1980

The Pronghorn Antelope

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Historically, the pronghorn's range covered most of the Great Plains as well as the sagebrush plateaus and grassland valleys of the western states, south-central Canada and northern Mexico. Unregulated hunting and agricultural development reduced both their numbers and range. Reintroduction programs have helped the pronghorn make a comeback.

FOSSILIZED REMAINS on the North American continent are reminders that the pronghorn antelope (Antilocapra americana) roamed the land in present-day forms as early as the Age of Mammals, over one million years ago. Evolutionary changes may have taken 20 million years to develop the pronghorn as we know it today.

Surviving the rigors of this violent young continent, the ancestral pronghorn antelope thrived and evolved into an alert, fleet-footed ungulate which roamed the large expanse of brush, grassland and cactus of the plains area.

Into this scene man made his appearance some 20,000 years ago. The pronghorn surmounted obstacles of glacial and drought changes of the young developing continent, but was nearly exterminated by modern man and his machines.

In the early 1800s, vast herds of bison and antelope were recorded by the Lewis and Clark expedition and others. Estimates were made of about 35 million antelope in North America. Within 100 years, antelope declined to a low of 20,000 animals and it was predicted that they were doomed to vanish from this continent. But, conservation-minded leaders in our country saved the pronghorn from extinction by their quick action.

The pronghorn antelope is the only living member of its family, Antilocapridae. Generally, four subspecies are recognized: 1) A. a. americana found throughout the great plains from Canada to Texas; 2) A. a. oregona found in Oregon, Idaho, Nevada and California; 3) A. a. peninsulara of lower California; and 4) A. a. mexicana found in Mexico.

The historical antelope range covered most of the Great Plains, as well as the high sagebrush plateaus and grassland valleys in the western states, parts of south-central Canada, and northern Mexico. By the mid-1920s this original range was reduced considerably due to habitat changes caused by agricultural development and man's inroads into the antelope domain. Only the more arid, unsuitable lands for agriculture in the great west remained for the antelope, and today these are its strongholds.
From less than 20,000 antelope in the United States in the early 1900s, numbers increased to over 26,000 in the 1920s, 130,000 in the 1930s, 360,000 in the 1950s, and over 400,000 in the early 1970's. In fact, the North American continent had an estimated population of 435,200.

Reintroduction of antelope has extended the range back into some unoccupied regions of their historical range. In addition, transplants have been made in three states that never had antelope during historical times (Florida, Washington and Hawaii).

As civilization advanced westward, the native prairie gave way to agriculture, and at the same time an antelope decline occurred. Several factors or combination of factors were responsible for the decline. Some believe the extinction of free-ranging buffalo had a great influence on antelope numbers since they were found in direct relationship to each other. Certainly the changes in habitat and land use, and the lack of harvest restrictions, had great influence on antelope numbers. Whatever the cause for the decline, by 1900 only remnant herds remained in pockets of the western ranges.

To prevent a total loss of the species from the Nebraska scene, the 1873 Nebraska legislature passed a law making it unlawful to kill, ensnare or trap any deer, antelope or elk between January 1 and September 1. It was furthered restricted, from January 1 to November 1, in 1897. Finally, in 1907, the season was totally closed for the taking of elk, deer, antelope and beaver. The season on antelope remained closed until 1953, a period of 46 years.

A 1925 publication stated that 10 small bands totalling 187 animals remained from the thousands of antelope which once roamed the Nebraska plains.

Recovery of the species in Nebraska was slow. However, by 1955 the estimated population in western Nebraska was approximately 3,500. Hunting seasons have been held every year since 1953 with the exception of 1958.

The major antelope range is broken by three escarpments and several rivers and creeks in an east-west direction. The Pierre Hills, commonly referred to as the badlands in Nebraska, extend south from the South Dakota state line in the northwest part of the state. The Pierre Hills then rise abruptly to meet the Pine Ridge escarpment which slopes gently southward to the Box Butte tableland and on to the North Platte Valley. South of the river, the Wildcat Hills escarpment drops into the Pumpkin Creek Valley and confronts the Cheyenne escarpment and its tableland.

The climate is mild, but as is typical of the High Plains region, much fluctuation of temperature occurs. Occasionally, severe winter storms sweep through the state. Normal annual precipitation in the antelope range varies from 15 inches in the west to 23 inches in the east, with most of it occurring from April to June.

The shortgrass rangeland of the Pierre Hills and Box Butte tableland support the highest density of antelope numbers in the state (3.7 and 1.6 antelope per square mile respectively). Aerial surveys conducted during the summer of 1974 show an average of 1.1 antelope per square mile in the primary range of the Panhandle.

The better antelope range in Nebraska is found in the northwestern portion of the state. It is characterized by rolling plains developed on soft, clayey shales. The low hills are round-topped and the valleys are broad swales. Pockets of small, badly eroded areas of badlands are found in the area. Vegetative cover is thin with sparse stands of grasses, principally western wheatgrass, needle-and-thread, blue grama, hairy grama and buffalo grass. Prickly pear cactus is quite abundant. Willow, cottonwood, ash and elm grow along the watercourses. Pockets of sagebrush do occur in the grassland. A variety of forbs is found scattered throughout the range.

Antelope Range in Nebraska

The badlands and Box Butte tableland south of the Pine Ridge support highest densities of pronghorn in Nebraska. The Sand Hills offers the largest habitat but lowest numbers

- High
- Moderate
- Low
- Scarce
A Year with the Antelope

LATE SPRING is fawning time for the Nebraska pronghorn. As in most gregarious species, the pronghorn doe stays apart from the group as the time of birth approaches. Perhaps this desire for solitude is due to an inherent fear of the newborn becoming mixed up within the herd and trampled, or even being attacked by adults of the herd. It may also be from fear of the herd scent being imparted upon the newborn, which would serve to attract predators.
Kidding grounds are usually located in swales and low-lying areas with small ridges or hills surrounding them. Vegetation is usually short and sparse. It must provide cover for the young but still allow the protective doe to keep a watchful eye on her offspring.

When delivery time approaches, in late May or June, the fetal sack drops and distends the abdomen of the doe. By this time the mammary glands are well developed and the doe is seen standing listlessly. As contractions of the abdomen begin, the doe alternately lies down and gets up, perhaps to get the fetus in proper position. With the fluid-filled sack protruding, the doe becomes even more restless and occasionally spins around in a circle as if to find a place to lie down. Her stance at times is very still except for her flipping tail. Soon the head of the young antelope can be seen. Much lying down and getting up will continue while more of the young is exposed, until the young is slid to the ground. Following the delivery, the doe starts tearing and removing the fetal membrane and licks the young dry to stimulate blood circulation. Normally a second twin is born about 30 minutes later. The entire twin-birth process takes a little over an hour.

Nursing of the young begins as soon as it can stand on its wobbling legs; even while his twin is being born. The weight at birth ranges from 5 pounds to over 9 pounds and averages 6¾ pounds. Males average about ½-pound heavier than females.

Training of the kids starts early in life. When only a few hours old, the young are taught to remain motionless in the face of danger. The doe usually joins other females in a small group while keeping a watchful eye over her hidden kids. When danger threatens, the doe will try to lure the predator away by being the decoy. Occasionally, in her attempt to lure the intruder away from her hidden young, she may inadvertently stumble across some other kids and endanger them. The kids, unless they are several days old, will remain motionless in the scant vegetation and are completely safe from the nose of a predator as they are scentless while newborn and vulnerable.

Sprinting for short distances, older antelope kids can outrun most predators, but usually the doe will lead the way and hide her kids one at a time as they disappear over a slight rise or drop into a depression. If the youngster refuses to hide, the running doe may nudge or even knock the running kid down into hiding while she continues to lead the predator away. When the presence of the predator is no longer imminent, the doe will round up the young, nurse them, and then cache them some distance apart. The doe then resumes her normal routine and may move as far as half a mile away.

As the young grow older, they accompany the doe. Later, they will be joined by other young kids and be left in a group with nursemaid does. Intruders are quite often met by a band of does and are threatened with bodily harm, but these actions are usually bluffs on the part of the pronghorns.

The young antelope develops rapidly and soon starts to experiment with various succulent vegetation. His periods of nursing at a couple of weeks of age are restricted to four or five times a day, at intervals of several hours instead of every half hour. At six weeks of age, the young antelope has all of its deciduous incisors and pre-molars with one permanent molar, so he is then ready for a diet of vegetation.

The major portion of their diet is composed of forbs and browse plants, with very little grass being consumed. Studies show that forbs and browse constitute 85 percent of the antelope’s annual diet, while cacti make up 11 percent, and grasses and grass-like plants, including wheat, make up 4 percent.

Seasonal variations occur in the diet, which may be due to several factors, including availability, palatability, succulence, and preference. As the seasons progress, various vegetation becomes available, and palatability increases or decreases at different growth stages. Certain plants are more palatable or nutritious at different growth periods and thus are preferred. Studies have indicated that pronghorn and other animals are able to select plants with higher nutritional value.

During the fall, browse was shown to make up the major portion of the pronghorn’s diet in the shortgrass prairie range of northeast Colorado. As high as 75 percent of the diet is browse plants in the fall, while in winter the percentage drops to 50, and in the spring and summer, about 25 percent.

A limited food habit study made in the fall showed some differences in the diet of the Nebraska pronghorn from those of northeast Colorado. It was found that browse-plant species were not very important in the fall, while forb plant species received greater use. This probably is a reflection of the plants found on the Nebraska antelope range. The study showed that forbs made up 81 percent of the plants used as food, cactus 19 percent, browse less than 1 percent, and only traces of grass.

Forbs play an important part during the spring and summer, while they are of lesser importance during fall and winter. However, they assume an equally important part of the pronghorn’s diet in a year-around basis.

Cacti use in summer and winter increases to 15 percent, and drops to 5 percent during spring and fall. Apparently, cactus is used as filler or emergency food when others are less palatable or not available. Grass consumption is low on an annual basis; however, during spring “greening up”, use of cheatgrass brome increases to about 20 percent.

Two members of the grassland community, the bison and the antelope, lived in relatively close relationship to one another. The buffalo lived on the great expanse of the grassland plains and moved long distances following the growth of different vegetation through the seasons. In the wake of huge herds of bison, the antelope no doubt benefited by the grazing and trampling activities, which caused much damage to the grassland. The
sparse vegetation on the grassland, especially the shortgrass range, supported a variety of vegetation such as forbs, browse, grasses and cacti. The forbs, generally annuals, were the first to recover from the onslaught of thousands of feeding bison.

This relationship and association of bison and antelope is replaced today in the form of antelope and range cattle. This relationship also occurs in other grasslands of the world. Under natural or wild conditions on good range, the antelope and bovines affect each other less than any other combination of animals. On poor range, cattle are forced to utilize browse and forbs, and a competition for food may develop with the pronghorn.

Studies have indicated that antelope-livestock competition is nearly negligible, and in some cases is beneficial to the range in general. Because their food habits do not overlap significantly, it would take about 105 pronghorns to utilize as much cattle forage as 1 cow. Pronghorns consume many poisonous and injurious plants, including larkspur, loco weeds, rubberweed, rayless goldenrod, cockleburs, needle-and-thread grass, and yucca. Other undesirable range plants consumed by antelope are snakeweed, rabbitbrush, fringed sage, Russian thistle, and saltbush. Wise range managers encourage pronghorns to use their rangeland to discourage the increase of undesirable species of plants.
The growth of the young pronghorns increases rapidly as summer progresses. However, it will be almost three months before they develop the speed and endurance of the adult. Occasionally a weak individual, which has succumbed to disease or parasites, will be overcome by mammalian predators. Avian predation is believed to be rare, but carrion feeding by eagles and hawks is believed to be quite common.

The coyote is the major natural mammalian predator of the pronghorn, even though his top speed is far less than that of the pronghorn. Antelope cruise at speeds of over 30 miles per hour and have been clocked at 50 to 60 miles per hour for short distances. The coyote's cunning and the pronghorn's habit of running in a wide circle can cause the antelope to fall prey. Several coyotes may utilize a system of relays to tire the chosen victim, which frequently ends as a meal for the canines. Coyote predation is, however, normally on weak or sick individuals, or on other less speedy and more abundant prey species. When the buffer species that coyotes usually prey upon is in short supply, the coyote may be an important antelope predator, especially on the young. Natural mortality due to predation alone is not normally considered an important factor in pronghorn management.

During late summer and early fall, the more stalwart bucks begin to challenge imaginary rivals as if shadow boxing and sparring. The male will strike an odd pose of head hanging, as if in his last stage of physical decline. Suddenly his rump patch will appear to blossom and each strand of hair on his body will appear to stand up and vibrate. Then, with no apparent reason except, it seems, to release some excess energy, the buck will run and bound stiff-leggedly over the grassland. It doesn't matter to the buck whether he has an audience or not. When other bucks are encountered, two or more may back off and participate in mock battles. Seldom does any individual get injured in this display of vigor and power.

As the height of courtship and mating approaches during the last half of October, the females in the harem become more and more attentive to the buck. Deer, antelope, and other wildlife are stimulated by the excitant of a powerful secretion of musk from special glands. As the buck responds to its influence, the doe is fondled by the neck and head with gentle gestures. Using coquetry, the doe pretends to run away in alarm. Stopping and looking back at the buck, the doe returns to just beyond his reach. As excitement mounts, the buck stirs itself to higher pitch by giving chase. The two animals gallop off at full speed each time until at the last run, the doe stands and the courtship terminates with the consummation of mating. This behavior is so much a part of the species that lonely old bucks will even make this courtship run alone when unable to

Pronghorn markings are distinctive. Their coarse, hollow hair can be erected on the rump to signal danger to other antelope.
find a doe to precede the chase.

The gestation period is believed to be from 230 to 240 days, with a peak of kidding in Nebraska occurring about June 12. A study on a confined herd of antelope near Sidney, indicated a peak of kidding between June 10 and 15. Thus, if the data obtained from our study is indicative of Nebraska’s wild antelope population, conception occurs between October 10 and October 20.

Unlike other wildlife, that relies upon cunning and body coloration, the pronghorn depends on keen eyesight to detect danger, and great speed to outdistance it. The old adage of “safety in numbers” applies to numerous species of wildlife, but most of all to pronghorns. They are nearly always found in groups of five or more. The pronghorn buck, however, may be found by himself.

When grazing, a sentinel is stationed on a knoll to watch for intruders on their vast domain of shortgrass and open space. With the first hint of danger, the group is alerted and swift flight carries the animals to distant safety.

The white hairs on the pronghorn’s rump can be erected to flash a heliographic warning. Thus, the sentinel can alert others to the potential danger of an approaching predator.

Pronghorns appear to have eyes in the back of their heads and are almost impossible to approach without being alerted. The eyes are large and bulge out from the head, thus affording the animal a wide angle of view. The antelope is said to have vision comparable to man aided with 8-power binoculars.

The general body structure indicates great speed. The legs are slender and long and very lightly muscled toward the hooves, while heavily muscled close to the body. Large windpipe and lungs allow huge quantities of air to be gulped in by mouth as well as through the dilated nostrils.

Antelope have true horns that are composed of fused hairs formed over a bony core. There is a forward projection, or prong, from whence the animal derives its common name, the pronghorn antelope. These horn sheaths are shed annually, during the winter. Bucks have well developed horns that may attain trophy lengths (up to 20 inches), while older females have nearly inconspicuous horns of single-point fused hairs, seldom exceeding the length of their ears. Other differences between the sexes include a very dark face and dark triangular-shaped cheek patches on the males. The overall coloration of the antelope is tawny brown on the neck, back and legs, while patches of cream to white occur on the lower side of the neck and body. Viewed from the back, the white rump patch is very prominent.

The antelope is very well adapted to the rigors of the grasslands, where summer temperatures may soar above 100 degrees Fahrenheit and during the winter may drop below minus 20 degrees. The pelt of the pronghorn is composed of individual hairs which are hollow and filled with air. The hair is loosely attached to the skin, which is underlaid with a network of muscles that can raise or lower the hair at will. When the hairs are laid down they form an efficient insulator, keeping the cold temperature of the surrounding environment out while retaining the body heat of the animal. During hot summer days, the hairs can be held erect, allowing a movement of air to cool the skin. Due to the brittleness and the loose attachment of the hair to the skin, antelope pelts are not valuable as fur. The tanned skin of antelope is also not valued due to the poor wearing quality of the leather.
The major portion of the pronghorn’s diet is composed of forbs and browse plants, with very little grass being consumed.
Managing the Herds

Wildlife is a renewable natural resource, and if managed wisely, can be cropped annually without depleting the stock. Management of a wildlife species is done by obtaining information about its population and relationship with its habitat. The controlling factors that limit population numbers must be learned before effective management plans can be initiated. In Nebraska, big game management policies must take into consideration the interests of the sportsmen and the landowners upon whose land most of the animals live. The goal of providing the greatest number of antelope and recreational benefits to the sportsmen, while keeping antelope populations at levels consistent with the agricultural interest of the land, becomes a challenging one for the game manager. Herd and harvest inventories play major roles in antelope management of Nebraska.

Information relative to population number, distribution, sex, age and range conditions is collected throughout the year, but the summer aerial inventory provides most of this information.

The annual aerial survey is conducted by a low-flying aircraft with observers counting the animals by sex and age on a regular flight path. The time the animals were observed is also recorded. This information can then be plotted on a map and the relative distribution within the management unit can be determined. Distribution of antelope has changed over a period of years, and this is important in managing herds on a unit basis.

During the 1974 survey, an estimated 8,217 antelope for the study area in the Panhandle indicated the highest population during a 20-year period. However, the doe-kid ratio of 100 does to 50 kids indicated one of the lowest productivity rates for the same period. The 20-year average is 100 does to 65 kids, while the last 5 years averaged 100 does to 57 kids.

Once herd numbers have been estimated and the population status determined, the game manager must decide whether to increase, decrease or stabilize the herd by controlling the harvest.

If the herds are below the carrying capacity of the range and the tolerance level of the landowners, the number of permits authorized may be low to limit the harvest and increase antelope numbers in subsequent years. However, if herds are above carrying capacity or tolerance limits, then more permits must be authorized to reduce antelope numbers.

The first hunting season in recent history was held in 1953, after a closure of 46 years. It was a 5-day hunt limited to a small portion of Cheyenne County. Since 1953, antelope seasons have been held annually except for 1958 when the season was closed.

The popularity of antelope hunting is shown by the great number of applications exceeding the authorized number of permits each year. Permit allocations have been on an unbiased, lottery system, but sometimes purely by chance the same persons were unable to receive permits year after year. Thus, a more equitable system for allocating permits was necessary and in 1973 a restriction was placed upon holders of permits the previous year. In 1974, restrictions were placed on holders of permits in the previous two years. Even with these restrictions, demand for permits was over two times the authorized number in 1974.

Generally, 83 percent of the total harvest for the season is taken during the first 2 days, regardless of the length of the season, and 93 percent of the hunters require 2 days or less to bag an antelope. Therefore the additional days after the third day are for the benefit of trophy hunters and for hunter convenience. Since 1953, a total of 19,182 antelope have been harvested by 23,719 rifle hunters. Hunter success over the years has varied from 74 to 88 percent, averaging 81 percent.

That rifle hunters show preference for adult bucks is clearly indicated by the harvest data. Summer inventory data show the population structure of 20 percent adult males, 53 percent adult females and 27 percent young of the year, while 1974 harvest data show 64 percent were adult males, 27 percent adult females, and 9 percent kids.

Information collected at check stations has greatly aided the management of the species. Data obtained include sex, age, and general physical condition of the animals (weights and measurements), hunter distribution, pronghorn distribution and other information concerning the hunt.

Weight measurements are used to compare with similar data obtained in other years for determining range condition trends and physical condition of antelope. Males are about three percent heavier than females as kids, and by the time males are yearling and older, they are from 8 to 18 percent heavier than the females.

Effective management recommendations can be made by utilizing the population structure by sex and age classes. Several methods can be used to obtain this information, but the sex and age class information obtained during the harvest seem to be the most accurate and unbiased. The game manager utilizes the mandibular eruption and wear method of aging antelope which are brought to check stations. This biological information, when used to construct an age structure graph, can reveal a
Aerial surveys are made during late July to gather information on Nebraska's antelope
Transplant programs of the late 1950s and early 1960s reintroduced 1,077 pronghorn into the Nebraska Sandhills herd that is in a healthy status as compared to one that is over-exploited. Since hunter preference for adult males occurs, the age structure of the females is of greater value in evaluating herd status.

The archery season, with 64 days, has insignificant influence on the herd while providing considerable recreation. During the last 5 years, 592 archers harvested 65 antelope for an average hunter success of 11 percent. Since 1964, 913 bow-hunters took 122 antelope for an overall success of 13.4 percent.

Pre-natal mortalities occur in antelope as in any other species and are probably a matter of poor nutrition and environmental stress. After parturition and before hunter harvest, there are numerous causes of mortality. Accidental losses occur from collisions with automobiles and trains, or when the animal becomes entangled with barbed-wire or woven-wire fences. Severe weather conditions can have drastic effects upon antelope. Large herds have perished during storms, especially when their physical condition was poor prior to being subjected to stress.

Losses occur throughout the lifespan of the pronghorn, but are probably more prevalent prior to adulthood. Pronghorn kids have been abandoned by their mothers after excessive handling by humans. This may be the result of human
scent being imparted to the kid at a time when the animal is scentless. Predation as a rule is not a threat to any healthy wildlife population, however, under certain circumstances may be devastating. One such period for the pronghorn may be when the herd number is low due to other factors, and losses in combination to this may reduce or even annihilate the herd. This is referred to as the "threshold point", and the natural increment to the herd by way of reproduction cannot offset the losses.

The most damaging predator with the greatest potential for harm to pronghorn numbers is man. With his modern machines, man can be the super predator with which the pronghorn cannot cope. However, habitat changes brought about by man are currently a much greater threat to antelope than is his predatory nature.

Man, though, has done much to enhance the proliferation of the pronghorn over much of its original range. Historical records show that antelope once roamed throughout most of the Great Plains, of which much of Nebraska is included. A 1925 publication cited that 10 bands, totaling 187 antelope, remained in Nebraska. The Panhandle pronghorn herd increased to about 3,500 in 1955. However, antelope remained at a low level in the Sand Hills and were primarily restricted to the western edge of the area bordering the major antelope range. Trapping and transplanting has proven to be an efficient method of re-establishing big-game animals on historic ranges, and it was felt that such a program would be beneficial to Nebraska's antelope management program.

The Sand Hills of Nebraska is about 20,000 square miles in the north-central part of the state. Rainfall ranges from 18 to 23 inches, with topography of sharply rolling hills and irregular ridges, relieved occasionally by level valleys. Shallow lakes and ponds of varying size are distributed throughout much of the region. The soil type of most of this region is described as dune sand. Vegetative cover is characterized by mixed grass associations and a variety of forbs. Trees are limited almost entirely to stream courses. Land use is almost entirely haying and grazing.

About 1.7 million acres were signed up under cooperative agreements, and the trapping-transplanting program was initiated in 1958 and terminated in 1962. It resulted in 1,077 antelope being released at 20 sites in the Sand Hills. Individual releases varied in number from 28 to 72 animals.

Within a very short period, the natural habits of the pronghorn to congregate in relatively large numbers, especially during the winter, resulted in depredation problems on alfalfa fields. As a result, it became necessary to hold limited hunting seasons in 1964 in the Sand Hills.

A total of 3,238 Nebraskans have participated in the antelope harvest in the Sand Hill units as a direct result of the trapping-transplanting program. Hunter success averaged 72 percent for the period from 1964 to 1974 in the Sand Hills, while statewide success was 80 percent.

Tag recoveries from 75 antelope provided data on longevity and movements. The antelope were all aged and identified with individual ear tags. During the 1968 hunting season, a tagged doe was harvested which records showed as being over 10 years old. Movements of 75 antelope ranged from 0 to 125 miles from their release site, averaging 26 miles.

Field-dressed Weights of Nebraska Pronghorn

Information gathered at check stations during the fiream season aids greatly in management of the species. Weight measurements are compared with those of other years to determine range condition trends and the physical condition of the antelope. Males are about three percent heavier than females as kids. Male antelope older than one year will outweigh their female counterparts by as much as 8 to 18 percent.
Hunting the Antelope

The proper time to harvest Nebraska's pronghorns is determined by a number of factors. Harvest should come at a time when the young of the year would be little affected by loss of the mothers. The young themselves should have developed physically to the point that the meat has flavor and texture. Since sport and trophy hunting are important, the harvest should occur prior to shedding of the horns, which normally occurs during November.
and December in Nebraska.

Techniques and strategies for hunting antelope vary with individual hunters and field conditions. Regardless of the technique employed, it is the hunter who planned his hunt and anticipated the opening day of the season that will be most satisfied in the end.

Pre-season preparations help the hunter bring home that "special buck." Practice, and lots of practice, under various field conditions, improves the hunter's chances of downing the animal of his choice. This involves sighting allowances for windage, distance and movement of the animal. One problem the hunter will encounter is the decepiveness of the pronghorn's distance due to flat terrain. Another problem is the unbelievable distance the pronghorn can cover between the time the trigger is squeezed and the strike of the bullet.

Trophy hunting is an art in itself which requires discipline, patience, experience, knowledge of the species, and as often as not just plain luck. Many successful hunters take to the field in advance of the season to study the lay of the land. Advance knowledge of the various avenues of approach and the animals' avenues of escape often spells the difference between success and failure. The stalk should be made quietly and carefully until a clean, one-shot kill can be made.

A trophy is defined in different ways by different individuals. It is generally accepted, though, that a trophy is not just a fine buck, but is an individual of wild elusiveness and cunning that taxed the hunter's skill and strategy. The trophy hunt is designed by the hunter in the manner he selects and finds most satisfying. This means meeting basic challenge of man versus wildlife on equal footing. This fact is best demonstrated by primitive weapon enthusiasts, such as bow and muzzle-loading hunters.

The hunt is essentially over when the pronghorn is down with a well-placed shot. However, it is not complete if the trophy is to be mounted by a taxidermist. Prior to field dressing the animal, sponge away any blood that gets on the hair. Bleeding the carcass by slitting the throat ruins the cape for a full head and shoulder mount, and is unnecessary after a chest shot with a high-powered cartridge due to the internal hemorrhage that results.

Commence field dressing by placing the head uphill or propped up with available material, and with the animal on its back. Cut the skin and open the animal in the paunch region. Using the fingers as guides for the knife and to keep the viscera from the point of the knife, make an incision along the mid-line up to the rib cage. Then loosen the sex organs and circle the anal vent with the knife and tie this end with a string. Pull the loosened lower bowel and bladder into the abdominal cavity. Reach into the forward section of the chest and tie the esophagus with another string. Sever above the string-tie, and along with the severed windpipe, pull intestines from the front by cutting all attached tissues and pulling all the organs out along with the viscera. Some hunters split the pelvic girdle as well as the rib cage along the sternum to field dress the animal and to cool the carcass quicker.

Take special pains to prevent any paunch material or hair from contaminating the meat, as much of the wild or gamey flavor attributed to antelope or other game meat is the result of careless handling.

The gallbladder attached to the liver must be carefully removed. Clean the liver and the heart of blood and fat and save in a clean bag after cooling. Bacterial growth and decay of meat depends on warmth and moisture, so it is important to cool and dry the carcass as soon as possible.

A trophy specimen that is to be mounted must be given special care at this time. Most hunters remove the whole neck and head and deliver it to the taxidermist, but many remove too little of the cape over the shoulders for a full mount. If circumstances prevent the delivery of the carcass to the taxidermist before hair slippage may occur, the cape and head must be removed by the hunter. Using a sharp knife, cut from the underside of the hair and skin, rather than through the hair; make an incision behind the shoulder and encircle the animal. Then from the base of the neck along the top line of the neck, draw the knife up to the base of the head. At this point it is best to remove the head by sawing across the neck with cape attached. Remove bits of flesh or fat remaining on the skin. Apply liberal amounts of salt to the flesh side of the skin, inside of ears, nostrils and mouth. Protect from sunlight, heat and insects until delivered to the taxidermist. An alternative is to keep cape and head in cold storage or boxed and frozen until delivered to the taxidermist. Packing in dry ice will preserve the trophy if it must be transported some distance.

If unable to deliver in a day or two, further skinning and preparation must be done to prevent hair slippage, which is irreparable. Proceed by prying the skin away from the horns and working it forward over the skull. Cut the cartilage of the ears close to the skull and remove the eye lids with the skin. Do the same for the lips by cutting close to the teeth, and cut the cartilage back of the nostrils. Complete the separation of the skull and the skin. A sharp skinning knife to cut, and a blunted table knife to pry and loosen the skin, helps in this work. A bone saw to remove the horns in one piece along with the skull plate is required. This is done by starting from about two inches back of the horns and sawing forward. Remove flesh and fat from cape and horn plate. After drying, generously salt cape, ears and nostrils. Roll cape loosely with hair out in a porous bag and prevent crushing while transporting. A carefully handled cape will result in a beautiful mount, adding to the enjoyment of the hunt for years to come.

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This publication is made available through funding supplied by the Federal Aid in Wildlife Restoration Act, project W-15-R and the Nebraska Game and Parks Commission. Extra copies can be obtained from the Nebraska Game and Parks Commission, Box 30370, Lincoln, Nebraska 68503

Text by Harvey Suetsugu