Pronghorn Movement and Population Ecology Study | 2019





Forever Running Free

Montana is home to some of the continent's largest pronghorn populations. These iconic symbols of the Great Plains have lived in this part of North America for tens of thousands of years. One of the world's fastest land mammals, second only to the African cheetah, pronghorn can run more than 50 miles an hour. To see a herd racing across a sagebrush prairie is one of the West's great wildlife spectacles.

Unfortunately, numbers of these remarkable speedsters, commonly known as antelope, are declining in some areas of Montana. Throughout the second half of the 20th century, hunters and other conservationists helped wildlife agencies recover populations decimated by unregulated hunting and habitat loss. But over the past decade, pronghorn numbers, range, and densities have diminished in parts of Montana.

What accounts for the decline? No one knows for sure.

While Montana Fish, Wildlife & Parks (FWP) biologists have extensively studied elk and deer populations over the past half-century, they have gathered relatively little information on pronghorn. Now they need to know what's behind population declines and learn more about the animals' seasonal habitat use, critical migration routes, and barriers such as fences that impede pronghorn movement.

Without that basic information, FWP and its conservation partners can't devise effective plans for conserving pronghorn habitat and populations to ensure that these unique denizens of the open plains will forever run free.

THE STUDY

FWP recently began an unprecedented six-year study to gather critical information about pronghorn migrations and life history. In January 2019, 40 female pronghorn in the Madison Valley were captured and collared. In January 2020, an additional 60 female pronghorn in each of seven additional study areas (see map on page 3) across the species' range in Montana will be captured. These animals will be tested for pregnancy and disease and then fitted with GPS collars. Over the next five years, scientists will follow their movements and identify where pronghorn spend each season and the migration routes they follow among these critical habitats. The collars will also help scientists determine why pronghorn die, such as from severe weather, disease, predation, or other reasons.



THE 8 STUDY AREAS

- 1. Upper Big Hole Valley (Beaverhead County)¹
- 2. Madison Valley (Madison County)1
- 3. Upper Yellowstone area (Park County)¹
- 4. South Philips County²
- 5. East Fergus and Petroleum Counties²
- 6. Part of Garfield and Rosebud Counties²
- 7. Alzada area of Carter and Powder River Counties²
- 8. Part of Golden Valley and Musselshel Counties^{2, 3}
- 1 Biologists' main goal in these study areas is to map seasonal ranges and movement corridors that can be used to manage pronghorn populations and plan land use in ways that protect critical habitats and migration routes.
- 2 The main goal here is to map seasonal ranges and movement corridors while collecting additional information on pronghorn death, reproduction, and fawn survival to better understand factors affecting population abundance and trends.
- 3 Another goal in this study area is to refine the ways biologists monitor pronghorn.

THE RESULTS

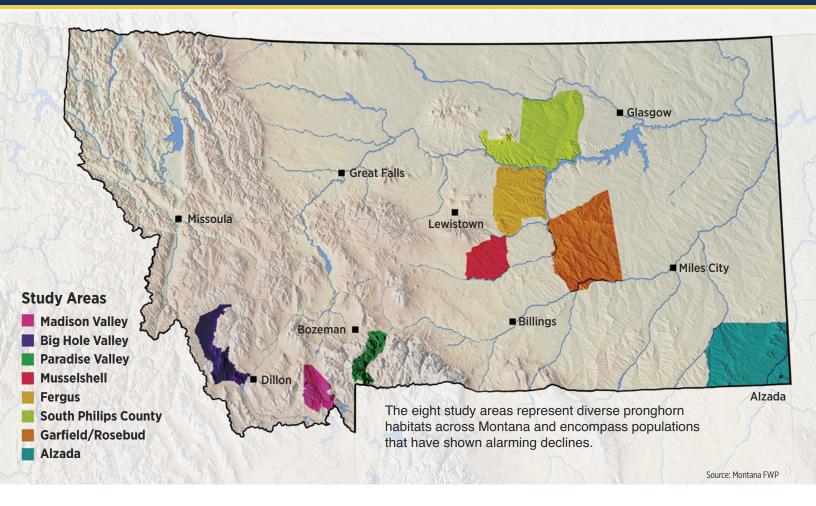
Using the migration and habitat information they gather from the study, biologists will produce maps that FWP and other con-



servation partners will use to conserve and manage movement corridors and other important habitats. This work will ensure that pronghorn can maintain their historic seasonal migrations. And with information on pronghorn mortality and reproduction, FWP will develop management strategies to help struggling pronghorn populations recover.







THE NEED

Montana's estimated 158,000 pronghorn comprise one of the largest populations across the species' continental range, second only to Wyoming's. Montana also has the second highest pronghorn harvest in the United States. In addition to the recreation they provide to hunters and others who enjoy seeing these symbols of the Great Plains, pronghorn may also be an "umbrella" species for sagebrush-grasslands. In other words, by conserving pronghorn using information from this study, Montana private landowners and public land managers could in turn indirectly conserve the many other species living in sagebrush prairies.

The new six-year study also meshes with initiatives across the western United States to identify and protect big game migration corridors and winter ranges. This regionwide effort was given a jump start in 2018 by the United States Department of Interior. The department's Secretarial Order 3362 seeks to fos-



ter collaboration among federal agencies, states, private conservation groups, and landowners to identify, improve, and conserve winter range and migration corridors for mule deer, elk, and pronghorn.

In response to this order, FWP drafted a State Action Plan that identifies four priority conservation areas in Montana as part of the department's new big game migration research initiative. The new pronghorn study is a critical part of this monumental science initiative. The study is a collaborative effort by the Bureau of Land Management, University of Montana, National Wildlife Federation, FWP,

and many local conservation organizations and private landowners. Once completed, this study and others will help FWP, landowners, and other conservation partners understand where they need to help unblock big game movement barriers and improve critical migration routes.





LEARN MORE

For more information about the FWP Pronghorn Movement and Population Ecology study, contact your local FWP wildlife biologist or Kelly Proffitt, the project's lead research biologist, at **kproffitt@mt.gov**.

THE **OUTSIDE** IS IN US ALL.

