

RANGE EXTENSION OF THE LEAST WEASEL AND PIGMY SHREW IN ILLINOIS

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ABSTRACT.— Specimens of the least weasel collected in Woodford, Champaign and Monroe counties and a specimen of the pigmy shrew collected in Monroe County, provide new information on the distribution of these species in Illinois.

The least weasel (*Mustela rixosa*) has been considered an uncommon or rare mustelid in Illinois with a range limited to the northeastern section of the state (Necker and Hatfield, 1941; Hoffmeister, 1956). Since the recording of the Champaign County specimen by Hoffmeister (1956), four other animals have been taken in that county, three within the city limits of Champaign. Hurst H. Shoemaker, Department of Zoology, University of Illinois, Urbana, live-trapped an adult male on February 22, 1958 and kept it in captivity until it accidentally escaped August 10, 1958. Another male was taken July 14, 1961 and this specimen (skin and skeleton No. 26295) was added to the collections of the Museum of Natural History, University of Illinois. The third animal, a male, was caught in a window well in April, 1961 by Richard R. Graber, Illinois Natural History Survey, Urbana, who kept the weasel until its death December 2, 1961. The fourth was caught by a dog two miles northeast of Urbana, March 1, 1962 and was brought alive to Mrs. Richard Graber who kept the animal in captivity until releasing it near the point of capture in October, 1963.

In addition to these four Champaign County records this paper presents an account of remains of *M. rixosa* from two other Illinois counties. One supplements the generally accepted range of this weasel in the north-central region of the state while the other indicates the occurrence of this mustelid in south-

western Illinois, probably in prehistoric times.

On November 17, 1964, the senior author and M. K. Hoffman of the Illinois State Museum staff each collected a short-eared owl (*Asio flammeus*) approximately three and one-half miles east of Minonk, Woodford County. One owl, a male, contained a nearly complete, partially digested carcass of a young least weasel that certainly had been captured the preceding night, probably within a short distance of where these wintering owls were flushed.

The other noteworthy specimen of *M. rixosa* from Illinois consists of the lower jaw and the anterior half of a skull, probably from the same animal; these were recovered in July, 1961 during excavation of a fissure fill located in the limestone bluff of the Mississippi River approximately four miles southwest of Columbia, Monroe County, Illinois (Parmalee, Bieri, and Mohrman, 1961).

While bones of the long-tailed weasel (*Mustela frenata*), representing nearly all elements, were fairly common (124) and at least 10 individuals were represented, only jaw and skull sections of one *M. rixosa* were encountered. This suggests that the least weasel was probably uncommon to rare in that local area. It is impossible to determine the time period in which the least weasel inhabited this section of southwestern Illinois. Recovery of bones of species now occurring further north in Illinois or animals extirpated in the state, plus geological evidence, suggest that the accumulation of animals in this natural death trap began at or soon after the last glacial retreat. Whether these skeletal remains of *M. rixosa* were from an animal of recent occurrence or of one from a prehistoric time period, this Monroe County record extends the range (present or former) of the least weasel

in Illinois approximately 165 miles southwest of its established, southernmost locality (Champaign County).

Hoffmeister and Mohr (1957) state that "The only specimen of the pigmy shrew recorded for Illinois is from Palatine, in Cook County." Recovery of a complete right lower jaw with full dentition and the anterior half of a skull (both I and Pm3; left M₁) of the pigmy shrew (*Microsorex hoyi*) from the same Monroe County cave deposit constitutes the second Illinois record of this northern species and a southwestern extension of its (former or present) range in Illinois of nearly three hundred miles.

Remains of the short-tailed shrew (*Blarina brevicauda*) and the least shrew (*Cryptotis parva*) were abundant in the cave deposit with over 1,000 individuals of the latter species represented. Fifty-one jaw and skull elements of the southeastern shrew (*Sorex cf. longirostris*) were recovered; compared with these three species of shrews, *M. hoyi* was rare in that river bluff area. As indicated by the presence of porcupine, least weasel and certain other northern forms, remains of the pigmy shrew from this Monroe County cave point to a prehistoric population rather than an ex-

isting one and suggest a more northern and cooler environment at one time in that region of southwestern Illinois.

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