

THE HERPETOFAUNA OF PREBLE COUNTY, OHIO¹

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ABSTRACT

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Collections of reptiles and amphibians from Preble County, Ohio, are quite limited. Many specimens previously recorded from the county, deposited at Miami University, Oxford, Ohio (P. M. Daniel, personal communication, 1968), and the Toledo Zoological Society (J. S. Hipp, personal communication, 1968) cannot be located. The loss of these specimens reduces the previously documented list of amphibians and reptiles from Preble County to 34 preserved specimens of 16 species. From 1967 to 1971 over 80 reptiles representing 17 species and over 100 amphibians representing 17 species were collected in Preble County. Seven species of reptiles and eight species of amphibians had not previously been reported for the county. *Eumeces inexpectatus* (KU 150923), found during this study, had not previously been reported from the state. One species, *Pseudacris triseriata* (previously reported as *nigrita* by Walker, 1946), was not found during this study.

Preble County, located in the Ohio Till Plains physiographic province in southwestern Ohio, is bordered on the west by the Indiana state line, on the south by Butler County, on the east by Montgomery County, and on the north by Darke County (see Wood and Duellman, 1947). The human population is sparse, with no large metropolitan areas. The county is subdivided into 12 townships which were generally surveyed as to habitat availability. All localities mentioned in the paper refer to these townships (fig. 1). Much mixed deciduous forest and tall grass prairie remnant have

been cleared for farming, and virtually all of the flat-to-rolling land north of the Camden Moraine is tilled or grazed. The only remaining natural areas are on steep hillsides or along stream bottoms. The southernmost townships (Israel, Somers, and Gratis) are quite rugged and have good stands of mixed deciduous forest with American Beech (*Fagus grandifolium*), Sugar Maple (*Acer saccharum*), Red and Black Oak (*Quercus rubra* and *Q. velutina*), and Hickory (*Carya ovata*), but areas in various stages of old field succession are dominated by Osage orange (*Maclura pomifera*), Redbud (*Cercis canadensis*), and Red Cedar (*Juniperus virginiana*).

Two major moraines transect the county. The Farmersville Moraine traverses Jefferson, Washington, and Lanier Townships, and the Camden Moraine (which is broader and more rugged) extends through southern Jefferson Township and Jackson, Dixon, Israel, Somers, and Gratis Townships. Most of Jackson and Dixon Townships are flat.

SOURCE OF MATERIALS

Specimens were collected where suitable habitat and cover were available. In addition a few residents of the county were asked to collect any animals they found. Night road collecting during rains proved fruitful in obtaining some specimens. The following museum collections were searched for pertinent material: Dayton Museum of Natural History (DMNH), Toledo Zoological Society (TZS), Ohio State University Museum (OSUM), Carnegie Museum (CM), Miami University (MU), University of Kansas Museum of Natural History (KU), and the National Museum of Natural History (USNM).

COMPOSITION OF HERPETOFAUNA

Specimens reported by Walker (1946) and Conant (1951) that were listed as being in the collections of the museums

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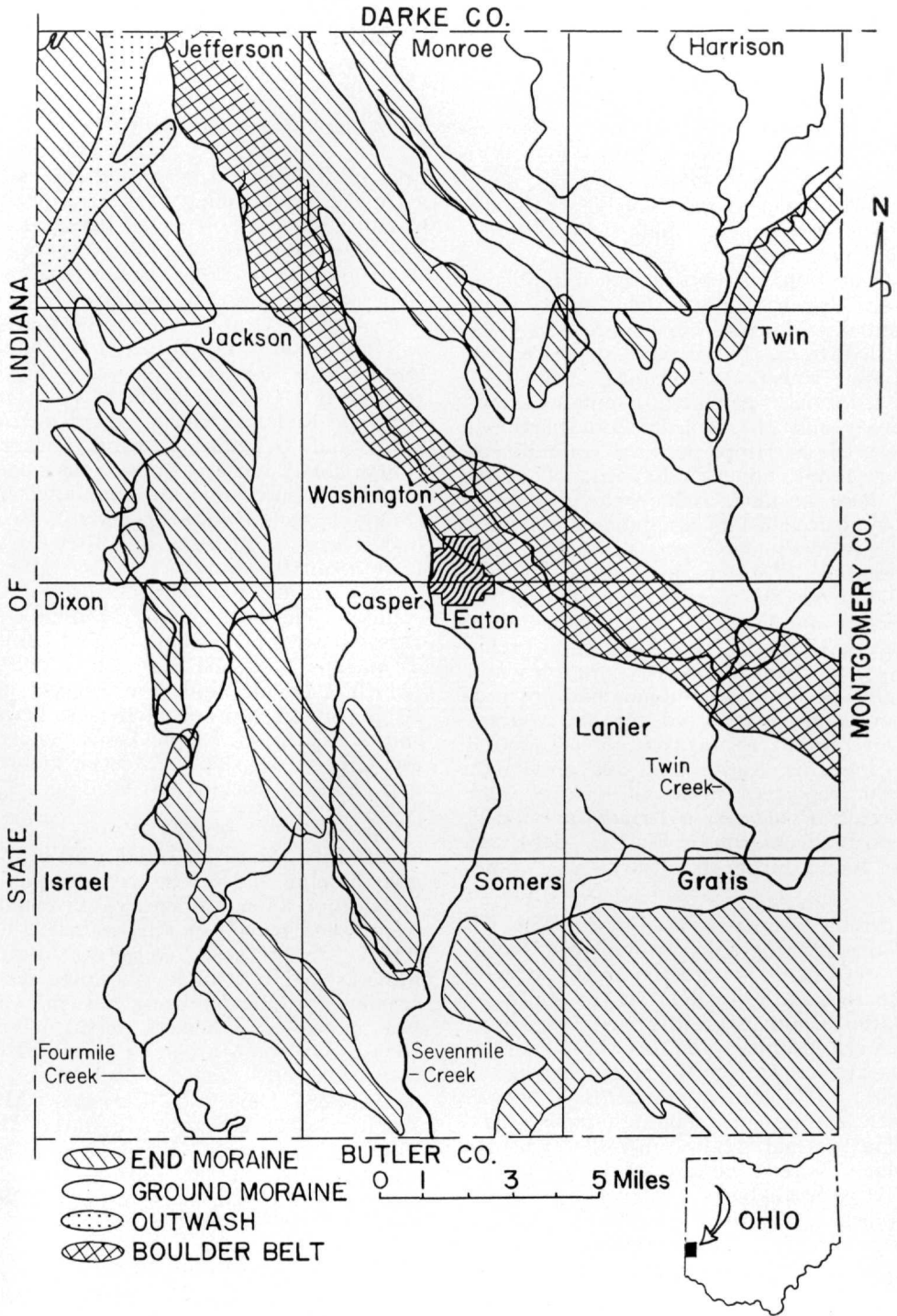


FIGURE 1. Glacial till map of Preble County.

are noted in tables 1 and 2. Seventeen specimens of reptiles, of which five were the only records of a species from the county, have been lost or destroyed. A total of eight species of reptiles and 12 amphibians were recorded from Preble County prior to this study. Sixteen species were collected, of which five were not previously recorded from the county.

Species new for the county are *Ambystoma jeffersonianum*, *A. maculatum*, *A. texanum*, *Plethodon richmondi*, *Bufo americanus*, and *Rana clamitans melanota*.

One species, *Pseudacris triseriata*, which had previously been reported (as *P. nigrila* by Walker, 1946) from Preble County, was not found. A visit to Walker's original collection site (Harrison

TABLE 1
Amphibians from Preble Co.

Species	Township Collected	Museum No.**	Relative Abundance	Habitat***
SALAMANDERS				
<i>Ambystoma jeffersonianum</i>	Israel	KU 150874	Rare	3
	Gratis	CMNH*	Rare	3
<i>Ambystoma maculatum</i>	Lanier	KU 150876	-----	3
	Harrison	KU 150875	-----	3
<i>Ambystoma texanum</i>	Somers	KU 150877	Uncommon	2
<i>Desmognathus f. fuscus</i>	Washington	KU 150886	Very common	1
	Dixon	KU 150885	-----	1
	Jefferson	MU*	-----	3
	Lanier	MU	-----	1
	Twin	KU 150884	-----	1
	Israel	KU 150883	-----	1
	Gratis	KU 150881-2	-----	1
	Somers	KU 150878-80	-----	
		OSUM 300	-----	
		MU, CMNH	-----	1
<i>Eurycea b. bislineata</i>	Somers	KU 150888-90	Common	
		OSUM 1282, 1293	-----	
		USNM 76825	-----	1
	Israel	MU, CMNH	-----	
<i>Eurycea l. longicauda</i>		OSUM 1139	-----	
	Casper	OSUM 1436	-----	
	Somers	KU 150891-2	Uncommon	
<i>Plethodon c. cinereus</i>		MU, CMNH	-----	1
	Israel	OSUM 1134-35	-----	
	Somers	KU 150893	Common	5
		OSUM 1181	-----	
	Dixon	KU 150894	-----	5
<i>Plethodon r. richmondi</i>	Gratis	CMNH	-----	5
	Israel	OSUM 600	-----	
	Somers	KU 151815	Rare	4
FROGS AND TOADS				
<i>Acris c. blanchardi</i>	Somers	KU 150901-2	Very common	2
		08-10	-----	
	Gratis	KU 144556-7	-----	3
		KU 150907	-----	
	Harrison	KU 150906	-----	2
		CMNH	-----	2
	Jefferson	KU 150905	-----	2
		CMNH	-----	2
	Monroe	KU 150905	-----	2
		CMNH	-----	2
	Dixon	CMNH	-----	3
	Israel	KU 150903	-----	3
	Washington	CMNH	-----	3
<i>Bufo a. americanus</i>	Somers	KU 150895, MU	Very common	9
		OSUM 1519	-----	
	Monroe	KU 150904	-----	9
Lanier	KU 150897, CMNH	-----	9	

TABLE 1. *Continued.*

Species	Township Collected	Museum No.**	Relative Abundance	Habitat***
<i>Bufo w. fowleri</i>	Gratis	KU 150900, MU	Very common	9
	Somers	KU 150898	-----	9
	Monroe	KU 150899	-----	9
	Israel	CMNH	-----	9
	Washington	CMNH	-----	9
<i>Hyla c. crucifer</i>	Israel	KU 150911	Rare	3
<i>Hyla versicolor chrysocelis</i>	Jefferson	OSUM 742	-----	
	Somers	MU	Common	4
<i>Pseudacris triseriata</i>	Jefferson	OSUM 1880	-----	
	Jefferson	OSUM 592	Possibly extinct	
<i>Rana catesbeiana</i>	Somers	KU 150903, CMNH	Common	1
		OSUM 1593	-----	
	Gratis	KU 150912	-----	3
	Washington	KU 150914	-----	3
<i>Rana c. melanota</i>	Monroe	OSUM 522	-----	
	Gratis	KU 150918	Very common	1
	Israel	KU 150917	-----	3
	Lanier	KU 150916	-----	3
	Jackson	KU 150915	-----	2
	Somers	CMNH	-----	2
	Jefferson	OSUM 742	-----	
<i>Rana p. pipiens</i>	Monroe	CMNH	Common	3
	Somers	OSUM 1653	-----	
	Gratis	KU 150919	-----	1
	Harrison	KU 150920	-----	2
	Washington	OSUM 514	-----	

*Specimens not yet catalogued or no numbering or catalogue system in use.

**See "Source of Materials" for museum abbreviations.

***Habitat description: (1) limestone stream; (2) sand or mud-bottomed stream; (3) artificial lake or pond; (4) oak-hickory woodland; (5) beech-maple woodland; (6) "old field"—Osage orange—Blackberry; (7) wet grassland or prairie; (8) tilled farm land; (9) cosmopolitan (found in all areas).

TABLE 2
Reptiles from Preble Co.

Species	Township Collected	Museum No.**	Relative Abundance	Habitat*
TURTLES				
<i>Chelydra s. serpentina</i>	Somers	MU	Common	3
	Gratis	MU	-----	1
<i>Chrysemys p. marginata</i>	Israel	KU 150972	Rare	3
<i>Terrapene c. carolina</i>	Gratis	KU 150973	Common	5
<i>Trionyx s. spinifera</i>	Washington	KU 150974	Uncommon	2
LIZARDS				
<i>Eumeces fasciatus</i>	Somers	KU 150922	Common	5
	Gratis	CMNH	-----	5
	Israel	KU 150921	-----	4
<i>Eumeces inexpectatus</i>	Israel	KU 150923	Very rare	5
<i>Eumeces laticeps</i>	Israel	KU 150924	Rare	3
SNAKES				
<i>Coluber c. flaviventris</i>	Israel	KU 150926	Common	4
	Gratis	KU 150925	-----	6
	Somers	CMNH	-----	6

TABLE 2. *Continued.*

Species	Township Collected	Museum No.**	Relative Abundance	Habitat*
<i>Diadophis p. edwardsi</i>	Somers	KU 150928, CMNH	Rare	5
	Israel	KU 150927	-----	5
	Lanier	KU 150929	-----	6
<i>Elaphe o. obsoleta</i>	Gratis	KU 150931	Common	6
	Washington	KU 150930	-----	8
	Somers	CMNH	-----	5
		OSUM 228	-----	
<i>Heterodon p. platyrhinos</i>	Somers	KU 150934	Uncommon	4
	Gratis	KU 150935, CMNH	-----	6
<i>Lampropeltis t. triangulum</i>	Monroe	KU 150938	Uncommon	8
	Somers	KU 150936	-----	6
	Gratis	KU 150937	-----	7
	Jackson	CMNH	-----	8
	Israel	CMNH	-----	4
		OSUM 440	-----	
<i>Natrix s. sipedon</i>	Gratis	KU 150953, 56, 59	Very common	1
	Israel	KU 150921	-----	3
		OSUM 440	-----	
	Somers	KU 150954-5, 58, 60, CMNH	-----	3
		OSUM 441	-----	3
		USNM 129056-7	-----	
	Washington	KU 150950, 5	-----	3
	Casper	KU 150949	-----	2
	Jefferson	KU 150957	-----	2
	Twin	KU 150948	-----	1
<i>Regina kirtlandi</i>	Washington	KU 150939	Rare	2
	Gratis	KU 150940, 41	-----	2
	CMNH	-----		
<i>Regina s. septemvittata</i>	Jefferson	KU 150947	Common	2
	Washington	KU 150943, 46	-----	2
	Somers	KU 150942, 45,	-----	1
		CMNH	-----	
	Israel	KU 150944	-----	1
	OSUM 505	-----		
<i>Sistrurus c. catenatus</i>	Somers	KU 150970, CMNH	Rare	7
	Casper	KU 150971	-----	7
<i>Thamnophis s. sirtalis</i>	Israel	KU 150962, 64	Common	3
	Gratis	KU 150963, CMNH	-----	3
	Somers	KU 150863	-----	3
		USMN 129015	-----	3
	Monroe	KU 150968	-----	2
	Jefferson	CMNH	-----	2
	Washington	KU 150961	-----	2
	Twin	CMNH	-----	4

*See Table 1, Footnote ***, for Habitat Description.

**See "Source of Materials" for museum abbreviations.

Twp) did not yield any specimens, and much of the area has become part of urban New Paris. However, a breeding population was discovered 0.25 miles south of the Preble County line in Butler County (2.7 miles NW Oxford).

Species of reptiles collected during this study are listed in table 2. Of 16 species collected, eight are new records for Preble County. These are *Terrapene c. carolina*, *Chrysemys p. marginata*, *Trionyx*

s. spinifera, *Eumeces laticeps*, *Eumeces inexpectatus*, *Regina kirtlandi*, *Lampropeltis t. triangulum*, and *Sistrurus c. catenatus*.

Prior to the collection of the single *Eumeces inexpectatus* (KU 150923), this species had not been found in the state of Ohio, but another specimen was found in 1972 (D. Dennis, personal communication, 1972). These specimens represent a northern range extension of nearly 200

miles. Previously, the northernmost record for this species was Powell County in central Kentucky (Barbour, 1971).

A melanistic *Thamnophis s. sirtalis* (KU 150863) was collected in Hueston Woods State Park (Israel Twp). This specimen may have escaped from the state park headquarters, where several melanistic *Thamnophis* were on display. Another unusually marked adult *Thamnophis sirtalis* (KU 150862) was collected at Rush Run Game Reserve (Somers Twp). It was olive green dorsally with pale yellow-brown lateral stripes. The sides of the venter were blotched with light orange (approximately 60% of total area) and the remaining area of the venter was pale green with no distinct black spots. *Heterodon p. platyrhinos* (KU 150934) from the same area were bright orange and brown, although one speci-

men from nearby Gratis Twp was melanistic (KU 150935).

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