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Notes

A Note on the Microdistribution of the Red-backed Vole, *Clethrionomys gapperi*, in the E.N. Huyck Preserve, New York

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In a trapping study of small mammals on the E. N. Huyck Preserve (Rensselaerville, New York) it was found that *Clethrionomys gapperi* was captured only in the immediate vicinity of abandoned stone fences. *Peromyscus leucopus* were common throughout the study area. Captures of *P. leucopus* did not seem related to the presence or absence of abandoned stone fences. Thus, interspecific interactions seem unlikely to restrict *C. gapperi* to the areas near abandoned stone fences. The latter may provide essential nesting habitat or protection from predators for Red-backed Voles.

Key Words: Red-backed Vole, *Clethrionomys gapperi*, microdistribution, stone fences, New York.

The Red-backed Vole, *Clethrionomys gapperi*, is a small woodland rodent found in the Northern United States and Canada. Getz (1968) and Miller and Getz (1972, 1973) reported that the microdistribution of this species is influenced by many factors: water availability, vegetation, and interspecific interactions with other small mammal species.

This note reports the results of a trapping study of small mammals which yielded data on the local distribution of *C. gapperi* in relation to the White-footed Mouse, *Peromyscus leucopus*.

Small mammals were trapped on the E. N. Huyck Preserve, located in the Adirondacks region of New York (in Rensselaerville) between 17 and 23 October 1982. Museum Special traps were spaced approximately 10 m apart on lines run in several predominantly second-growth deciduous woodland areas of the Preserve. Some of the areas contain abandoned stone fences left from early attempts to cultivate the area.

Traps were baited with peanut butter and oatmeal, and were checked at least three times per day. The trapping procedures complied with the methods approved by the American Society of Mammalogists (Ad hoc Committee on Acceptable Field Methods in Mammalogy 1987). The characteristics of each trap station (including type of trees located nearby, presence of stumps, and presence of abandoned stone fences) were recorded to allow for analysis of small mammal microdistribution.

Eighty-nine *P. leucopus*, 12 *C. gapperi*, five shrews, *Blarina brevicauda*, and three deer mice,

Peromyscus maniculatus, were captured in a total of 879 trap nights. Ten of the 12 *C. gapperi* captured were trapped within one meter, and two within two meters, of an abandoned stone fence. The relationship between capture of *C. gapperi* and the presence of a stone fence within one meter of the trap site was statistically significant ($p < 0.01$, Chi-square test). In contrast, capture of *P. leucopus* was not statistically significantly related to the presence of a stone fence. Traps within one meter of a stone fence accounted for slightly more than 10% of the trap nights. These trap stations were found in a variety of different habitats. Other factors, such as the type of trees near trapping sites, did not have any discernible influence on the capture of either species.

Stone fences have been noted previously as one of several preferred microhabitats of *C. gapperi* (Miller and Getz 1972, 1973). However, in my study area, *C. gapperi* was found only in the immediate vicinity of abandoned stone fences. Since the presence or absence of a stone fence near a trapping site did not affect the chances of capturing *P. leucopus*, it seems unlikely that interspecific interactions were responsible for restricting *C. gapperi* to the vicinity of the stone fences. Instead, the latter may provide essential nesting habitat or protection from predators for the Red-backed Voles.

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Habitat Use by Snowshoe Hares, *Lepus americanus*, in Relation to Pelage Color

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Habitat use by Snowshoe Hares (*Lepus americanus*) was examined in relation to pelage color during vernal and autumnal molting periods. During periods with no snow, mottled and white hares ($\leq 75\%$ brown pelage) occupied sites with more understory cover than brown hares in two of six comparisons. Age and sex-related differences in habitat use did not explain these differences. Because the combined length of the vernal and autumnal molting periods is approximately 140 days, an ability of hares to occupy habitat in response to pelage color differences may have implications to predator avoidance and survival.

Key Words: Snowshoe Hare, *Lepus americanus*, habitat use, Maine, molt, pelage.

Like several other boreal vertebrates, Snowshoe Hares (*Lepus americanus*) undergo vernal and autumnal molts that result in predominantly brown and white pelages, respectively. Because of these molts, a Snowshoe Hare generally blends with the prevailing tone of its environment in any season. However, during the molting period, a population of hares includes members that are brown, mottled, or white (Grange 1932; Severaid 1942). I compared pelage color of hares to habitat features at capture sites during spring and autumn molting periods to determine if habitat use varied with pelage color.

Study Area and Methods

Habitat use of hares was studied in eastern (Cherryfield, 44°35'N, 67°55'W) and western (Pierce Pond, 45°15'N, 70°10'W) Maine, during 1981-1983. Cherryfield was located in coastal Maine and overstory vegetation of this area was predominantly hardwoods, including Red Maple (*Acer rubrum*), Gray and Paper birch (*Betula*

populifolia, *b. papyrifera*), and aspen (*Populus tremuloides*, *P. grandidentata*). Understory vegetation included Canadian Rhododendron (*Rhododendron canadense*), alder (*Alnus* spp.), and willow (*Salix* spp.). Pierce Pond was located approximately 190 km west of Cherryfield in the mountainous portion of Maine. Dominant overstory species included Red Spruce (*Picea rubrens*), Balsam Fir (*Abies balsamea*), Paper Birch, and Yellow Birch (*B. alleghaniensis*). Extensive logging in this area resulted in dense stands of regenerating spruce and fir. Single-door box traps (90 × 30 × 30 cm) were placed at 100-m intervals in a 7 × 7 grid on two sites in each study area (Cherryfield: Lawrence Creek, Pork Brook; Pierce Pond: Alder Road, Otter Pond). Grids within each study area were separated by at least 6 km, preventing hares from occupying more than one sampling grid. Traps were baited with alfalfa pellets and set for 8-15 days during spring (April-May) and autumn (October-November). At the initial capture, each hare was marked with unique