

White-footed Mouse, *Peromyscus leucopus*, Occupies Isolated Prairie Tract in Illinois

ROGER D. APPLGATE

Division of Science and Mathematics, Parkland College, 2400 W. Bradley Avenue, Champaign, Illinois 61821
Present address: Department of Inland Fisheries and Wildlife, Wildlife Division, P.O. Box 1298, Bangor, Maine 04401.

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Peromyscus leucopus was trapped in prairie grassland and prairie grassland/oldfield shrub habitats, 1.6 km W of Champaign, Illinois. These sites were 15 km from the nearest woodland/brushland and not contiguous with those areas.

Key Words: *Peromyscus leucopus*, White-footed Mouse, *P. maniculatus*, Deer Mouse, prairie, habitat selection, Illinois.

Peromyscus leucopus, the White-footed Mouse, is considered to be a woodland species over much of its range (Kaufman et al. 1983; Dueser and Shugart 1978; Van Deusen and Kaufman 1977), although Hoffmeister and Mohr (1957: 162) regard this species as a inhabitant of brushland and fingers of brushland extending into prairies. During the mammal-inventory stage of a remnant prairie restoration project near Champaign, Illinois, in April 1983, *P. leucopus* was trapped on an isolated prairie tract. The study area (40°06'51"N, 88°15'50"W) was a railroad right-of-way 1.6 km W from the city and approximately 15 km from the nearest woodland or brushlands. No areas of brushy or woody habitat connected the study site to adjacent brushland or woodland areas, but portions of the study site contained < 1 woody stem/m². The surrounding area was cultivated row crops or grazed pasture. Trapping in crop and pasture fields yielded no specimens of *Peromyscus* during this study.

Trapping was conducted with snap-traps on 4 transects, each 120 m long with 2 traps per station and 10 stations. Two transects consisted of prairie grasses (*Andropogon gerardii*, *A. scoparius*) and two transects were composed of grasses and *Prunus serotina* and *Rosa multiflora*. Trapping sessions lasted 10 consecutive days on each transect. I used Feldhamer et al. (1983) to separate *Peromyscus* spp. Specimens were deposited with the Museum of Natural History, University of Illinois, Champaign, Illinois.

P. leucopus constituted 49% (N = 41) of the total mammals trapped on the study area in 414 trapnights of effort. *P. maniculatus bairdii*, considered to be an inhabitant of grasslands, cultivated fields, and oldfields (Finck et al. 1986; Hoffmeister and Mohr 1957: 159), accounted for 34% (N = 14) of the catch. *P. leucopus* was trapped on all of the four transects; 35% (N = 7) of the

captured *P. leucopus* were taken in the two grassland transects with the remaining animals (N = 13) being trapped on the two transects with mixed woody/grassy vegetation. Three of 7 *P. leucopus* trapped in grassland were adult males, 1 adult female, and 3 subadults (2♂, 1♀). In woody habitats, *P. leucopus* (N = 13) were: adult male (3), adult female (5), subadult male (4) and subadult female (1). All adult females were pregnant.

P. leucopus has been documented in grassland sites that were contiguous with woodlands, a factor that could allow dispersal of mice into grasslands from the adjoining woods (Snyder and Best 1988; Adler et al. 1984; Kaufman et al. 1983; Kaufman and Fleharty 1974; Geluso 1971). Clark et al. (1987) reported that *P. leucopus* foraged in prairie and lived in adjacent woodland ravines on their study area in Kansas. *P. leucopus* was absent from shrub sites with grassy understory (Van Deusen and Kaufman 1977); thus my observation of *P. leucopus* in grass dominated and shrub/grass habitats not contiguous with woodlands, is notable.

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