

BRIEF NOTE

The Status of Ermine (*Mustela erminea*) in Ohio¹

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ABSTRACT. The status of ermine as regular inhabitants of Ohio has been unclear. Previously, only three records were known from the state. In this study, size 0 leghold traps and 8 x 8 x 25 cm Sherman traps were used to capture five ermine in Ashtabula and Trumbull Counties during summer 1987 and two in Trumbull County in 1988. Ermine are permanent residents in at least Trumbull County.

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INTRODUCTION

The ermine, or short-tailed weasel (*Mustela erminea*), has the most widespread distribution of the members of the genus *Mustela*, but is mainly a boreal, circumpolar species (Hall 1981, Svendsen 1982). Ohio is on the edge of the ermine's range, but its occurrence as a regular inhabitant of the state was considered improbable by Gottschang (1981).

Prior records are confusing. The species was listed as part of Ohio's fauna by Kirtland (1838) and Brayton (1882), but neither author listed the more widespread long-tailed weasel (*M. frenata*). This seems paradoxical in that long-tailed weasels certainly would have been much more common and widespread in Ohio than ermines, especially in the late 1800s. Kirtland's 1938 record is further puzzling in that he offered the remark that the ermine "is occasionally met with, but is mistaken for a *white weasel*" [Kirtland's emphasis] - presumably, a white weasel would have been an ermine. A record claiming to be based on the first specimen of an ermine from Ohio was reported by Henninger (1921), but subsequent examination determined the specimen to have been a long-tailed weasel (Hall 1937).

Prior to this study, only three records were known: one each from Cuyahoga County in 1937 (Bole and Moulthrop 1942), Ashtabula County in 1964, and Lake County in 1978 (Gottschang 1981). The present study attempted to determine if ermine were more common than the records indicated, and if they were present in sufficient numbers to be considered permanent residents.

MATERIALS AND METHODS

Trapping was conducted in Ashtabula and Trumbull Counties during July and August 1987. Ermine were trapped with size 0 leghold traps placed under a 60 x 60 x 40-cm fiberglass tub, into which a small opening had been cut. A live mouse (*Peromyscus*) caged in an 8 x 8 x 6-cm/cage was placed under the tub as bait, with the trap between the opening and the bait. Sherman live traps (8 x 8 x 25 cm) were also used, baited with pine shavings used as bedding in cages of white mice. Traps were placed in or near brush piles, along the edges of dike roads, in

woodlots, and in ditches and other travel routes. Most were near bodies of water such as marshes, ponds, and slow-flowing rivers. Captured ermines were sacrificed, body measurements were taken, and the specimens were deposited with the Museum of Zoology at The Ohio State University.

RESULTS

A total of 243 trap nights (140 leghold and 103 Sherman) during summer 1987 resulted in the capture of one female and four male ermines. Two males were captured 10 days apart in Sherman traps placed at the intersection of two marsh dikes on the Mosquito Creek Wildlife Area in Trumbull County. A male and a female were captured within 2 km of one another on the Grand River Wildlife Area in Trumbull County. The male was captured in a leghold trap set in a small woodlot bordered by the Grand River, a gravel road, and a dike. The female was captured in a Sherman trap placed in a brush pile at the edge of a large woodlot. These four were the first records of ermine for Trumbull County.

The remaining male was captured at the northern end of Pymatuning State Park in Ashtabula County. It was taken in a Sherman trap placed on the ground near some fallen trees, in a mixed hemlock-oak-maple woodlot that contained small pools of standing water. This was only the second record from Ashtabula County.

Two additional ermine were accidentally taken in Sherman traps set for mice in July and October 1988, in Trumbull County. Both were females; one was found in a barn, and one in an adjacent woodlot on the Mosquito Creek Wildlife Area.

Date and county of capture, sex, and body measurements of the seven ermine were determined and recorded (Table 1).

DISCUSSION

Results of this study show that ermine are more common than previously indicated. The absence of records probably results from a combination of factors, including a lack of effort, a need for specialized trapping techniques, a failure to distinguish between *M. erminea* and *M. longicauda*, and a relatively low target population. It is not likely that the recent records are a result of an increase in the population. Although not analyzed by

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TABLE 1

Date and county of capture, sex, and body measurements of ermine captured in northeastern Ohio, 1987 and 1988.

Date	County	Sex	Body Measurements (mm)			
			Total Length	Tail Length	Hind Foot	Ear
7/26/87	Trumbull	M	283	74	32	18
8/2/87	Trumbull	F	239	52	29	13
8/6/87	Trumbull	M	295	77	32	14
8/16/87	Trumbull	M	280	68	32	19
8/27/87	Ashtabula	M	263	67	30	18
7/29/88	Trumbull	F	231	53	29	—
10/15/88	Trumbull	F	233	56	27	13

species, Division of Wildlife annual fur harvest records since the 1951-52 trapping season show a long-term decline in the state-wide weasel population, and only one weasel has been reported in the fur harvest from Ashtabula, Lake, or Trumbull County since the 1984-85 trapping season.

It is extremely unlikely that the individuals captured in Trumbull County were transient wanderers from Pennsylvania, especially the female ermine. Females have been found to be relatively site-specific and rarely travel long distances, and the movement of all but transient males usually corresponds to the distribution of females (Sandell 1986). The longest recorded movement by female ermine in a mark/recapture study in New Zealand was 5.6 km (King and McMillan 1982), and Erlinge (1977) found that female ermine were never recaptured more than 1 km from their original capture site.

The relative frequency of capture during this study, therefore, argues convincingly that the species is a permanent resident of the state. It is certainly a resident of Trumbull County, and our Ashtabula County record,

along with the other relatively recent records from Ashtabula and Lake Counties, are indicative of an established population in northeastern Ohio. Further trapping needs to be done to determine the full extent of the range for ermine in Ohio.

Sherman traps baited with soiled pine shavings from the cages of laboratory mice proved to be a much more efficient method for capturing ermine than were leghold traps. They were also much easier to set, could be quickly set in large numbers, and were easily concealed. These traps also more closely mimic a mouse tunnel, which may further attract ermine. Therefore, we recommend that Sherman traps, or those of a similar tunnel type, be used in future collecting efforts.

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