The news on Kansas pronghorn introduction

Antelope Update



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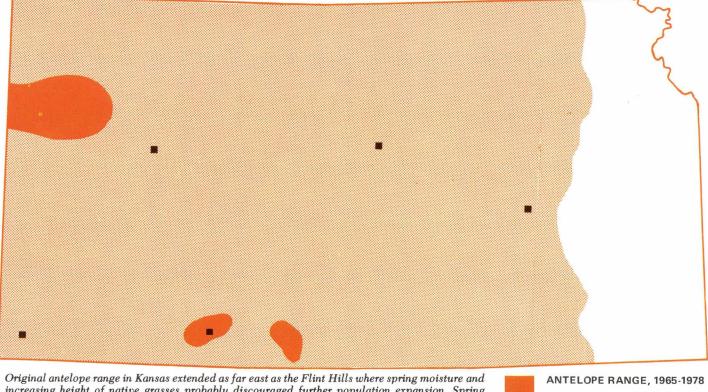
In the heart of winter last January, three stock trucks crossed the state line into Kansas headed south. They rolled by feedlots and sale barns, past roadside corrals to five lonely range sites scattered across the state. In a sense the animals aboard were making history. They represented the largest big-game stocking operation ever undertaken by the Fish & Game Commission— 351 pronghorn antelope captured near Rock Springs, Wyoming.

When the white man first arrived in the territory that is now Kansas, the pronghorn was as abundant as the buffalo. Historians estimate 60 million antelope once roamed the plains and deserts of North America. But destruction of native prairie and unregulated hunting had nearly wiped out the pronghorn by the turn of the century. Only a few small bands still roamed Kansas in three border counties in the West, and those hardy few often moved out of the state for years at a time during unfavorable weather cycles. Reintroduction of the pronghorn to its historic range began in 1965 when the Commission released 75 Montana antelope in Wallace and Sherman counties to boost the remnant herds there. In the following year 61 antelope provided by the Colorado Game, Fish and Parks Department found a new home in the Red Hills of Barber county. The next major stocking occurred in 1978, when Fish & Game personnel brought back 100 pronghorn from a site near Cheyenne, Wyoming. Clark county received 63 head, and the remaining 37 were released in the Flint Hills in Chase county.

Much of the pronghorn's ancestral range in Kansas has been drastically altered. The rolling, unbroken western prairie now stretches out flat before the eye, leveled by developers who preferred the efficiency of a flat surface. The sea of grama and buffalo grass, once flowing smooth and uninterrupted to the horizon and beyond, now channels and diverts around dense circles of irrigated corn. Since the advent of intensive farming in western Kansas in the 1960s, wildlife habitat has been steadily eaten away. But in 1974 the pace quickened, as high wheat prices caused farmers to put huge tracts of range under the plow. In that year alone 16 percent of the rangeland in Wallace, Sherman, and Logan counties— 172 sections in all—was converted to cropfields. Prior to 1974 Fish & Game had estimated the carrying capacity of the three-county area to be between 1,500 and 2,000 antelope. That figure has since been revised downward due to the loss of habitat. While major antelope population growth is unlikely in the extreme and this social activity could result in increased production."

Of the animals trapped last year, 75 were stocked in Ellsworth county, 68 in Gove county, 36 in the Cimarron National Grasslands in Morton county, 71 in Clark county, and 98 in the Flint Hills in Chase county. Clark county offers the best potential for supporting a healthy, expanding herd. It lies in the heart of the pronghorn's historic range, and only nominal conversion of range to cropland has occurred. Pronghorn Biologist Terry Funk counted 74 antelope in Clark county during an aerial census earlier this year. The

Kansas antelope distribution and 1979 release points



increasing height of native grasses probably discouraged further population expansion. Spring rains in the Flint Hills may pose a problem for transplanted antelope even today. Young pronghoms bom into cool damp weather have a tendency to develop pneumonia and die. Only time will tell how the recently introduced animals react to these climatic difficulties. Meanwhile, the western core of Kansas' pronghom population is expanding rapidly and may soon contribute aninals for transplant in other parts of the state.

1979 RELEASE SITES

ORIGINAL RANGE

Northwest, numbers have begun building up south of Highway 40 in southern Logan and Gove counties as small herds work their way down the Smoky Hill River Basin. According to Game Research Chief Kent Montei, last year's stocking of antelope in eastern Gove county may enhance this natural range expansion:

"We now have two populations fairly close together: those animals that have drifted down the river from the north, and the Wyoming transplants. The antelope may begin moving up and down the basin to intermingle, animals are currently concentrated in two populations of 30 to 40, and Funk hopes the two may eventually join.

"The Clark county antelope are approaching the threshold point in numbers," said Funk. "From here I expect them to take off and expand rapidly."

Pronghorn usually reach this threshold at around 50 head. Predation becomes less critical to the population, and certain social needs leading to greater reproduction are met by the increase in numbers.

Gove county in northwestern Kansas holds nearly as much promise as Clark county for supporting a healthy, growing antelope population. Funk has counted one concentration of 34 antelope in Gove county, a group he feels is nearly large enough to begin flourishing. With the quality rangeland available there, Gove county residents should be seeing more antelope in the years ahead.

Of the five sites stocked last year, Chase county in the heart of the Flint Hills has the best potential for producing large numbers of antelope. The thin, rocky soil resists the plow; as a result this has traditionally been ranching country. Large tracts of rangeland stretch north and south for miles along the low hills, providing nearly unlimited room for herd expansion.

Modern range management in the Flint Hills may have actually improved habitat conditions there for the pronghorn. Early records indicate antelope drifted in and out of the area, never establishing large, permanent populations. Because of the damp climate and tall, thick grass the Flint Hills served historically as the eastern boundary of pronghorn range. Antelope shun high grass because it obstructs their view and hampers their running ability. Today stock grazing and periodic burning keep the grass shorter, and the transplanted antelope may do better as a result.

One condition that may limit herd expansion has not changed, however: the problem of excessive moisture. Pronghorn young in the first weeks of life are susceptible to pneumonia, and the damp springs characteristic of the Flint Hills region may cause higher-thannormal fawn mortality rates. So far, though, Fish & Game biologists are optimistic:

"I wouldn't have expected any reproduction last year from these animals because of their stressed condition from the hard Wyoming winter," said Funk. "But reports show some reproduction, and at this point we have no evidence of the climate causing problems."

The abundance of rangeland around the Chase county site allowed the antelope to spread out after release. For this reason, winter counts this year are only considered rough estimates. Funk said it is too early to evaluate the success of the stocking. Only when densities increase over the next few years and closer monitoring becomes possible will biologists be able to judge accurately how the herd is doing. If the 1978-79 stockings take hold in the Flint Hills, any future trapping efforts will be aimed at boosting numbers in that area.

"We may trap more antelope in Wyoming if the Game & Fish Department makes them available," said Montei. "And if the Flint Hills population begins to expand, we may transplant animals there from other herds in Kansas."

The Ellsworth county antelope were beset with problems from the day of their release. Several have

been killed in collisions with automobiles, and poachers continue to chip away at the herd. But the greatest threat to their survival may prove to be an attack by a pack of free-running dogs the winter before last that left several antelope dead and badly dispersed the rest.

"There must be interaction between small herds for antelope to do well," said Funk. "When they're scattered like this not much expansion can occur."

Because of the dog attack he predicts it may be years before accurate counts can be made of the Ellsworth antelope.

The stocking of 36 head in the Cimarron National Grasslands in Morton county last year was viewed by the Commission chiefly as an experiment. The sandy soil and predominance of sagebrush provide less than ideal habitat for pronghorn, and since Morton county is on the state line some of the animals may eventually drift west into Colorado. Montei said success or failure of the stocking won't be known until the population density increases considerably.

"We decided to try a release of antelope on the Grasslands because it is such a large tract of public land. We're not particularly optimistic about the stocking, but if they take hold there the area could eventually provide some public hunting opportunities."

Because the pronghorn's preferred diet is forbs supplemented with grass and low browse, it does not compete directly with cattle for food. Antelope often actually improve cattle range. Their heavy reliance on forbs can open up vegetation cover, favoring the growth of grass. When antelope do feed on grass they graze over a large area, rarely exerting heavy pressure on the range. In winter antelope often move off rangeland onto wheatfields. The growing plants usually suffer no noticeable damage, except during dry years when the trampling can break up the soil and cause it to blow. Fish & Game has been successful at hazing the animals off cropfields by airplane in response to complaints.

Except during deep snow cover, the pronghorn fears few predators. In spring coyotes take a small percentage of the fawns by ambushing them when the does are away feeding. But a fullgrown pronghorn is more than a match for a single coyote, and even a pack will usually end up eating only dust in an attack on a healthy animal. Kansas weather presents no major problem for the pronghorn, either. Most of the nation's antelope live in the Dakotas, Wyoming, and Montana, where winters are far more severe.

Gifted with eyesight eight times more powerful than a human's and speed unexcelled by any land animal on the continent, the fleet pronghorn was made for the open spaces. As long as enough rangeland is preserved in the state to provide living room, reintroduction of this former Kansas native should be a success.