

The Uinta Ground Squirrel in Jackson Hole:  
A Comparison of Two Populations in Different Habitats  
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Project Number 157

Uinta ground squirrels (Spermophilus armatus) occupy a variety of habitats in Jackson Hole. This study has been investigating squirrel populations in two conspicuously different habitat types in order to evaluate the means by which these populations adapt to different combinations of environmental factors (in this case differences in soil texture, the abundance of edible vegetation, and the nature of the overstory).

During the past four summers (April-August) squirrel populations in the two study areas have been compared with regard to: (1) population density and structure, (2) food habits in relation to available vegetation, (3) energy dynamics, (4) the nature of predation and interspecific competition, (5) general behavior, (6) timing of activity (daily and seasonal), (7) burrow structure and distribution and (8) the distribution, home range and dispersal movements of individuals.

The study is essentially a live-trapping operation in which captured squirrels are classified as to sex and age-class, weighed, examined as to condition (of pregnancy, etc), toe-clipped and dye-marked for individual identification, and followed to a burrow upon release. Burrows are marked and mapped. Reproductive tracts are collected and analyzed. Body fat is removed and weighed. Stomach contents are examined and compared to canopy coverage analyses of available vegetation. Observations are made concerning the timing of activity, general behavior and the nature of predation. Caloric values are being worked out for plant species and stomach contents. Different types of burrows have been excavated. The ability of squirrels to dig in different soil textures has been studied experimentally.

Field work is now essentially complete.

Supported by the New York Zoological Society.