

The Eastern Harvest Mouse, *Reithrodontomys humulis*, in Northcentral Oklahoma

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Reithrodontomys humulis, the eastern harvest mouse, is a small brownish-gray mouse with a blackish middorsal region (1). The tail is bicolored, dark brown above, grayish-white below, and the ventral portion of the body is grayish-white or ash colored (2). Through much of its range in the southeastern United States it is the only harvest mouse. However, in eastern Oklahoma it occurs with *R. fulvescens* and *R. montanus* (2).

This note reviews the published literature for *R. humulis* in Oklahoma and reports the capture of 14 additional specimens from two localities in Post Oak-Blackjack Uplands and Tallgrass Prairie Rolling Hills physiognomic regions. It also extends the distributional range of the species within the state. Prior to this report, *R. humulis* was known to occur in the Oak-Hickory Ozark Plateau, Oak-Hickory-Pine Ouachita Highlands, Cypress-Oak Floodplains, and Tallgrass Prairie Rolling Hills physiognomic regions of eastern and southeastern Oklahoma (1).

Formerly, only 22 specimens of *R. humulis* from only four localities had been taken in Oklahoma. The first state record was reported from Robbers' Cave State Park, 5 mi. N Wilburton, Latimer Co., by Jones and Anderson (3). Smith (4) reclassified to this species 13 specimens from 5 mi. N Colbert, Bryan Co., originally identified as *R. montanus griseus* by McCarley (5). Bradley et al. (6) collected seven individuals from 4.8 km E Tecumseh, Pottawatomie Co., and one specimen from Garnett, Tulsa Co., was reported by Caire et al. (1).

The following description of 14 specimens extend the range of *R. humulis* northwestward 91 km from the nearest published locality in Tulsa Co. (1). Two adult specimens (one male and one female; deposited in the Oklahoma State University Collection of Vertebrates) were collected 13.5 km W Stillwater, Payne Co., 0.5 km W of the junction of highways 51 and 51C in February 1990. This collection site in the Post Oak-Blackjack Uplands physiognomic region (1) was a regenerating pasture of little bluestem (*Schizachyrium scoparium*), big bluestem (*Andropogon gerardi*), sand plum (*Prunus angustifolia*), and sumac (*Rhus* sp.) in a transition zone between prairie and blackjack oak (*Quercus marilandica*). Both specimens were identified as *R. humulis* by the presence of a labial ridge on the lower molars and pelage characters. Body measurements (in mm) were: total length, 110, 118; length of tail, 49, 53; length of hind feet, 16, 14; length of ears, 11, 12; and weight, 5.6, 8.4 g. The male was karyotyped following the nondifferentially stained chromosome procedures modified from Baker et al. (7) and had $2N=50$. Other species collected in the area were *Sigmodon hispidus*, *Peromyscus leucopus*, and *R. fulvescens*.

Twelve specimens from the Tallgrass Prairie Rolling Hills physiognomic region (eight males and four females; deposited in the University of Central Oklahoma Collection of Vertebrates) were collected in The Tallgrass Prairie Preserve in Osage Co. from December 1991 to May 1992. These specimens were captured in Sherman live traps from seven sites characterized by little bluestem, big bluestem, Indian grass (*Sorghastrum nutans*), and switch grass (*Panicum virgatum*). Mean measurements (in mm) were: total length, 114.3; length of tail, 50.5; length of hind foot, 14.9; length of ear, 8.8; and weight 7.4 g. A male and female were karyotyped; the result matched that reported by Bradley et al. (6) for *R. humulis* ($2N=50$; $FN=48$). Other species captured with *R. humulis* at these sites were *Blarina hylophaga*, *Cryptotis parva*, *R. fulvescens*, *R. montanus*, *P. maniculatus*, and *S. hispidus*.

In addition to the above specimens, one (OKSU 8859) captured 1 mi. W Stillwater, Payne Co., on December 3, 1967, and deposited in the Oklahoma State University Collection of Vertebrates was reclassified from *R. montanus* to *R. humulis*. We also identified an uncatalogued specimen collected in 1981 from Payne Co. as *R. humulis* (now OKSU 11034). Caire et al. (1) reported that several specimens were collected at the Black Fox nuclear reactor site near Inola, Rogers Co., during an environmental impact study, but disposition of the specimens was not known and confirmation of identification was not possible.

Identification of *R. humulis* requires close examination of the cusp pattern and a comparison of pelage characteristics with those of known specimens. Other study skins deposited in museum collections may also have been misidentified as *R. montanus* or *R. megalotis*. A specimen of *R. humulis* reported by Caire et al. (1) from Tulsa Co. was collected in 1936 by Blair (8) and originally identified as *R. montanus griseus*. It was referred to *R. humulis* by E. Hooper of The University of Michigan Museum of Zoology. The actual location where this specimen was taken is uncertain. Blair's field notes indicate the specimen was taken in Rogers Co. and the "Garnett" on the skin tag referenced his Garnett Prairie collection site rather than Garnett, the Tulsa County town.

Because few specimens of *R. humulis* have been captured in the state, essentially nothing is known of its ecology or reproductive biology in Oklahoma. Only two specimens were captured during 1400 trap-nights in Payne Co., and in The Tallgrass Prairie Preserve in Osage Co. just 12 specimens in 6745 trap-nights were captured. Without extensive trapping efforts directed specifically toward the collection of small mammals (less than 10 g), little new information about this species will be learned except through chance captures.

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