
SALIENTIAN ADDITIONS TO COUNTY LISTS IN OKLAHOMA

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Each year since 1939, efforts have been made during field trips to add to the knowledge of Salientian distribution in Oklahoma, using counties as convenient units. The following constitute, for the most part, new county records secured by us, working singly or jointly, during the season of 1949. Most specimens collected are preserved in the University of Oklahoma Museum (Division of Zoology) but a few have been retained in the private collections of one or the other of us. We report by species rather than by counties in order to make the use of the list more convenient for the greatest number of readers.

We express our indebtedness to the Oklahoma Biological Survey under whose auspices most of the collecting was done.

1. *Bufo cognatus* Say. A specimen taken in Ellis County is the first from that county.

2. *Bufo woodhousii woodhousii* Girard. Two specimens, both adult, taken at the north edge of Wilburton, Latimer County, apparently represent a typical member of *B. w. woodhousii* and a cross between this and *B. terrestris americanus* Holbrook. The first mentioned has all the characteristics of *B. w. woodhousii* but the other one represents a curious mixture of the characteristics of *woodhousii* and *americanus*.

Wilburton lies east of the general geographic range of *B. w. woodhousii* as earlier outlined (1) but an ecological map prepared by the State Game and Fish Department in 1943 offers an explanation. Wilburton lies in a valley characterized by a more western flora than occurs out of this valley to the north or south. Presumably this narrow strip of a more western habitat offers a highway for dispersal to the eastward of this common western toad. Interbreeding with the very abundant American toad would not be surprising in this narrow corridor where the population of *woodhousii* is very likely to be small.

Individuals of *B. w. woodhousii* were also seen in abundance on roads in Garfield County during a heavy rain at night.

3. *Bufo insidiosus* Girard. Several specimens were taken from beneath stones on rocky hillsides in Harmon County. Others were secured as they hopped about in broad daylight.

4. *Bufo punctatus* Baird and Girard. These were taken in the same situations as *B. insidiosus* in Harmon County. Others were taken elsewhere in the western half of the state at periods when the soil was rather moist in similar rocky habitats.

5. *Hyla versicolor versicolor* Le Conte. Tadpoles collected in the overflow of a stream in McIntosh County are apparently the first specimens known from this section.

6. *Microhyla carolinensis olivacea* (Holbrook). Adults taken in Logan County constitute a new county record. Adults collected in Harper County confirm a former sight record.

7. *Pseudacris clarkii* Baird. A large chorus of this species was heard from ditches in Hughes County in mid-afternoon after heavy rain. Choruses were also heard in Harper County.

8. *P. streckeri* Wright and Wright. These were heard calling in the following counties: Pittsburg, Latimer, Atoka, Pushmataha, Choctaw, Alfalfa, and Pawnee. Specimens were taken also in Major County. The lack of ecological restriction, increasingly evident as the known range in Oklahoma is extended, makes it probable that this form occupies most of Oklahoma, except possibly the panhandle. However, no records have yet been secured from the upland areas of eastern Oklahoma.

9. *P. triseriata* (Wied). The breeding call was heard in Hughes, Pittsburg, Haskell and Sequoyah Counties and, later, tadpoles were secured in each. Adults collected in southern Muskogee County confirm a record farther north. Tadpoles were also taken in McIntosh County and adults in Ottawa County.

10. *Rana areolata areolata* Baird and Girard;

11. *R. a. circulosa* Rice and Davis.

A paper in preparation by the senior author gives details concerning the distribution found for these two subspecies. For completion of the record here we outline this distribution briefly, so far as it is new: *R. a. areolata* taken as tadpoles in Pushmataha, Sequoyah, Latimer, Le Flore, Pittsburg, and Haskell Counties; *R. a. circulosa* taken as adults in Ottawa County, as tadpoles in Craig, Mayes, and McIntosh Counties; as probable intergrades, Sequoyah and Muskogee (adults), Hughes and McIntosh (tadpoles). An intergrading zone occurs in the prairies between the Arkansas and Canadian Rivers. *R. a. areolata* (but not *R. a. circulosa*) invades the valleys of the eastern mountains and hence is the less ecologically restricted of the two.

12. *Rana catesbeiana* Shaw. An adult specimen in the University of Oklahoma Museum represents the first from Grant County. Tadpoles collected in Haskell County confirm a call record earlier reported.

13. *Scaphiopus bombifrons* Cope. Adults were taken in Ellis, Blaine and Major Counties, the first confirming an earlier call record.

14. *Scaphiopus couchii* Baird. No new records were secured but tadpoles taken in Jackson and Comanche Counties in and near metamorphosis show, by the relation to the time of the last previous rainfall in each area, that the developmental rate is very rapid as earlier suspected (1).

15. *Scaphiopus hurterii* Strecker. A dried specimen was collected in Tishomingo, Johnston County, by William N. Bragg, by whose courtesy we report it.

LITERATURE CITED

1. BRAGG, ARTHUR N., and HAROLD A. DUNDEE, 1960. Sallentian collections in Oklahoma, 1948. Proc. Oklahoma Acad. Sci., 29:24-25.
 2. ———, and CHARLES C. SMITH. 1943. The ecological distribution of toads in Oklahoma. Ecology 24:285-307.
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