

New Locations for *Gastrophryne Carolinensis* And *Rana Clamitans* in Oklahoma

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The Eastern Narrow-mouthed Toad, *Gastrophryne carolinensis* (all nomenclature after Conant, 1958), has previously been known in Oklahoma from Adair, Cherokee, Delaware, Latimer, LeFlore, and McCurtain Cos. (Bragg, 1950); from Mays Co. (Blair, 1950); and from Wagoner and Tulsa Cos. (Blair and Laughlin, 1955). It is known from nearby in Texas from near Paris (Burt, 1937) and from SE of Dallas on the Trinity River (Blair, 1955).

Specimens of the Eastern Narrow-mouthed Toad have been collected from two locations in Bryan County. One is in Sec. 6, T5S, R13E, 8.5 miles NE of Bokchito. At this location several species of anurans, including *G. carolinensis* and *G. olivacea*, were collected from a small temporary pool formed by recent rains. Another location is in Sec. 5, T7S, R13E, 4.5 miles SE of Bennington. At this location both of the above species of *Gastrophryne* were collected from a marshy area along White Grass Creek. The collections at the first location were made in late spring after and during relatively heavy rains. Those at the second location were made in late summer and there had been no rain for several days. The presence of breeding aggregations at each of these locations was brought to my attention as a result of daytime calling (mid-afternoon). Attention was brought to *G. carolinensis* by the distinctly different call, essentially as described by Blair (1955) for *G. carolinensis* from his zone of overlap. The first location, a small temporary pool about 30 ft long, 15 ft wide, and 2 ft deep, had been formed in a small depression in the floor of an oak-pine forest. The second location was a fairly large permanent marsh (3 or more acres). *G. olivacea* far outnumbered *G. carolinensis* at each location. A careful check produced only distinct morphological forms of either species. No hybrids could be located at either location. It may be of interest to note that these Bryan Co. locations are near the western boundary of the overlap zone of Blair (1955). Apparently effective isolating mechanisms are operating at both locations.

Specimens of *Rana clamitans* have been obtained from three locations in Johnston County. On Brushy Creek this species was collected from Secs. 11 and 12, T3S, R4E, approximately 7 miles SW of the town of Mill Creek. Brushy Creek is a small, spring-fed tributary of Mill Creek 3.5 miles long. A second location is in Sec. 36, T2S, R4E, on Bee Branch, approximately 4 miles S of the town of Mill Creek. Bee Branch is also a small tributary of Mill Creek. The third location is in Sec. 19, T2S, R6E, on Pennington Creek about $\frac{2}{3}$ mile N of the federal fish hatchery at Reagan. This species has previously been known from most of the eastern third of the state as far west in the north as Lincoln Co., (Ortenburger, 1926), and in the south as far west as Bryan Co., (Taylor and Laughlin, 1964).

All of the adult specimens of this species I have seen from Bryan and Johnston Cos. have had plain brown backs with light venters that contained dark worm-like spots and thus would seem to be referable to *R. clamitans clamitans*. This conclusion seems to be supported by Conant (1958) and by the study of Meacham (1954).

All of the Johnston Co. locations are much alike in that they are on streams that are spring fed and flow the year round—even in very dry years, according to the natives of the area. Relatively mesic forest vegetation occurs along these streams which is unique in that grassland is the predominating vegetation elsewhere in the three areas.

Specimens discussed in this paper are at present in my private collection.

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