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## An Ecological-Physiological Study of Moose

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An Ecological-Physiological Study of Moose  
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Project Number 125

Twenty-five months of research have been completed on the ecology of the shiras moose in Grand Teton National Park and adjacent areas. The present period of field research, begun in June 1965, is scheduled to continue until August 1966.

Data is still being accumulated on the sex and age structure of this moose population in order to continue analysis of moose population dynamics. Over 600 moose jaws have been collected from hunter killed animals to determine the age structure of various population segments. A more precise aging technique has been developed for these jaws, which will allow the construction of population survivorship curves and life tables. To date, approximately 120 female moose reproductive tracts have been collected and analyzed. Over 125 testes from male moose have been collected to determine the physiological breeding capabilities of various aged male moose. Daily observations coupled with sex and age classification of moose continues to provide data on herd composition, behavior, etc.

The evaluation of factors influencing moose population dynamics is continuing. Thirty transects established on major winter range areas are used to measure annual plant use and condition of key moose forage species. Quantitative vegetation transects have been established to determine plant successional relationships in plant communities of importance to the moose population. This information can be interpreted to provide data on the effects of plant succession on the moose population. Nearly 30,000 instances of plant use have been recorded at moose feeding sites to determine which plant species are important moose forages in the various habitat types.

A total of 75 moose have been ear tagged. Relocations of these animals continue to provide invaluable information on home range sizes, breeding habits, etc.

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