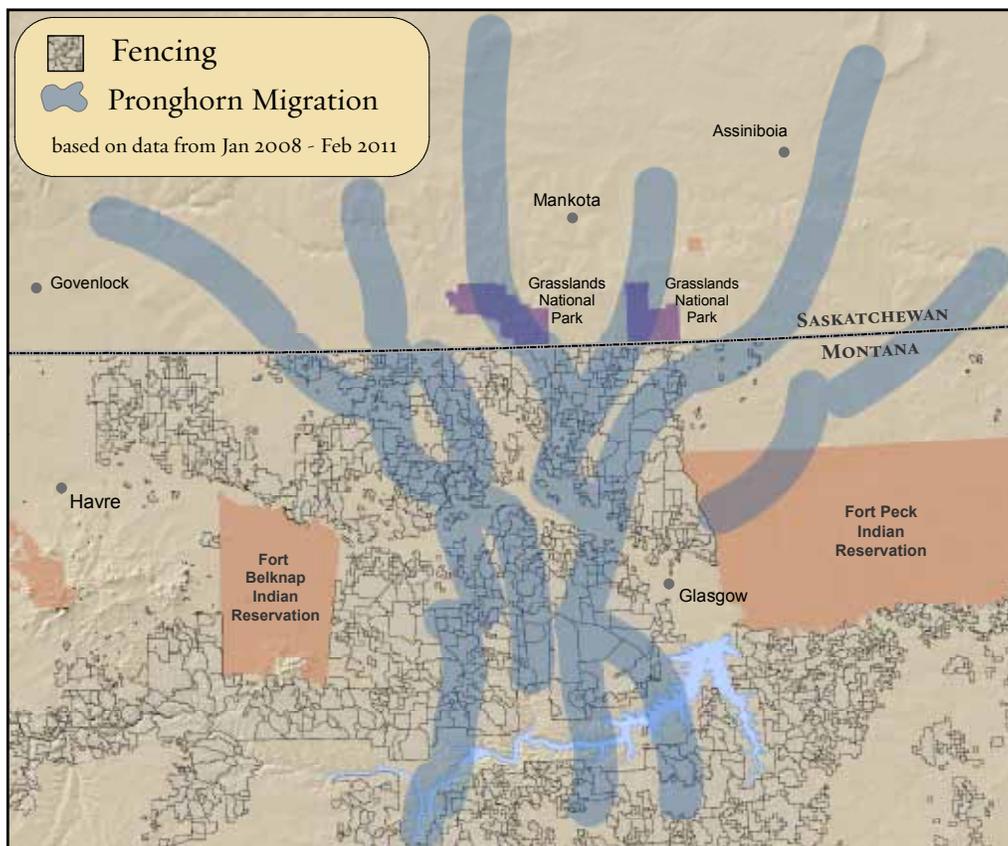
In addition to being fast, pronghorns' ability to travel long distances also serves them well. As seasons change, herds migrate hundreds of miles to escape deep snow cover that makes grazing impossible. Recently, Jakes and his colleagues discovered that the longest pronghorn migration in North America – 300-400 miles – is through northeast Montana and southern Saskatchewan. While long free from former predators, the last hundred years have created a new menace. Human development of the prairie has

brought with it roads, irrigation canals, and hundreds of thousands of miles of fences, which are serious obstacles that pronghorn won't jump over the way deer and elk will.

"People always want to know why they don't just jump," Jakes says. "They can jump, but it's a learned trait. For eons, they just never had to adapt to jumping anything taller than sagebrush. They never lived in any other kind of terrain."

So in winter, when harsh weather and food shortages require pronghorn to keep moving, barriers such as ditches and fences can be a literal dead end.

Fortunately for pronghorn, small changes can make a big difference. Switching out or modifying fences so that pronghorn can crawl under, rather than jump over, makes a huge difference (see related story); so can leaving certain gates open during times of migration. Pronghorn naturally follow particular migration corridors and learn where there are breaks in barriers such as fences. It's knowledge they pass on to their young. Not every fence has to be modified either (which would be nearly impossible in a place like eastern Montana where cows outnumber people). Jakes' field research has identified important migration routes on the [Northern Prairies](#).



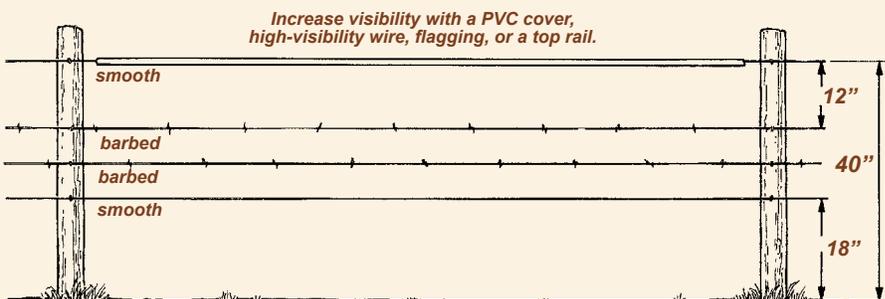
This map shows only fences that have been mapped by the U.S. Bureau of Land Management. A similar web of fences can be expected across much of the rest of this region. The pronghorn migration path is based on data recovered from animals equipped with GPS collars. Created by Amy Pearson.



Wildlife Friendly Fences

We often talk about the problems that fences can cause for wildlife. Animals can be entangled in fences that are too high for them to jump, have wires too closely spaced or are too low to crawl under. And it's not just pronghorn that need bottom clearance—young animals also need to go under rather than over fences.

Here is a short primer on common fencing and how it can be made more wildlife-friendly!



Conservancy staff is now using that information to identify where modifying fences will be most effective for the pronghorn and most acceptable to the landowners. Fortunately, many of those modifications can be made on land owned by members of the Conservancy's [Matador grassbank](#).

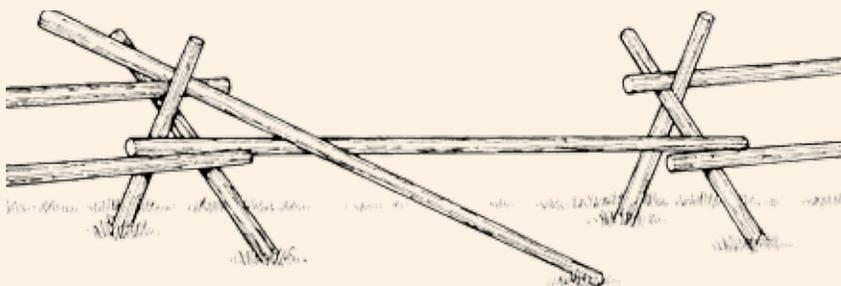
Staff has already started modifying fences at our [Matador Ranch](#), taking down miles of woven wire fencing and replacing it with wildlife-friendly fencing. This summer, strategically placed modifications will be made on other ranches. Remote cameras will be placed at modification points to record how animals are using them. With good science, a little luck, and a lot less fence wire, the Conservancy hopes to make the pronghorns' long migration a little easier.

- Alison James, Bebe Crouse



Pronghorns aren't well-adapted to jumping so tend to crawl under fences rather than jumping over them.
©Samantha Howlett

- Wire fences should be no higher than 40" with 12" between the top two wires and 18" clearance between the bottom strand and the ground. Ideally, the bottom wire should be smooth rather than barbed. Modifying some old fences can be as easy as simply removing that bottom strand.
- In places where woven-wire fencing is necessary (such as on sheep ranches), installing a gate that can be opened during migration periods, or a section that can temporarily be laid flat, can let wildlife through during the migration season.
- Fence visibility can be important, especially to birds such as Sage-grouse.



- The problem with buck and rail fences may be less an issue of height than the overall width of the span. Dropping the top rail can often help.

The Montana Department of Fish Wildlife & Parks has an excellent publication on Wildlife-Friendly Fencing. [\(download pdf\)](#) . Contact FWP Field Services at 406-444-3065 or your local FWP field office.

Fence diagrams courtesy of Montana Fish, Wildlife & Parks