Greed & Beauty

on the western plains.

By Dr. Bart O'Gara

Dr. Bart O'Gara, retired leader of the Montana Cooperative Wildlife Unit, has intensively studied pronghorn biology and management for over 30 years. He supervised the studies of several graduate students working on this species. His book, coauthored by Jim Yoakum, is in press with the Wildlife Management Institute and will be an exhaustive treatise on the pronghorn.

The pronghorn (*Antilocapra americana* Ord) evolved during the Pleistocene epoch and is endemic to North America. Coronado and his men saw pronghorn on the plains of Kansas in 1535, but it was the reports of Lewis and Clark and a specimen collected by them that made the animal known to science and led George Ord to describe and name it in 1818.

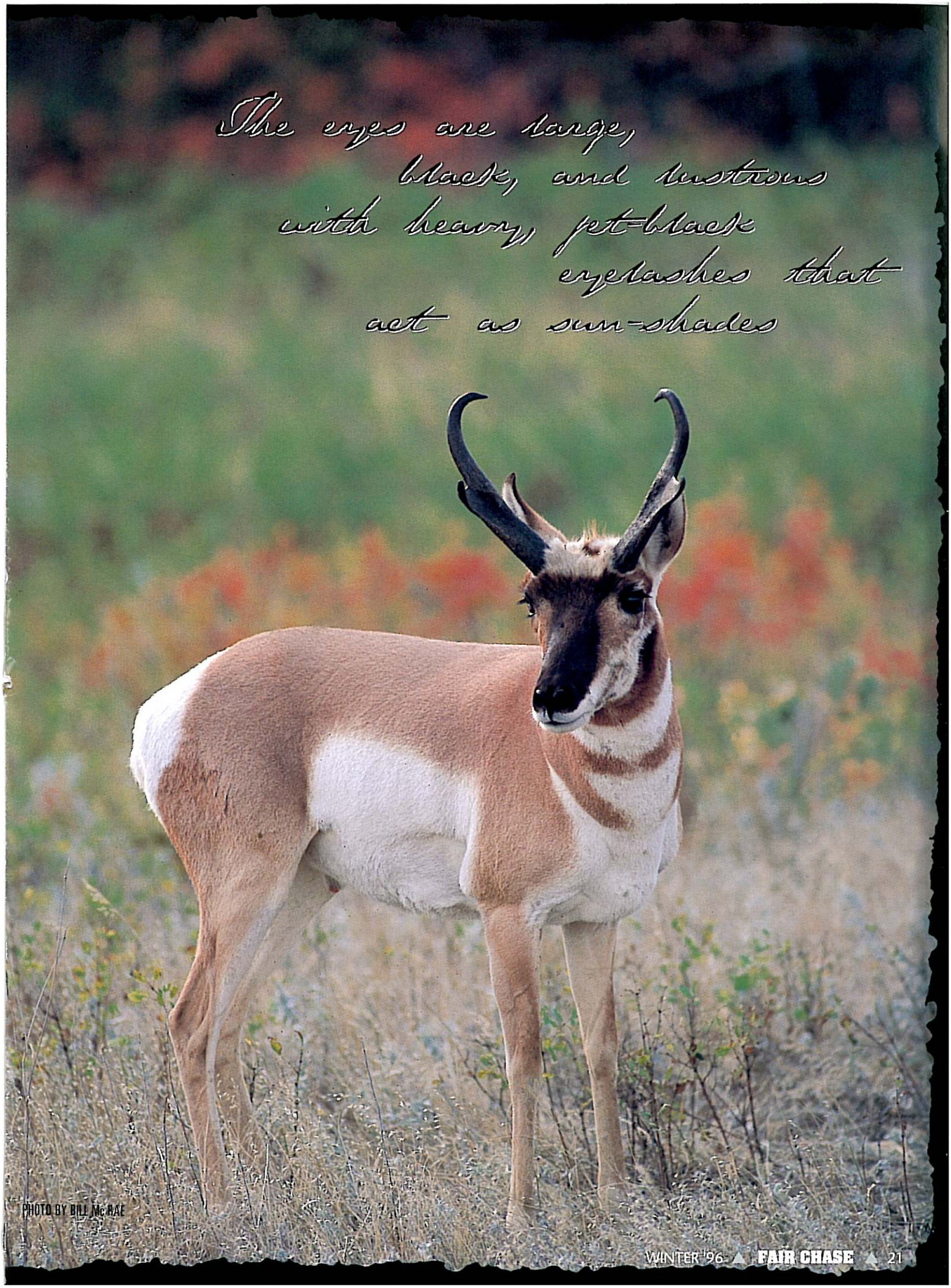
Before the arrival of the white man, pronghorn — often called antelope — roamed a great expanse of prairie and semi-desert west of the Mississippi River from central Mexico into the prairie provinces of Canada. They apparently equaled or even surpassed the buffalo (*Bison bison*) in numbers. It has been estimated that there were once 40 million pronghorn in North America. Subsequent to 1870, the white man's occupation of the open range depleted the herds. By the early 1900's, only about 30,000 remained, and extinction of the species seemed imminent. The decline was halted, but increases were slow until the early 1940's, when transplanting programs returned pronghorn to many suitable but unoccupied ranges.

More than a million pronghorn now roam the West. This has been a remarkable achievement-reflecting, first, the resilience of the species and, second, the ability of management to permit recovery from virtual brink of extinction to sustainable, harvestable abundance within the span of a human lifetime. Without the cooperation of many ranchers and money provided by sportsmen through licenses and the Federal Aid in Wildlife Restoration Act (Pittman-Robertson) funds, it could not have happened.

The vast majority of pronghorn are on the mixed sagebrush-grasslands of the Great Plains. Lesser numbers — and densities — occur in the intermountain valleys of the Rocky Mountains, Great Basin, and hot deserts of the southwestern United States and northwestern Mexico. Succulent spring forbs and grasses on the Great Plains allow pronghorn does to raise about twice as many fawns there than in the drier areas. The tolerance of ranchers and the policies of the Bureau of Land Management will determine, to a great extent, how many pronghorn can be maintained.

Five subspecies of pronghorn generally were recognized before the advent of modern techniques. More than 90 percent of pronghorn belong to the type subspecies — *A.a. americana*. Recent DNA studies indicate animals formerly recognized as *A.a. oregona* are similar to *A.a. americana*, but that *A.a. mexicana* is a legitimate subspecies. Too few specimens are available for study to determine if *A.a. peninsularis* or *A.a. sonoriensis* are valid subspecies.

Pronghorn are not large animals, the largest does usually weighing be



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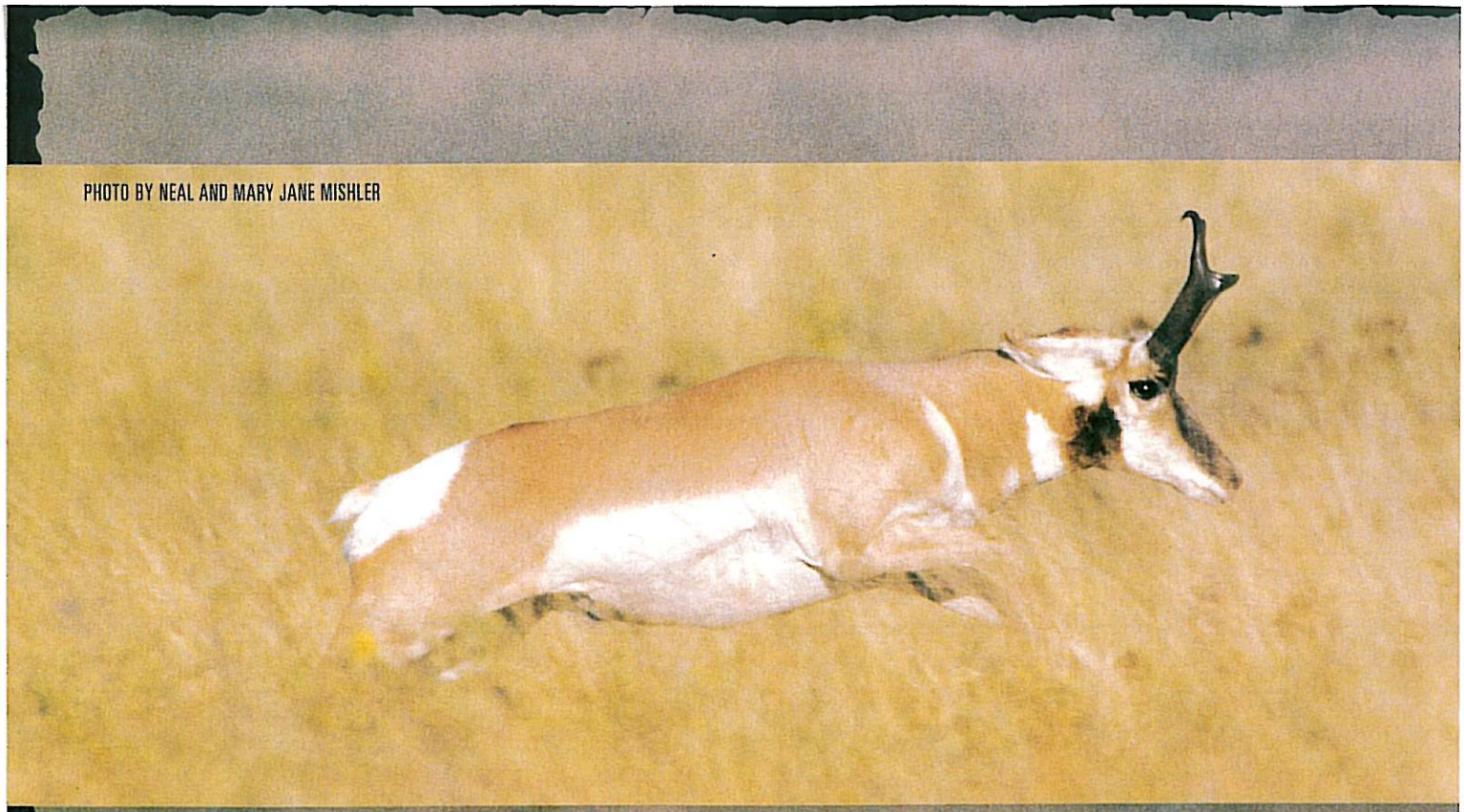

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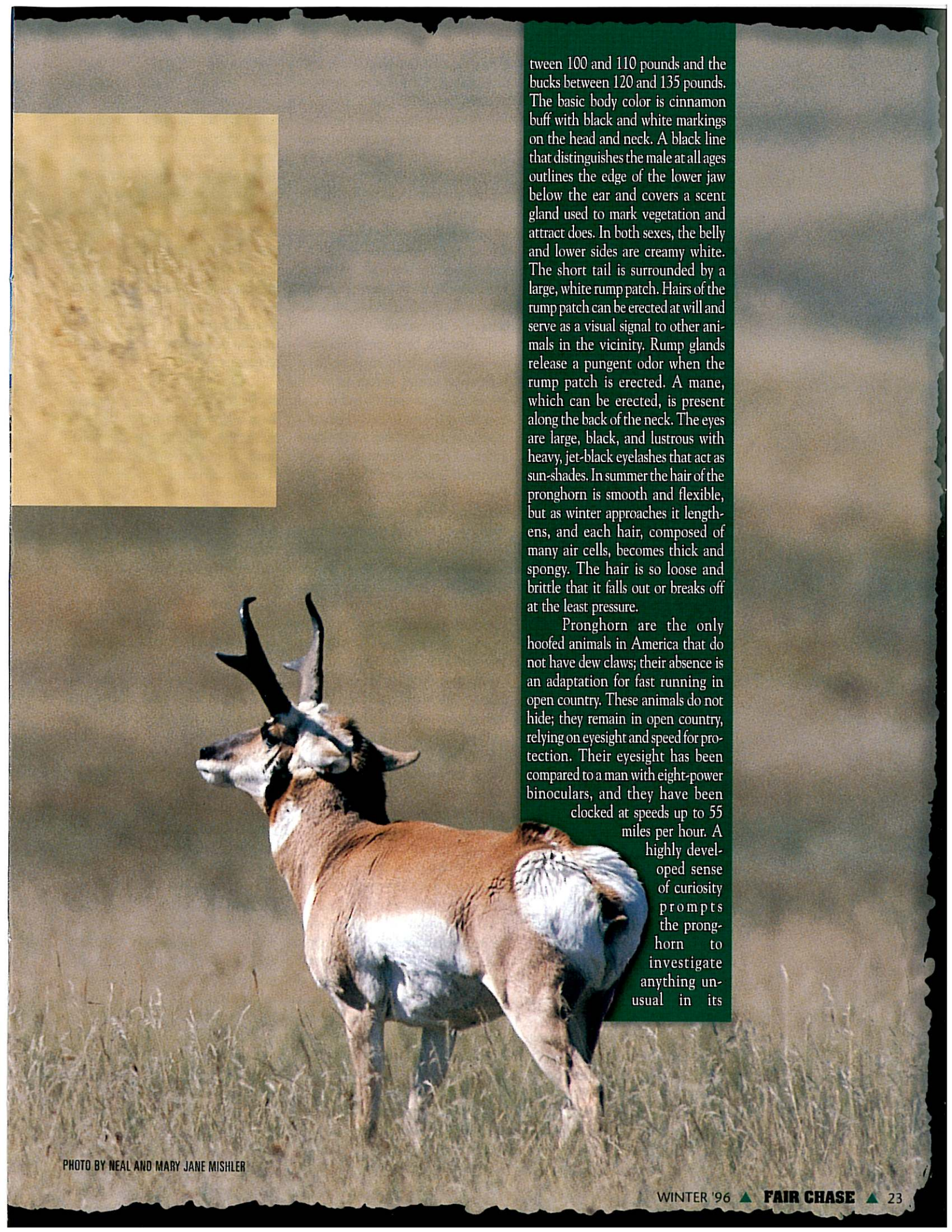

tween 100 and 110 pounds and the bucks between 120 and 135 pounds. The basic body color is cinnamon buff with black and white markings on the head and neck. A black line that distinguishes the male at all ages outlines the edge of the lower jaw below the ear and covers a scent gland used to mark vegetation and attract does. In both sexes, the belly and lower sides are creamy white. The short tail is surrounded by a large, white rump patch. Hairs of the rump patch can be erected at will and serve as a visual signal to other animals in the vicinity. Rump glands release a pungent odor when the rump patch is erected. A mane, which can be erected, is present along the back of the neck. The eyes are large, black, and lustrous with heavy, jet-black eyelashes that act as sun-shades. In summer the hair of the pronghorn is smooth and flexible, but as winter approaches it lengthens, and each hair, composed of many air cells, becomes thick and spongy. The hair is so loose and brittle that it falls out or breaks off at the least pressure.

Pronghorn are the only hoofed animals in America that do not have dew claws; their absence is an adaptation for fast running in open country. These animals do not hide; they remain in open country, relying on eyesight and speed for protection. Their eyesight has been compared to a man with eight-power binoculars, and they have been clocked at speeds up to 55 miles per hour. A highly developed sense of curiosity prompts the pronghorn to investigate anything unusual in its

PHOTO BY NEAL AND MARY JANE MISHLER

territory. Before the advent of long-range rifles, hunters often took advantage of this characteristic.

Pronghorn feed on a seemingly endless variety of plants. Studies have shown that forbs and browse, especially sagebrush, are the principal food during summer and winter, respectively. Grass is consumed in quantity only during "green-up." Cacti are usually eaten in substantial quantities where they are available. Other strange preferences include many weeds and plants that are poisonous to livestock. Pronghorn feed extensively on wheat and barley shoots and, to some extent, on the ripe grain. Few farmers object to the amount of grain these animals eat, but a large herd running through a field of ripe grain can do extensive damage.

During spring and early summer, bucks may be found alone or in small herds. The breeding season is short, generally beginning in September and continuing into October. Groups of does are collected by individual bucks, with the number of does in a harem depending on the aggressiveness and vigor of a particular male. Fighting, which can be deadly, is most prevalent prior to the breeding season, when supremacy is determined.

Breeding behavior studies have described the pronghorn as having a harem-type mating system, in which dominant bucks control and defend does during the rut without regard to a specific location. Other studies have indicated that dominant bucks were territorial — defending a specific area throughout summer and holding a harem on that territory during the rut. These dissimilar social organizations are not caused by differences in specific behaviors in particular areas. Rather, social organization is influenced by the environment, and flexibility aids in adapting to specific areas and to changing environmental conditions. Territorial bucks are vulnerable to hunting because they remain in a given location day after day. When driven from its territory by a hunter, a territorial buck generally will be back in less than half a day. Heavy hunting pressure during the rut can shift a population from- territorial to harem-type breeding strategies — apparently to the detriment of the population.

In late fall and early winter, northern pronghorn gather into large herds that generally move to areas where snow depths are not extreme and browse is readily available. Does often become solitary when kids are dropped in the spring but band together in small groups shortly after the youngsters are old enough to follow. Newly born fawns generally weigh 6-9 pounds and somewhat resemble their parents in color, but are more drab. They begin walking less than an hour after birth and can outrun a man when they are several days old. The greater portion of their first 3 weeks of life is spent hidden; they rise only to nurse. In many areas, predation — especially by coyotes (*Canis latrans*) — is extensive during the first month of life.

Rivers and small mountain ranges are not barriers to pronghorn. They can pass under or through most barbed wire fences, but woven wire topped with barbed wire or seven-strand barbed wire fences, constructed with the bottom close to the ground, form barricades that pronghorn are unable to cross. Their movements appear critically curtailed in some areas because highway rights-of way are being fenced. Some herds may have to be reduced to levels that would allow a particular range to be adequate for both summer and winter use.

Pronghorn have a number of unique characteristics. Their common name is derived from the best known of these, the branching or "pronged" horns. These are true horns composed of keratinized epithelial cells forming a black outer sheath over a bony core. Both sexes have horns; those of mature bucks average about 12-15 inches in length, while those of the does are 1-5 inches in length and usually do not have prongs. About one third of the does do not have horn sheaths, even though small nipple-like cores can be felt under the skin. The outer sheaths of the bucks' horns are shed annually, usually in November. Those of the does are shed but not at a definite time of year. Early authors reported that the horns were made of hair. A great deal of hair, which may lend considerable structural support, is indeed embedded in the keratinized epidermis.

Although twin births are the rule, three to seven embryos begin development. Pronghorn have an unusually long gestation period for their size — about 250 days. Females usually breed at the age of about 16 months. Occasionally a 4-6 month-old female will breed and produce fawns at slightly over one year of age. On a good range, where food is plentiful, adult does produce twins about ninety-eight percent of the time, but fewer first births involve twins.

Unregulated hunting, along with loss and deterioration of habitat, once took pronghorn dangerously near extinction. The species now thrives and provides extensive hunting opportunities despite continuing loss of habit. However, freedom of movement over the prairies is a thing of the past. If the

animals were not managed by hunting, crop damage would be high and die-offs during severe winters or droughts would eliminate some populations or reduce them to low numbers. More than 100,000 pronghorn are now being harvested annually, and more than four million have been legally harvested since 1934. They provide the only prairie hunting available to many American big-game hunters.

Crawling over a landscape covered with cacti, sagebrush, sharp rocks, and an occasional rattlesnake to get close enough for a shot can be exciting. Shots often must be taken at fairly long ranges, and the prairie wind will do its part to foil the marksman. Despite all this, the success rate is higher for pronghorn than for other big game—usually in the 75 to 90 percent range. Under most circumstances, even the inept hunter will see lots of game and have a memorable experience.

The most satisfying way to pursue pronghorn is on foot, and this involves more than simply walking around the countryside. Hunters must remember that the game has better senses of sight, hearing, and smell than they do. It then goes without saying that a successful nimrod avoids being seen, heard, or smelled by the quarry.

Those who cannot spend the time or do not have the physical stamina to hunt all day on foot miss much of the thrill and satisfaction of hunting. Yet, a sporting hunt still is possible without chasing animals or shooting from vehicles. Glassing from high points on roads and taking short walks to check the other sides of ridges often will reveal pronghorn. If a hunter wants to stalk animals originally seen from a moving vehicle, the best bet is to drive out of sight without changing the sound of the engine—then walk back, relocate the game and plan the stalk.

Under the right conditions—stalking, flagging, walking-down, and waiting at crossings, green fields, or water holes all can afford shots at standing pronghorn. But, stalking is by far the most sporting and enjoyable way to hunt these prairie speedsters.

The hunter who sees game before being seen holds the trump cards. To accomplish this, avoid the tops of ridges and hills. The stalker should cross ridges in saddles or notches, using bushes or rocks for cover, and crawling if necessary, because pronghorn notice objects on the skyline at tremendous distances. Watch carefully while crossing because game may be just over any ridge.

Never glass from the tops of ridges; cross them first, then settle down behind or against rocks or bushes, and glass all of the terrain in sight. Take ample time; frightened pronghorn flash white, but bedded ones are hard to see. Although the country may look flat, small draws and undulations can hide whole herds. The longer one glasses, the greater the chances of an animal moving out of such places. Setting up a spotting scope is worthwhile for scanning distant ground.

The person who rushes from ridge to ridge spreads fear and is sure to get more exercise than game. But a slow-moving hunter, who stops often to use binoculars, sounds much like a feeding animal. If they do not see or smell anything strange, pronghorn sometimes investigate unfamiliar sounds. Teddy Roosevelt observed: "It is a queer animal, with keen senses, but with streaks of utter folly in its character."

Once pronghorn are located, the hunter should watch them long enough to determine what they are doing and whether a particular animal among them warrants a stalk. If the group is moving, a quick stalk-and-wait interception often is possible. If the animals are bedded, it is time to plan the stalk. Once a route is selected, do not dally—the game may move any time. Stalking with the rising sun at one's back can be effective.

Undulations in the ground usually will allow a circuitous approach—out of sight of the animals and into or across wind. Walking almost any distance while screened from pronghorn will prove more effective than trying to cross even small openings within their sight. Crawling on hands and knees, or even one's belly, is fine for the final 200 yards or so, but it is tiring and time-consuming to crawl for a longer distance. After just a short crawl, the average hunter will be too out of breath for a steady shot, and it takes some moments while lying in a cramped position to get one's breath back.

Often, a hunter can get within shooting distance on hands and knees—a fairly fast mode of travel if one is wearing knee pads and leather gloves. Crossing an opening in sight of pronghorn can only be done flat on one's belly and slowly. Watching a cat stalk a bird gives an idea of how slow movements should be. Resist the temptation to lift your head for a look, or to raise your buttocks for faster crawling.

A pronghorn hunt is the ideal situation for teaching a young sportsman hunting ethics, the close stalk and clean kill. It is deplorable that many neophytes are introduced to chasing animals with vehicles and long-range "flock shooting." Living in open country, pronghorn are easy to see and-unfortunately—easy to chase with a vehicle. Their habit of running in wide arcs around pursuers instead of straight away, racing and crossing in front of moving objects, reluctance to jump fences, and penchant for open ground all serve to make them easy prey to vehicular pursuit.

Stalking pronghorn is fun: The hunter can count on seeing many animals, and excitement builds as one sneaks up on a trophy buck or an animal for the table. A quick, clean kill may leave the sportsman momentarily sad at the death of a beautiful animal, but a good, honest satisfaction soon sets in from knowing the game was played by the rules, and played well. Those who chase these interesting animals with a vehicle and who shoot at running herds not only risk damaging landowner/sportsman relations, crippling animals, and lending needless credibility to the propaganda of individuals and groups that are inclined to label all hunting as unfair and inhumane; they also miss one of the greatest thrills in North American hunting.

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