## DISTRIBUTION RECORDS OF Graptemys IN OKI AHOMA

The semi-aquatic turtle genus <code>Graptemys</code> is represented by members of three species in Oklahoma. The Mississippi Map Turtle, <code>Graptemys kohni</code> (Baur), is found in the Arkansas and Red River systems in the eastern-third of the state; the Map Turtle, <code>Graptemys geographica</code> (Le Sueur), is known only from specimens collected in 1927 in Delaware County (Ortenburger, 1929); and the Ouachita Map Turtle, <code>Graptemys pseudogeographica ouachitensis</code> Cagle, occurs throughout the eastern two-thirds of the state associated with the Arkansas and Red River systems. Smith and Brodie (1982) list <code>G. p. ouachitensis</code> as the species, <code>G. ouachitensis</code>, and <code>G. kohni</code> as the subspecies, <code>G. p. kohnii</code>. Webb (1970) notes the relatively few specimens of this genus available for study from Oklahoma.

From 1981 through 1985, Pigg conducted a study of rivers and lakes throughout Oklahoma as part of the Biological Monitoring Program of the Oklahoma Health Department. Specimens were collected either (a) in gill nets set across rivers and lakes for two hour periods, or (b) by hand-seining rivers and lakes (20 seine hauls of 10 meters each were conducted at each sampling site). Turtles were removed from nets, preserved and deposited in the Bailey Science Museum at Oklahoma Baptist University.

In the fall of 1986, Lardie deposited at the Museum at sizeable collection of reptiles and amphibians obtained in northwestern Oklahoma from 1971 to 1986. This collection contains a number of distribution and observation records.

G. kohni was collected in only three Oklahoma counties (Table I) indicating the apparent scarcity of this turtle in the state. The specimen (OBU 272-86) from Lake Raymond Gary, Choctaw County, is a county record and extends the range westward along the Red River for members of this species in Oklahoma. Additional collecting will probably extend the range of the Mississippi Map Turtle farther westward along both the Red and Arkansas River systems. Collins (1982) reports that this turtle occupies soft-bottomed and vegetated rivers, lakes and sloughs in Kansas.

Even though Webb (1970) reports he examined a specimen of  $G.\ kohni$  from Cherokee County in the Tulane University collection, Secor and Carpenter (1984) indicate only a sight (DOKARRS) record in that county for the Mississippi Map Turtle. The specimen (OBU 274-86) collected by Pigg in Tenkiller Reservoir, Cherokee County, confirms the occurrence of  $G.\ kohni$  in the county.

Webb (1970) and Secor and Carpenter (1984) show *G. p. ouachitensis* associated with the Red and Arkansas River systems in Oklahoma. Its range extends westward along these rivers and their tributaries into the oak-woodland forests and grasslands of central and western Oklahoma. Ouachita Map Turtles prefer waters with an abundance of aquatic vegetation. Five county records are represented in the Pigg Collection from Sequoyah, Delaware, Tulsa, Atoka and Pushmataha Counties (Table I).

<u>Table I.</u> Oklahoma collection records of *Graptemys kohni* and *Graptemys pseudogeographica ouachitensis* in the Pigg Collection (1981-1985) and the Lardie Collection (1971-1985). Both collections are presently in the Balley Science Museum, Oklahoma Baptist University, Shawnee, Oklahoma

SPECIES	LOCALITY	COUNTY	NUMBER OF SPECIMENS	OBU MUSEUM NO.
G. kohni	Lake Raymond Gary near Ft. Townson*	Choctaw Co.	5	273-86
	Tenkiller Reservoir**	Cherokee Co.	2	274-86
	Verdigris River, Rocky Point Park	Rogers Co.	Н	275-86
G. p. ouachitensis	Robert S. Kerr Reservolr*	Sequoyah Co.	H	276-86
	Grand Lake*	Delaware Co.	2	277-86
	Arkansas River north of Bixby*	Tulsa Co.	г	286-86
	Muddy Boggy north of Lane"	Atoka Co.	г	288-86
	Klamichi River south of Clayton*	Pushmataha Co.	1	282-86
	State Line bridge on Chikaskia River***	Grant Co.	r	289-86
	Skeleton Creek west of Douglas *****	Garfield Co.	1	DOKARRS
	Red River south of Terral	Jefferson Co.	ţ	278-86
	Red River southwest of Waurika	Jefferson Co.	1	279-86
	Red River south of Harris	McCurtain Co.	ţ	280-86
	Pine Creek Reservoir, Little River State Park	McCurtain Co.	п	283-86
	Little River south of Idabel	McCurtain Co.	1	286-86
	Washita River north of Dickson	Carter Co.	1	281-86
	Verdigris River, Rocky Point Park	Rogers Co.	1	284-86
	Kaw Reservoir east of Newkirk	Kay Co.	г	285-86
	Chikaskia River south of Blackwell	Kay Co.	. 1	287-86
	Red River south of Hugo	Choct.aw Co.		290-86

\*New county record

\*\*\*Museum voucher that verifies previous sight (DOKARRS) record(s) as summarized in Secor and Carpenter (1984). \*\*\*\*Sight (DOKARRS) record for county There is a scarcity of records for *Graptemys* from counties in northeastern Oklahoma (Webb, 1970; Secor and Carpenter, 1984) and from adjacent counties in Kansas (Collins, 1982). This area, in part, includes the Ozark Plateau, which is one of the most rugged and wooded terrains in Oklahoma. Streams are characteristically clear and bedded with coarse sediment. Perhaps the clear, coarse-bedded streams of the Ozark Plateau in Oklahoma do not provide suitable habitats for *Graptemys*. This is an area in Oklahoma deserving of study.

The Lardie Collection contains an observation record of the Ouachita Map Turtle in Garfield County. This observation represents the first recorded sighting for this turtle in Garfield County. The Lardie Collection also contains a specimen (OBU 289-86) which verifies the sight (DOKARRS) record for Grant County (Secor and Carpenter, 1984), and the literature reports of Lardie (1980, 1982) and Lardie and Black (1981).

The range westward of this turtle genus (*Graptemys*) is probably determined by permanency of water in western Oklahoma (Webb, 1970). Lardie (pers. comm.) suggests that map turtles have reached the Chikaskia River on the Oklahoma-Kansas border in northwestern Oklahoma via the Salt Fork branch of the Arkansas River.

## Literature Cited

- Collins, J. T.
  - 1982. Amphibians and reptiles in Kansas. 2nd ed. Univ. Kansas Mus. Nat. Hist. Pub. Ed. Ser. No. 8, 1-356.
- Lardie, R. L.
  - 1980. Reptile county records for northwestern Oklahoma. Bull. Okla. Herp. Soc. 4(4):77.
- 1982. A preliminary checklist of the amphibians and reptiles of northwestern Oklahoma (excluding the Oklahoma Panhandle).
  Bull. Okla. Herp. Soc. 7(2):36-78.
  - and J. H. Black.
  - 1981. The amphibians and reptiles of the Cimarron Gypsum Hills region in northwestern Oklahoma. Bull. Okla. Herp. Soc. 5(4):76-125.
- Ortenburger, A. I.
  - 1929. Reptiles and amphibians from northeastern Oklahoma. Copeia 1929 (170):26-28.
- Secor, S. M. and C. C. Carpenter.
  - 1984. Distribution maps of Oklahoma reptiles. Okla. Herp. Soc. Spec. Pub. No. 3, 1-57.
- Smith, H. M. and E. D. Brodie, Jr.
  - 1982. Reptiles of North America. Golden Press, NY, 240 pp.

Webb, R. G. 1970. Reptiles of Oklahoma. Univ. Okla. Press, Norman, 370 pp.

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