

## Catalogue of American Amphibians and Reptiles.

Pierce, Benjamin A., and Patricia H. Whitehurst. 1990. *Pseudacris clarkii*.

***Pseudacris clarkii* (Baird)**  
**Spotted Chorus Frog**

*Helocaetes clarkii* Baird, 1854:60. Type locality "Galveston and Indianola, Texas." Restricted to Galveston, Galveston County, Texas by Schmidt (1953). Syntype, National Museum of Natural History (USNM) 3313, date of collection unknown. Collected by M. Dean in Galveston, Galveston County, Texas (examined by authors). Location of other syntype unknown, but may be the specimen figured in Baird, 1859. See Nomenclatural History.

*Chorophihus triseriatus clarkii*: Cope, 1875:30.

*Pseudacris triseriata clarkii*: Burt, 1932:80.

*Pseudacris nigrita clarkii*: Stejneger and Barbour, 1933:31.

*Pseudacris clarkii*: Smith, 1934:462.

*Pseudacris clarki*: Jameson, 1950. Incorrect subsequent spelling.

- **Content.** No subspecies are recognized.

- **Definition and Diagnosis.** *Pseudacris clarkii* is a relatively small hylid frog with a pointed snout in lateral view and poorly developed webbing between the toes. Adults range in size from 23-35 mm snout-vent length. Digital disks are greatly reduced, only slightly wider than digits. Vomerine teeth are present in two small, round patches. A conspicuous tympanum is in contact with or only very slightly separated from the angle of the jaw. Dorsal pattern and coloration are important in distinguishing *P. clarkii* from other members of the genus; dorsal color is light brown or gray, with large, irregularly arranged spots or blotches. Spots are green with a thin, dark border in live specimens. A distinct lateral green stripe runs through the eye to midbody, and a white labial stripe is present. Typically, a triangular mark is found between the eyes. The venter is whitish, although the gular pouch is dark in mature males.

In larvae, the snout is bluntly rounded, eyes directed dorso-laterally, the anal tube short and dextral. The spiracle is on the left side of the body and is directed posteriorly. Lips are bordered by 1-2 rows of small papillae with a wide gap on the upper lip. There are 2 rows of upper teeth and 3 rows of lower teeth; the second upper row is interrupted medially and the third lower row is much shorter than the other two lower rows.

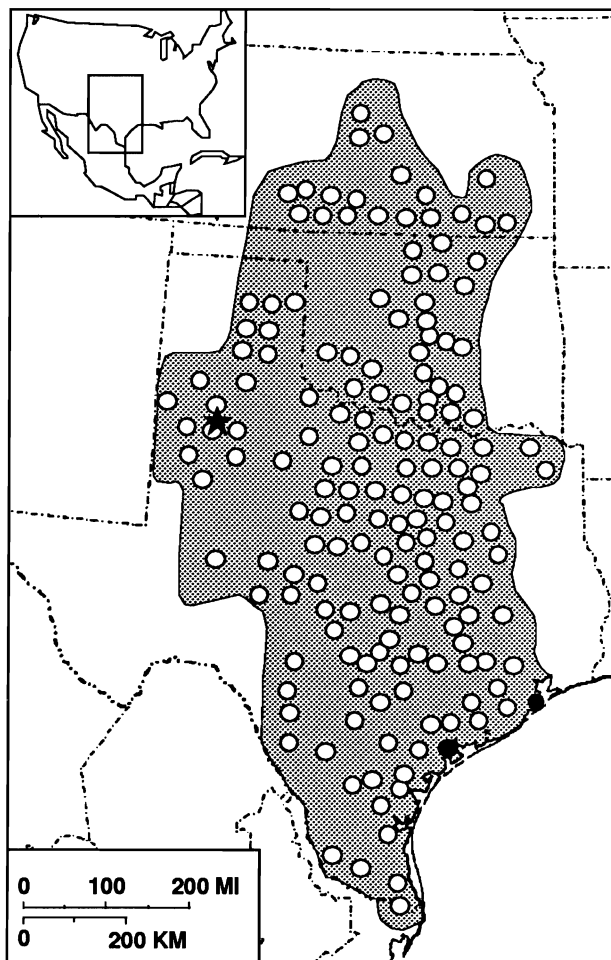
- **Descriptions.** Descriptions of adults are in Burt (1936), Lord and Davis (1955), Kennedy (1958), and Littlejohn and Michaud (1959). Eggs are described by Wright and Wright (1949), embryos and larvae by Eaton and Imagawa (1948) and Duellman (1970), vocalizations by Wright and Wright (1949) and Duellman (1970).

- **Illustrations.** Conant (1975) provided color illustrations of two variations in spot patterns. Black and white illustrations of developmental stages and tadpole mouth parts appeared in Eaton and Imagawa (1948) and Duellman (1970). Gaudin (1973) diagrammed a pectoral girdle while Chantell (1964) provided a black and white photograph of a fossil ilium. Duellman (1970) presented dorsal and ventral views of the skull. Photographs of hybrids with other *Pseudacris* species appeared in Mecham (1957).

- **Distribution.** *Pseudacris clarkii* occurs primarily in prairie habitats from the Rio Grande north to central Kansas.

- **Fossil Record.** Chantell (1964) reported a left ilium from an upper Miocene site in Brown County, Nebraska, and Holman (1978) identified two left ilia from the late Miocene Fort Randall Formation in South Dakota. Two right ilia from the Pleistocene found in Lubbock County, Texas were described by Holman (1969).

- **Pertinent Literature.** Jameson (1956), Blair (1961), and Weist (1982) described breeding habits. Call discrimination was dis-



**Map.** Solid circles represent type-localities, hollow circles indicate other localities. Stars represent fossil sites. Additional fossil sites are in Brown County, Nebraska and Charles Mix County, South Dakota.

cussed by Michaud (1962) and Littlejohn and Michaud (1959). Smith (1947) and Lord and Davis (1955) compared *Pseudacris clarkii* and *P. triseriata*, while Gaudin (1973, 1974) made osteological comparisons. Pierce (1975), Mecham (1957), and Littlejohn (1961) investigated artificial hybridizations. Maxson and Wilson (1975) and Hedges (1986) discussed protein variation in *P. clarkii* and the genetic relationship of the species to other hylids.

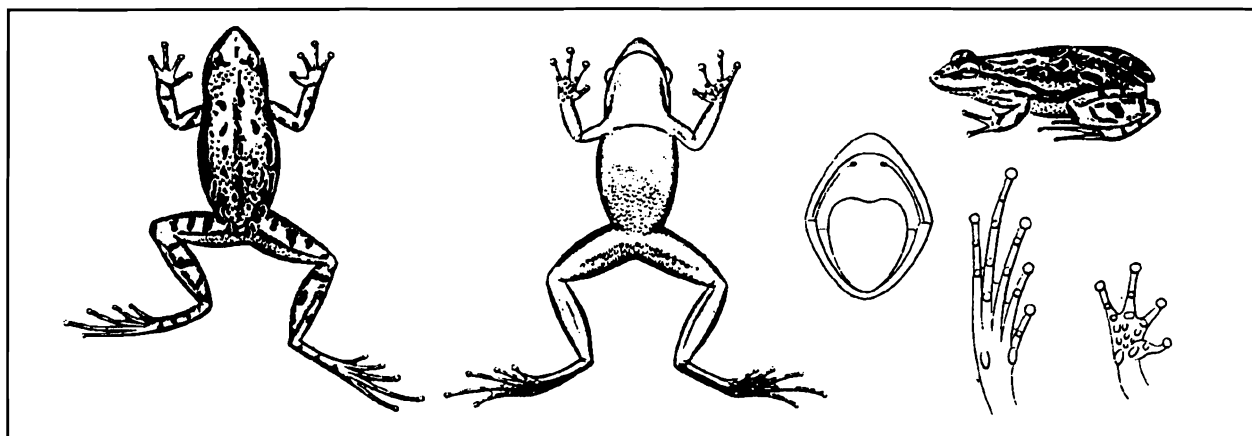
- **Nomenclatural History.** Baird (1854) did not designate type specimens, but gave the habitat as "Galveston and Indianola, Texas." Yarow (1882) listed only USNM 3313, but Cope (1889) listed USNM 3313 (from Galveston), 3317 (from Indianola), and 3315 (from between Indianola and San Antonio). Cochran (1961) designated USNM 3313 as the cotype. Duellman (1970) speculated that USNM 3313, 3315, and 3317 formed the type series for Baird's description, and Frost (1985) listed these three specimens as syntypes. At the present time only USNM 3313 can be located.

Although Jameson (1950) modified the spelling to *clarki* and Collins et al. (1978) recommended *clarki* as the standard name for the species, the original spelling is correct under Article 31 a (i) of the International Code of Zoological Nomenclature and cannot be changed under Articles 32 (b) and 33 (d) of the Code.

- **Etymology.** The specific name *clarkii* apparently honors J. H. Clark, an army surveyor on the Mexican Boundary Survey.

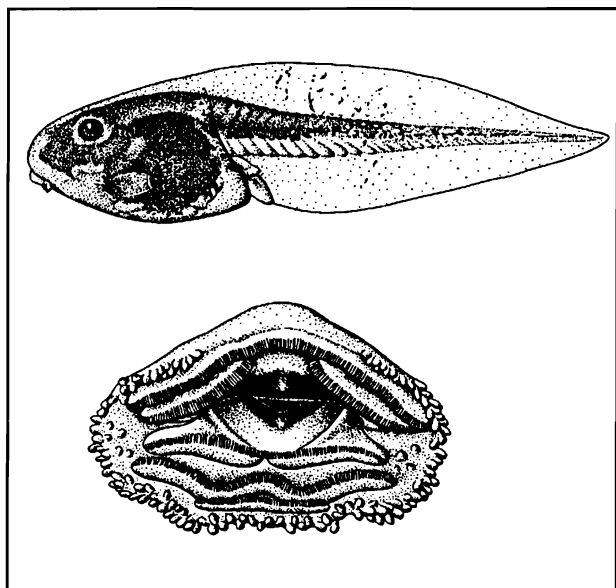
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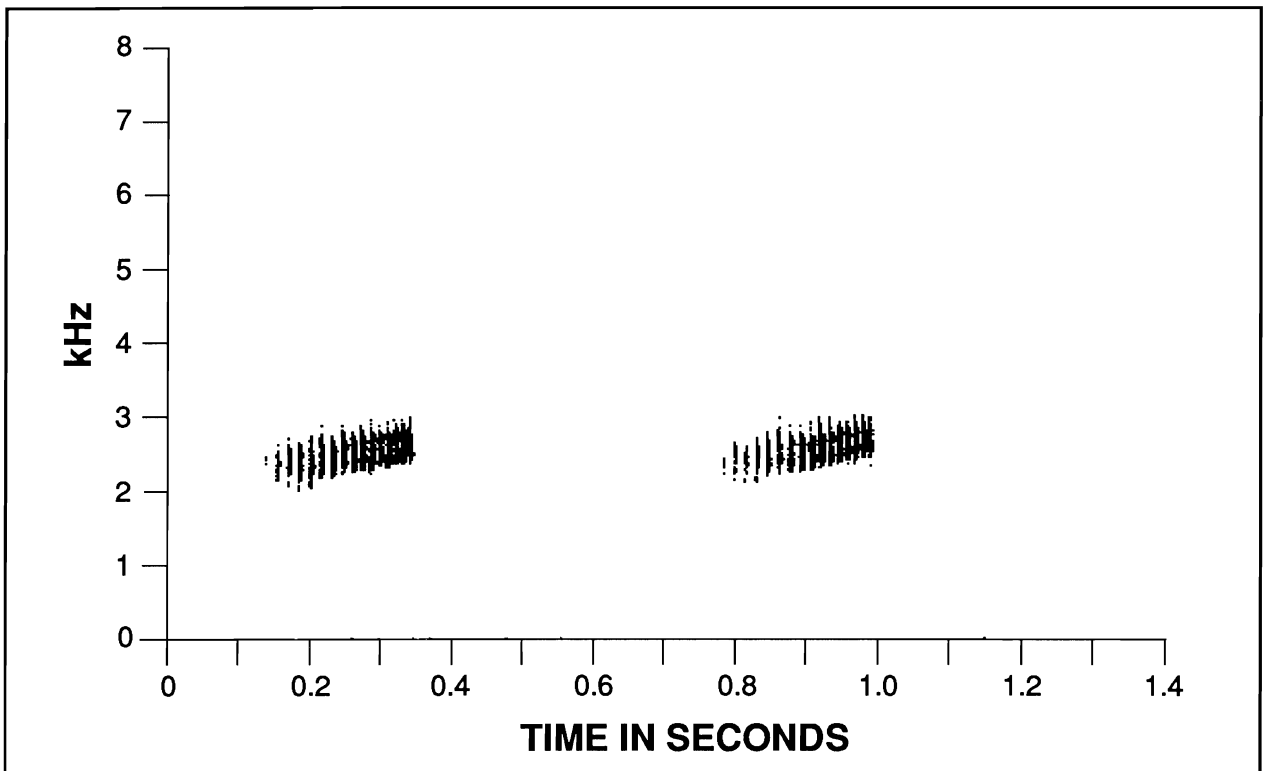


**Figure 1.** Baird's (1859) original drawing of an adult specimen of *Pseudacris clarkii* from Indianola, Calhoun County, Texas.

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**Figure 2.** Tadpole and tadpole mouthparts of *Pseudacris clarkii*. KU 116932. From Duellman (1970). Used with permission.



**Figure 3.** Audiospectrogram of advertisement call of *Pseudacris clarkii* from near Webberville, Bastrop County, Texas, 13 April 1988; water temperature 21.2°C, air temperature 11.4°C; 300 Hz bandwidth. Specimen USNM 285115, collected and recorded by Reginald Cocroft.

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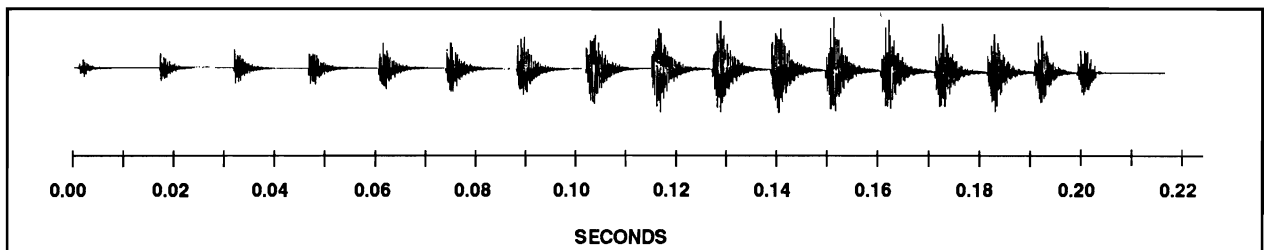
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**Figure 4.** Waveform analysis of middle four pulses of a call of *Pseudacris clarkii*. Collection data is the same as that for the audiospectrogram. Sampling frequency = 10 kHz; Nyquist frequency = 5kHz.