

Pronghorn Antelope

Natural History

Pronghorn antelope are native to the prairies of North America. At one time they numbered in the millions and were found from the Mississippi River to the Pacific Ocean and from central Canada to Mexico. With the European settlement of the plains, the population was reduced nearly to extinction. In Arizona, antelope persisted primarily in the northern plains. They also inhabit high elevation meadows between forested areas, and scattered herds are again found in the grasslands of southeastern Arizona. The endangered Sonoran pronghorn is restricted to the extreme desert lands of southwestern Arizona and northern Sonora, Mexico. The statewide population of pronghorn is estimated at 7,800 post-hunt adults.

The name pronghorn comes from the sharply pointed prong on the horn of the buck antelope. The doe's horns, if present at all, are smaller and more slender. Antelope have true horns in that the horny tissue is composed of fused hairs, which form over a bony core. Horn length reaches maximum size during the summer before the outer sheaths are shed, usually sometime in the fall.

Antelope have exceptional eyesight, which is often compared to high-powered binoculars. These "prairie goats" are also one of the fastest mammals, being able to run in excess of 60 mph. Despite their speed, antelope are reluctant to jump over objects, preferring to crawl under or through fences rather than leap over them.

A conspicuous characteristic of the antelope is the white rump patch. When an animal is alarmed, its rump hairs stand erect and appear as a white flash that can be seen for miles. The dominant body color is an apricot tan, with sharply contrasting white markings on the belly, head, and neck. The top of the buck's muzzle is brown or black, and below the ear will usually be a triangular black cheek patch, which is lacking on the doe. A short mane is present along the top of the neck. Shedding is continuous, with the individual hairs being loosely attached to the skin, making the hide nearly worthless. Since the hairs are hollow and can be erected at will, prong-horns are able to adjust to great extremes in temperature.

Adult bucks usually weigh between 90 and 120 pounds. The does are about 20 pounds lighter. Antelope are primarily browsers, feeding mostly on weeds and short browse plants, with grass being only a minor food source. Because of Arizona's mild winters, antelope tend to live longer than the six- to eight-year average life span of their northern cousins, one reason that a disproportionate number of Arizona bucks are trophy animals with horns in excess of 15 inches in length.

Antelope are gregarious and usually seen in mixed herds, except in the spring when the bucks are alone or in small bachelor groups. Later, in the summer and early fall, these same bucks will collect harems of does, which may number up to 15 animals, which they then defend from other bucks. Antelope breed in August and September, and the young are born in May and June. A doe will typically produce one or two fawns. The young are

not spotted like the fawns of the deer family, but instead have markings similar to those of adults. The fawns remain hidden, with the doe feeding them several times a day, until they are about two to three weeks old and strong enough to travel with the adults. During this time, pronghorn fawns, or “kids,” are the most vulnerable to coyotes, which may take 75 percent or more of the year’s production. Adult antelope are taken by mountain lions, as well as by coyotes.

Hunt History

Once, second only to deer as a game animal, Arizona’s antelope were first given a closed season in 1893. The response must have been less than satisfactory, however, as the season was completely closed in 1905. By 1922, the state’s antelope population was estimated to be less than 1,000 animals.

Then, for reasons that still are not fully understood, pronghorn antelope began to make a comeback. Aided by a closed season, government predator control programs, and the abandonment of numerous homesteads, pronghorn numbers steadily increased until fears were expressed that some northern Arizona populations were in danger of exceeding their food supply. Accordingly, a limited hunt of 400 buck permits was authorized for northern Arizona in 1941.

After a closed season from 1944 to 1948, antelope hunting in Arizona recommenced in 1949. Hunts were liberalized gradually, until 1954 when 1,600 permits were issued and 1,146 bucks were taken. Despite the issuance of a number of antlerless antelope permits between 1961 and 1975, this level of harvest has never again been equaled. Annual harvests since 1990 have varied between 500 and 700 bucks, with archers taking a proportionally larger percent of the harvest in recent years. Plagued by encroaching subdivisions, increasing highway construction, and other land-use changes, maintaining even the present number of antelope is dependent on citizen involvement and an aggressive translocation program. Approximately 10 percent of the 1998 antelope harvest was in areas having reintroduced herds.

Management Needs

Research Needs

Pronghorn Operational Approaches

Below are approaches for guiding the management of Arizona Game Species. In all the approaches listed below, annual harvest objectives were derived from past harvest estimates and recent habitat conditions. In all cases, these harvest objectives are well within the range of sustainable harvest.

1. Increase post-hunt population trends statewide (1.A.1-1.A.6).
2. Maintain annual harvest at 500 or greater (1.B.1-1.B.3, 1.B.6-1.B.7).
3. Provide recreational opportunity for 1,000 or more hunters per year (1.B.1-1.B.3).
4. Provide 4,500 hunter days or greater each year (1.B.1-1.B.3).
5. Maintain buck:doe ratios statewide according to hunt guidelines (1.A.1-1.A.6).
6. Maintain existing occupied habitat, with emphasis on retention of medium and high quality habitat and maintain linkages between habitats (1.A.1-6).
7. Continue habitat improvement efforts for pronghorn (1.A.1-6).
8. Manage and enhance habitat through partnerships with public agencies, property owners, lessees, and conservation organizations (1.A.1-1.A.6, 2.D.1-2.D.4).
9. Identify important habitats for populations and determine where protection and improvement are possible, in cooperation with land management agencies, property owners, and lessees (1.A.1-1.A.6, 2.D.1-2.D.4).
10. Improve conditions of declining or low-density herds through research, conservative hunt management, supplemental translocations, habitat improvement, and predator management (1.A.1-1.A.6, 1.B.1-1.B.3).
11. Restore the historical range in Arizona by repopulating through translocations (1.A.1-6).
12. Evaluate and initiate where appropriate translocations into Units 7, 13A, 13B, 21, and 27. Source animals will either come from central Arizona or from out of state (1.A.1-6).
13. Establish self-sustaining pronghorn populations at all translocation sites (1.A.1-1.A.6).
14. Use Regional Pronghorn Antelope Management Plans, which will be reviewed every 2 years by the Commission, to direct pronghorn management goals and objectives from a landscape perspective (1.A.1-1.A.6).
15. Use population abundance and basic hunt modeling to assist in permit recommendations (1.A.1-1.A.6).
16. Provide hunter recreation that stresses the quality of the hunting experience (1.A.1-1.A.6).

