NEW NORTHEASTERN ILLINOIS LOCALITY RECORDS FOR THE WESTERN HARVEST MOUSE *(REITHRODONTOMYS MEGALOTIS DYCHEI)*

RICHARD C. STUPKA, JAMES E. BROWER, AND JAMES HENRIKSEN

Department of Biological Sciences
Northern Illinois University
DeKalb, Illinois 60115

ABSTRACT.—Northeastern localities of *Reithrodontomys megalotis* are reported for Will, Dupage, and DeKalb Counties. Its distribution and movement patterns within Illinois are discussed.

Pinkham and Meade (1970) summarized the distribution of *R. megalotis* in Illinois, citing 16 localities, and adding two additional locations in Champaign County. The present known localities, including our findings are shown in Figure 1. Between 16 and 29 June, snap traps were set and once a week between 7 and 29 July, traps were set in a prairie habitat along a railroad. The location bordered U.S. route 30, 10 miles N.W. of Plainfield, Will County, Illinois. A total of 5400 trap-nights were set. Three *R. megalotis,* two males and one female, were caught during the June trapping period. All three speciments were trapped within twenty meters of each other in a stand consisting largely of bromegrass (*Bromus inermis*) and interspersed with patches of osage orange (*Maclura pomifera*).

Measurements from the two males (NIU 933, and HDW 1149) are 135, 69, 18, 13 and 120, 64, 15.6, 12.2 mm for total length, tail length, hind foot, and ear from notch respectively. The skull measurements were. 20.5, 31, 9.5, and 20.4, 9.5, 10.0, 9.5 mm for total length, interorbital width, zygomatic breadth, and breadth of brain case respectively. The external measurements for the females (NIU 932, skull destroyed) are 129, 59, 15, 11. On the basis of coloration, distribution, and measurements these specimens were assigned to the subspecies *R. m. dychei,* (Hoffmeister and Warnock, 1955 and Jones and Mursaloglu, 1961).

Evidence for the presence of the Western harvest mouse in DeKalb County comes from owl pellet data. A collection of 20 pellets were gathered from a cultivated stand of various coniferous species on 15 May, 1971, 2½ mi. North of DeKalb, Illinois along Rich Road. The pellets were deposited by a long-eared owl (*Asio otus*) which appeared to be a resident in that stand at that time. One of the pellets contained the remains of one skull of *R. megalotis.* Since we have no information on the range of this individual owl, we cannot know the original source of the skull. However, the owl was sited at later times in this stand and there were 20 pellets collected and numerous scattered remains of decomposed owl pellets. These facts indicate that the owl was a resident in this stand and not just a transient or a recent immigrant.

Mr. Robert H. Satterfield collected five specimens of *R. megalotis* in a railroad prairie in DuPage County, Barrington, Illinois in 1962 (personal communication to Harlan D. Walley). These specimens are currently being deposited in the NIU collection. These localities in Will and DuPage counties extend the present localities approximately 90 miles N.E. of the closest known localities in Stark, Whiteside, and Carroll Counties.

Previous collectors of the harvest mouse in Illinois have emphasized the

FIGURE 1.—Map showing current records for *Reithrodontomys megalotis* in Illinois.

extreme number of trap nights required in obtaining specimens, and have also mentioned the sporadic occurrence of this species in this state. Birkenholz (1967) suggested that the dispersion of the harvest mouse in Illinois follows the alterations of the habitat by man. These alterations include the clearing of woodland and maintenance of prairie habitat by burning along railroads. However, it is very difficult to make judgments on its true range extention just on the basis of new locality data of a species that is rare and sporadic in its distribution. *R. megalotis* probably ranges sporadically throughout the northern portion of Illinois, and will likely be found in rare numbers throughout the prairie peninsula of Illinois and extensions of the prairie created by farming and railroad rights of way.

The authors wish to thank Mr. Harlan Walley for his aid and comments on these findings. This research was supported by the National Science Foundation Student Originated Studies grant no. GY-9135.

Literature Cited

Birkenholz, D. E. 1967. The harvest mouse (*Reithrodontomys megalotis*) in central Illinois. *Trans. Ill. Acad. Sci.* 60: 49-53.

Hoffmeister, D. F., and J. E. Warnock, 1955. The Harvest Mouse in Illinois and its Taxonomic Status. *Trans. Ill. Acad. Sci.* 47: 161-164.

Jones, J. K., Jr., and B. Mursaloglu, 1961. Geographical Variation in the Harvest Mouse, *Reithrodontomys megalotis* on the Central Great Plains and in Adjacent Regions. *Univ. Kansas Publ. Mus. Nat. Hist.* 14(2): 9-27.

Pinkham, C. A., and S. Meade, 1970. The Southeastward Movement of the Western Harvest Mouse (*Reithrodontomys megalotis*) in Illinois. *Trans. Ill. Acad. Sci.* 63: 339-340.

Satterfield, R. H., 1971. (Pers. Comm.).

Manuscript received November 15, 1971.