



# Pronghorn Antelope

## The Antelope That's Not Really an Antelope...

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Male pronghorns in typical southwest desert habitat.

**P**ronghorns have accrued a variety of different names over the years, including prong buck, cabri (Native American), speed goat or simply antelope. Although it is commonly claimed that pronghorns are the only North American species of antelope, the name antelope is somewhat of a misnomer. Pronghorns are, in fact, not true antelope; but, then again, they're not deer either. But if they're different from antelope, why do we call them antelope? Well, pronghorn are often mistakenly designated as antelope, because they resemble the true antelope

of the Old World. In other words, they resemble the antelope species of Africa, and they tend to occupy similar ecological niches. In fact, the closest living relatives of pronghorns are giraffes. Key attributes in the biology and the behavior of the pronghorn make this species unique, not just to the plains of North America, but also in the context of diversity of all free roaming ungulates worldwide.

One of the fundamental defining attributes of pronghorn is its horns. Pronghorns share characteristics of horn development with both true antelope and deer. The horns of a

pronghorn are similar to those of a true antelope. Each horn has a core of bone that is covered by a keratinous sheath. Despite the structural similarity in the horns of a pronghorn and true antelope, the annual cycle of horn production in pronghorns is analogous to deer. Each year, pronghorns will shed and regrow the keratinous shed of the horn. This cycle is likely to be an evolutionary adaptation to the temperate climates of North America. Like deer, that shed their antlers each year, pronghorns likely shed the horn sheath each winter in an effort to conserve energy by re-



ducing the weight of the head. But, unlike deer and similar to antelope, the central bone core of the horn is retained throughout the year. Conversely, pronghorn horns are branched, resembling simple deer antlers, whereas horns of true antelope are always unbranched. Both male and female pronghorns can carry horns, although they are typically larger and more developed in the males.

Similar to many species of antelope and deer, pronghorns are ruminants, which means they chew their own partially digested food. By doing this, they are able to break apart food particles into smaller and smaller pieces thereby maximizing the nutrition gained from the vegetation on which they feed. Pronghorns will commonly feed on forbs, shrubs, grasses and even cacti. Pronghorns eat a wide variety of plant foods, including species that are toxic and unpalatable to other animals. The kidneys in pronghorns are quite large compared to deer and antelope, and this adaptation is likely to help remove toxins in many plant species that are poisonous to livestock and other ruminants. The enlarged kidneys may also play a role in reducing the need for water in pronghorns. Since they extract most of their water from the vegetation on which they feed, pronghorns are less dependent on water compared to white-tailed deer and mule deer. An anatomical difference in digestion between pronghorns and deer is the presence of a gallbladder. While pronghorns and antelope have a gallbladder, deer do not.

Apart from the digestive adaptations, pronghorns are built for speed. Pronghorns can run exceptionally fast, and they are built for maximal predator evasion through run-



Mixed herd foraging on grassy plains.

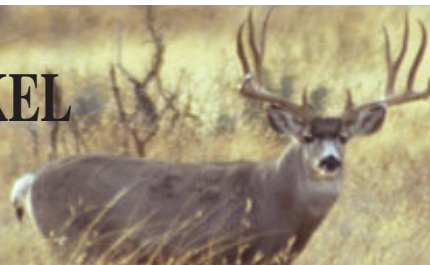
ning. Pronghorns are said to be the fastest land mammal in North America. Unlike deer or antelope, which are able to run quite fast over short distances, pronghorns are able to maintain high rates of speed over long distances. Since the speed of pronghorns far outpaces any predator in North America, it is believed that the pronghorn evolved its running ability to escape extinct predators such as the American cheetah. Compared to deer and antelope, pronghorns have certain physiological traits which allow them to run at great speeds over great distances. Some of the more obvious adaptations include enlarged lungs, heart, and windpipe which allow pronghorns to take in large quantities of oxygen to power muscles while running. Another adaptation for speed is the somewhat smaller stomach compared to other species. Less obvious adaptations include hollow hair fibers and a light bone structure which allows maximum speed while running.

The social herding behavior of pronghorns is similar to many deer and antelope species; however, there are some fundamental

reproductive differences. The average female pronghorn will gestate for approximately six weeks longer than the average white-tailed deer. The seven to eight month gestation period in pronghorns is longer than what is typical for most North American ungulates, and it is longer than most similarly sized antelope. The longer gestation period likely accounts for the high prevalence of twin fawns in pronghorns. Twinning occurs in over 94 percent of pronghorn births.

Many people may claim that the bison is the iconic species of the American West, but the pronghorn has every right to stake its own claim to that title. The unique taxonomy, charisma, reproduction and sheer speed of this animal set it apart from all others. To incorrectly classify the pronghorn as an antelope or deer detracts from its charm and its contribution to North American species diversity. Realizing the distinctiveness of this animal may ensure its conservation for years to come. Maybe it's time to start thinking about changing its name. Speed goat is my favorite... 🐐

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