

BEHAVIOR AND POPULATION DYNAMICS OF EUTAMIAS AMOENUS IN
NORMAL AND ABNORMALLY HIGH POPULATION DENSITIES

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The objective of the present study is the determination of the population parameters and social systems of two populations of the yellow pine chipmunk (*Eutamias amoenus luteiventris* Allen) differing in density. Many of the previous studies of sciurid social behavior have been done in enforced high density systems which were enclosed and maintained by the investigator. The occurrence of a natural high density area affords a unique opportunity to study the consequences and controlling factors of the great overlap of active areas.

The animals in the two areas were trapped, marked, and observed during the summer and fall of 1972. Behavioral parameters studied included aggressive interactions as in territory versus social dominance, cognitive behavior (anal and facial sniffing), self-maintenance and feeding behavior. The population dynamics include estimation of the age structure of the population from year to year recaptures, reproductive characteristics such as the percentage of breeding males and females, the age at first reproduction, number of litters, sex ratios and gestation period.

Trapping and observation of the two populations began in early spring of 1973 and continued through the fall.