



The biology of the antelope (*Antilocarpa Americana*) in Montana  
by Paul D Buck

A THESIS Submitted to the Graduate Committee in Partial fulfillment of the requirements for the degree of Master of Science in Zoology of Montana State College  
Montana State University  
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Abstract:

The object of the present thesis is to present results of research work on the American Antelope (*Antilooapra americana*).

The American antelope belongs to a different family from those of the Old World, It is unique among all horned animals by its possession of deciduous horns with a permanent bony core. The antelope possesses a gall bladder in contrast to the deer. The eyes are exceptionally large for its size.

It has by far the keenest vision of any mammal. The teeth are used to determine the antelope's age but the horns show strong indications in the younger bucks. The average length for 69 specimens taken in Montana was 93 inches. This was normally reached at the end of the third year. The males averaged 10 per cent larger than the females. During the winter months the antelope congregate in bands but during the summer the older bucks separate from the does and their young\* Twins are the general rule. In Montana the antelope appears to be exceptionally free from disease and parasites.

Stomach analysis showed that 85.9 per cent of their food was browse. The principal plant eaten is sage. Cactus was dominant in several samples. Grass was second in number of items but the quantity was extremely small. Observations would indicate that antelope give but little competition

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PAUL D. RUSK

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Approved:



In charge of major work



Chairman, Examining Committee



Chairman, Graduate Committee

Bozeman, Montana  
June, 1947

RECEIVED  
JUN 11 1947

N378  
B8556

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*Miss G. Graduate Committee*

ABSTRACT

The object of the present thesis is to present results of research work on the American Antelope (Antilocapra americana).

The American antelope belongs to a different family from those of the Old World. It is unique among all horned animals by its possession of deciduous horns with a permanent bony core. The antelope possesses a gall bladder in contrast to the deer. The eyes are exceptionally large for its size. It has by far the keenest vision of any mammal. The teeth are used to determine the antelope's age but the horns show strong indications in the younger bucks. The average length for 65 specimens taken in Montana was 53 inches. This was normally reached at the end of the third year. The males averaged 10 per cent larger than the females. During the winter months the antelope congregate in bands but during the summer the older bucks separate from the does and their young. Twins are the general rule. In Montana the antelope appears to be exceptionally free from disease and parasites.

Stomach analysis showed that 85.9 per cent of their food was browse. The principal plant eaten is sage. Cactus was dominant in several samples. Grass was second in number of items but the quantity was extremely small. Observations would indicate that antelope give but little competition

to livestock.

The gross anatomy is similar to that of sheep. This is especially true of the reproductive system with the exception of minor details. The observation of the embryos indicates that identical twins may appear.

100%  
COTTON FIBRE  
ANNIVERSARY BOND  
BY  
FOX RIVER

INTRODUCTION

During the past forty years many American game animals have had to orient themselves to new environments. This has been primarily due to civilization which has changed the habitat of so many animals. It is one of the things that has led to the need of a better understanding of the factors that control wildlife.

There has been very little work done on the antelope in Montana. Due to this, the present study is only on the general biology of the antelope. It is hoped that this will lead to further work.

ACKNOWLEDGMENTS

The writer wishes to acknowledge his indebtedness to the Montana State Fish and Game Department for their splendid cooperation in securing valuable material for this thesis; to Jack Thompson, State Game Warden, Townsend, Montana for his assistance in the field. Last, but not least, I wish to acknowledge my indebtedness to various faculty members of Montana State College, especially to Dr. C. A. Tryon, Jr. for his guidance in the writing of this report.

### Classification

The antelope possesses a four chambered stomach and ruminates its food. Thus it is placed in the division of Ruminants with the deer, elk, cattle, sheep and goats. Due to its deciduous horns it has been separated into a single family, Antilocapridae and given the name Antilocapra americana. The genus name Antilocapra was compounded by Ord from the Latin word for antelope. Its hollow horns and genital organs resemble those of the true antelope or antelope gazelle of the old world. The name capra means goat. The presence of odor glands is similar to that of a goat. The lachrymal sinus is wanting in both the prong horn and the goat. It has four mammae like a deer while the goat has only two. In common with the hollow-horned ruminants, it has a gall bladder which is wanting in all Cervidae. The genus has only one species, americana. Vernacular names are prongbuck, pronghorn, antelope and loper. The family Antilocapridae is strictly North American and is peculiar in that it combines the features of several other families.

In general the antelope is smaller than the white tail deer. In contrast its horns are hollow and deciduous with a short, triangular process extending forward near its tips.































































































































