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Pronghorn antelope (*Antilocapra
americana*)

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PRONGHORN ANTELOPE

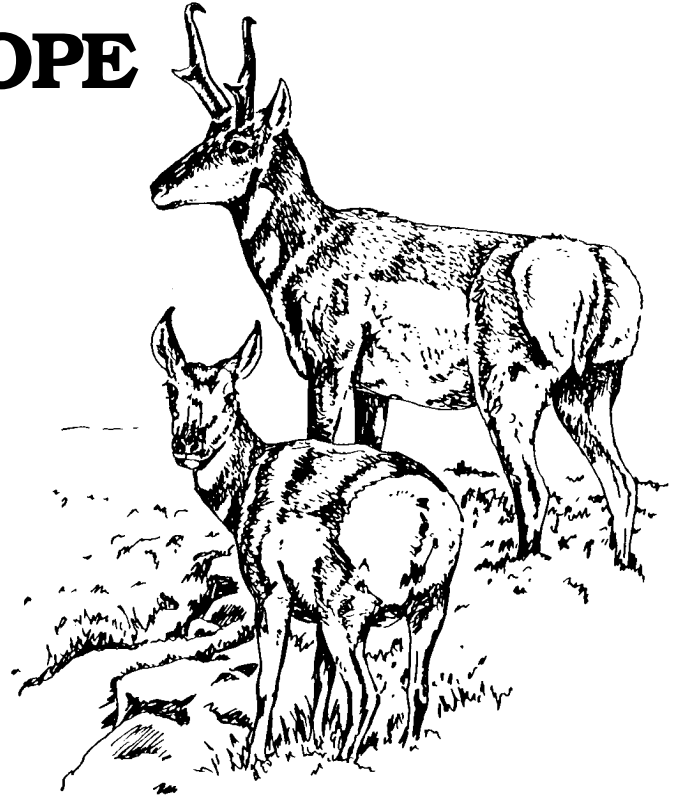


Fig. 1. Pronghorn antelope, *Antilocapra americana*

Damage Prevention and Control Methods

Exclusion

Woven wire and electric fence.

Cultural Methods

Plant tall-growing crops near damaged fields.

Frightening

Gas-operated exploders.

Repellents

None are registered.

Toxicants

None are registered.

Trapping

Corral trap.

Shooting

Encourage legal hunting.

Identification

The pronghorn (*Antilocapra americana*) is not a true antelope but in a family by itself (Antilocapridae). It is native only to North America.

The pronghorn is the only North American big game animal that has branched horns, from which its name derives. Pronghorns have true horns — derived from hair — not antlers. The horns have an outer sheath of fused, modified hair that covers a permanent, bony core. Pronghorns shed the hollow outer sheath each year in October or November and grow a new set by July. Both bucks and does have



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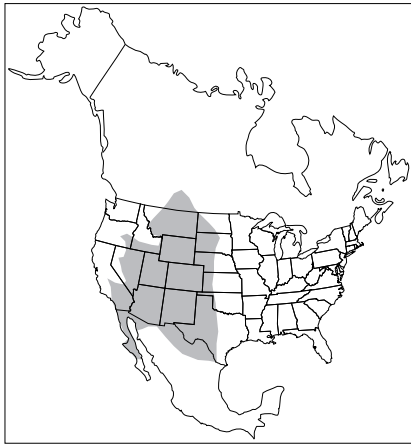


Fig. 2. Range of the pronghorn in North America.

horns, but doe horns are shorter and more slender. Adult pronghorns stand 3 feet (90 cm) high at the shoulders. Bucks weigh about 110 pounds (50 kg); does weigh about 80 pounds (36 kg). Pronghorns have a bright reddish-tan coat marked with white and black. The buck has a conspicuous black neck patch below the ears, which is lacking on the doe. At a distance, their markings break up the outline of their body, making them difficult to see. Their white rump patch is enlarged and conspicuous when they are alarmed. The flash of white serves as a warning signal to other pronghorns and is visible at long distances.

Range

Pronghorns currently have a scattered but widespread distribution throughout western North America (Fig. 2).

In the early 1800s, when the Lewis and Clark expedition recorded the presence of large herds of pronghorn, the total population across North America was estimated at 35 million. In less than 100 years, however, intensive market hunting brought pronghorn numbers to a low of approximately 13,000. Quick action by conservation-minded leaders saved the pronghorn from possible extinction.

In the late 1800s and early 1900s most Great Plains state legislatures passed laws making it unlawful to kill, ensnare, or trap pronghorns.

Pronghorns were given complete protection for nearly 50 years. In the 1940s

and 1950s, limited hunting seasons were permitted, and pronghorn seasons have been held ever since in most Great Plains states. Populations have shown a notable increase in the last 2 decades.

A game management success story documents an increase from a population low of a few bands of pronghorn in Nebraska during the early 1900s to a current population of about 7,000. Trapping and transplanting programs to reestablish pronghorn populations by the state wildlife agencies and proper management and protection have been major factors in the pronghorn's recovery.

Habitat

Pronghorns thrive in short and mixed grasslands and sagebrush grasslands. They prefer rolling, open, expansive terrain at elevations of 3,000 to 6,000 feet (900 to 1,800 m), with highest population densities in areas receiving an average of 10 to 15 inches (25 to 38 cm) of precipitation annually. Vegetation heights on good pronghorn ranges average 15 inches (38 cm) with a minimum of 50% ground cover of mixed vegetation. Healthy pronghorn populations are seldom found more than 3 to 4 miles (4.8 to 6.4 km) from water.

Pronghorns sometimes migrate between their summer and winter ranges. Since they seldom jump over objects more than 3 feet (90 cm) high, most fences stop them unless they can go under or through them. The con-

struction of many highways with parallel fencing has greatly altered the migratory patterns of pronghorns. Woven wire fences, in particular, are a barrier that impede pronghorn movements to water, wintering grounds, and essential forage. Proper spacing of barbed wire in fences (Fig. 3) is essential to allow adequate pronghorn movement.

Food Habits

Pronghorns eat a variety of plants, mostly forbs and browse. Sagebrush often makes up a large part of their diet. They are dainty feeders, plucking only the tender, green shoots. Pronghorns compete with sheep for forbs, but are often found on summer cattle ranges where cattle eat the grasses, leaving the forbs and browse. Dietary overlap of pronghorns with sheep and cattle was 40% and 15%, respectively, in New Mexico. In the winter, pronghorns often feed in winter wheat and alfalfa fields.

General Biology, Reproduction, and Behavior

Pronghorns depend on their eyesight and speed to escape enemies. Their eyes protrude in such a way that they can see in a side direction. They prefer to live on the open plains where they can see for long distances. Pronghorns are the fastest North American big game animal and can reach speeds of up to 60 miles per hour (96 kph).

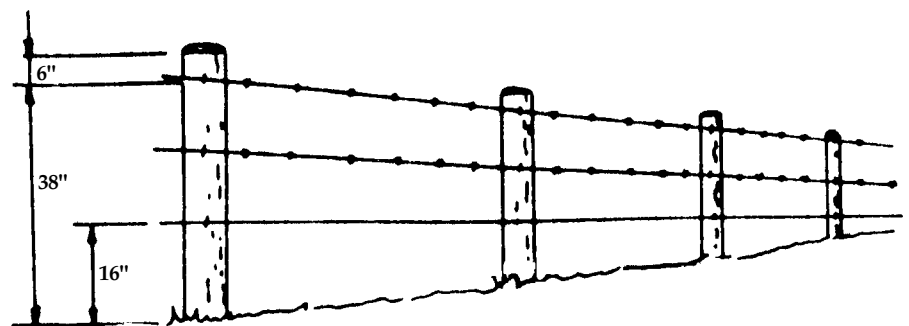


Fig. 3. Specifications for livestock fences constructed on antelope ranges, recommended by the US Bureau of Land Management Regional Fencing Workshop (1974).

Pronghorns are social animals, gathering in relatively large herds. In spring, however, bucks are alone or form small groups. Pronghorns breed during September and October. Bucks are polygamous, collecting harems of 7 to 10 does, which they defend from other bucks. Bucks and does begin breeding at 15 to 16 months of age. Usually 2 kids (young) are born 8 months after mating. The kids are grayish brown at birth and usually weigh 5 to 7 pounds (2.3 to 3.2 kg). Does nurse their kids and keep them hidden until they are strong enough to join the herd, usually at 3 weeks of age. By fall, the kids can take care of themselves and are somewhat difficult to distinguish from adults.

Pronghorns are relatively disease- and parasite-free. Losses occur from predation, primarily coyote, and starvation during severe winters with prolonged deep snow.

Damage

Pronghorns sometimes cause damage to grain fields, alfalfa, and haystacks during the winter. Damage occurs from feeding, bedding, and trampling.

Legal Status

Pronghorns have game-animal status in all of the western states. Permits are required to trap or shoot pronghorns.

Damage Prevention and Control Methods

Exclusion

Woven wire fences of 8-inch (20-cm) mesh, 48 inches (1.2 m) high, near agricultural fields will help to curtail damage. Electric fences with two wires spaced at 8 to 10 inches (20 to 25 cm) and 3 feet (90 cm) above the ground will discourage pronghorns from entering croplands. A single strand of electric wire painted with molasses as an attractant and 30 to 36 inches (76 to 91 cm) above the ground will discourage pronghorn access.

Cultural Methods

Plant tall crops, such as corn, as a barrier between rangelands and small grain fields to help reduce damage. Alfalfa fields adjacent to rangeland are more vulnerable and apt to suffer damage. Pronghorns often move out of pastures that are heavily grazed by cattle to ungrazed areas.

Frightening

Propane or acetylene exploders may provide temporary relief from crop damage. These devices are also used for bird damage control (see **Bird Dispersal Techniques and Supplies and Materials**).

Repellents

None are registered.

Toxicants

None are registered, and poisoning pronghorns also violates state laws that protect them as game animals.

Trapping

In areas where crop depredation and livestock competition are severe, pronghorns can be readily herded with aircraft into corral traps. After capture, they can be translocated into suitable unoccupied habitat. This technique is for use only by federal or state wildlife agencies.

Shooting

Encourage legal hunting near agricultural fields to help curtail crop damage. Shooting permits are available in some states to remove pronghorns that are causing significant damage outside of the regular hunting season.

Economics of Damage and Control

Competition with livestock and occasional damage to agricultural crops should be weighed against the economic value of pronghorns as game animals. Landowners in Texas and

other Great Plains states often charge \$200 or more for trespass fees per hunter. Guided hunts may yield \$600 to \$800 or more per animal taken. In addition, many landowners derive aesthetic pleasure from observing pronghorns. Some states provide economic reimbursement for crop damage. In Wyoming, costs of pronghorn crop damage on private land, including administration (for example, salaries and travel) averaged \$169,453 per year (1987 to 1991). Similar antelope crop damage costs in Colorado for the same period averaged \$5,510 per year.

Acknowledgments

Figure 1 by Charles W. Schwartz, adapted from Yoakum (1978) by Emily Oseas Routman.

Figure 2 from Burt and Grossenheider (1976), adapted by Jill Sack Johnson.

Figure 3 from the US Bureau of Land Management (1974).

For Additional Information

Kitchen, D. W., and B. W. O'Gara. 1982. Pronghorn. Pages 960-971 in J. A. Chapman and G. A. Feldhamer, eds. *Wild mammals of North America: biology, management and economics*. The Johns Hopkins Univ. Press, Baltimore, Maryland.

O'Gara, B. W. 1978. *Antilocapra americana*. Mammal. Sp. 90:1-7.

US Bureau of Land Management. 1974. Proc. Regional Fencing Workshop. Washington, DC. 74 pp.

Yoakum, J. D. 1978. Pronghorn. Pages 102-122 in J. L. Schmidt and D. L. Gilbert, eds. *Big game of North America*. Wildl. Manage. Inst. and Stackpole Books, Harrisburg, Pennsylvania.

Yoakum, J. D., and B. W. O'Gara. 1992. Pronghorn antelope: ecology and management. Wildl. Manage. Inst. (in prep).

Yoakum, J. D., and D. E. Spalinger. 1979. American pronghorn antelope - articles published in the *Journal of Wildlife Management* 1937-1977. The Wildl. Soc., Washington, DC. 244 pp.

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