

LIFE HISTORY STRATEGIES OF THE MONTANE VOLE, Microtus montanus

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Objectives

Emphasis in microtine rodent biology has historically been placed on population regulation and the population cycle. Until recently, little attention has been directed to behavior and sociality in microtine rodents, but work on the sociobiology of the montane vole (Jannett, 1978, 1980, 1981, 1982) is serving to integrate various aspects of the biology of this species so that its life history characteristics can be interpreted in an evolutionary framework. Work undertaken in 1982 continues previously initiated surveys of various topics, such as synchrony of population events in different populations, survivorship, scent gland development, patterns of cranial and dental variation, population trends in a sympatric species of vole (M. longicaudus), and reproduction in a primary predator, the shorttail weasel (Mustela erminea). It will also serve in preparation for more detailed studies of the social system and its demographic correlates to begin in 1983.

Methods

Voles were trapped over a three-week period in October in ten sample lines and gridded areas, each of which replicated samples from the same areas made in 1971-1977. Eyes were removed for age determination upon lens weight (Gourley and Jannett, 1975).

Results

302 Microtus montanus were obtained in the standard samples and grids. Breeding as evidenced by visible embryos was common in all populations sampled, and winter breeding will probably occur this year in these populations (cf. Jannett, in press).

Literature Cited

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