Introduction

The pronghorn is included in this series of pamphlets because it is a species that is listed in the Saskatchewan Game Farm Regulations as one that may be ranched or farmed. However, with present day practices it is a species that is unlikely to be farmed with any success. The principal advantage of the pronghorn is that the female will, under ideal conditions, produce twins each year. Another is that high fences are not required to hold them, although they will attempt to go under fences if the opportunity arises. The disadvantages include the fact that no satisfactory handling system has been developed for the species, and that they are flighty, prone to panic when confined, and very susceptible to capture myopathy (GF-S-1). In the small number of zoos where they have been maintained the greatest successes have come when all young, even those of bottle raised mothers, have themselves been hand-raised. The consequences of such a program are not only the cost, both emotional and financial, that is involved, but the potential for compromise of the immune system of such animals, and their consequent increased disease susceptibility.

The pronghorn is the only living member of the subfamily Antilocaprinae, of the family Bovidae. It is confined to North America and is found in many western states of the USA in pockets as far south as Mexico, and as far north as southern Saskatchewan and southern Alberta.

There are generally thought to be five subspecies of the pronghorn. The differences are slight, and the changes in them occur gradually between areas where they are found. Thus it is possible that the subspeciation is artificial.

Physical characteristics

In common with many ungulates for temperate regions weight vary with season. Adult does collected in Alberta ranged from 46.9 to 56.2 kg, and adult males may go as high as 64 kg, being heaviest in late summer. Both sexes are generally thinnest in May. Adults in Texas average 40 kg for females and 41 kg for males. One of the most striking features of the pronghorn, unique to the species, is the fact that the outer shell of the horns of the males are cast annually. Females may either have no horns at all, or small ones that are shorter than the ears.

Handling

There is almost no information on handling systems for captive pronghorn. Young animals less than about three days of age can be caught with a large hoop net as they hide in the grass or near other cover. Adults cannot be readily handled in any system of yards yet reported. Drug immobilization has been practiced, but even this is not without difficulty.

Carfentanil has been the most recently tested immobilizing drug, and Dr. B. O'Gara of...
Montana, who probably has more experience with pronghorn than almost anyone in North America, has found that it can be used satisfactorily on wild pronghorn.

Reproduction

Pronghorns are polygamous, with a breeding season generally lasting from mid-September until early October in the northern part of their range, and from late July until October in the south. Females may come into estrus for the first time at 16 months of age, but, in common with white-tailed and mule deer, animals may conceive in their first year of life, as young as 5 months of age, if they are well enough grown. The gestation period in captivity averages 252 days, and twins are much more common than single births.

Nutrition

In captivity pronghorn are usually kept on hoofstock pellets and hay, as their natural diet in the wild is highly variable from month to month, and cannot be matched for content in a farm grazing situation. However, there do not appear to have been any attempts to ranch pronghorn over extended areas that contain a wide variety of forage, so that information on this potential method of management is lacking.

Problems

Some of the problems of maintaining pronghorn in captivity have already been mentioned. Others include the fact that no data exist on appropriate methods of TB testing in this species, which would compromise a potential farmer in Canada under the current regulations. Pronghorn are susceptible to necrobacillosis (GF-S-5), lumpy jaw, and several other conditions, but as they have been little studied when maintained in close confinement, it is difficult to say how important any of these infectious conditions may be.

Bibliography