

SMITH, PHILIP W. 1966. *Pseudacris streckeri*.
Catalogue of American Amphibians and Reptiles, p. 27.

Pseudacris streckeri Wright & Wright
Strecker's chorus frog

[non] *Chorophilus ornatus* Holbrook: Cope, 1889:333-334. Misapplication of name.

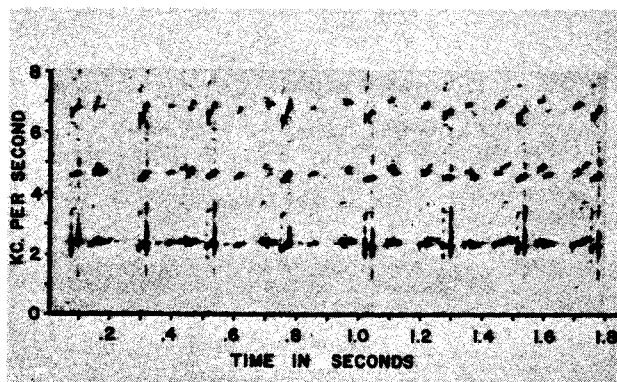
Pseudacris streckeri Wright & Wright, 1933:26, pl. 35. Type-locality not mentioned and no types designated, but description presumably based on Cornell Univ. 2485 (5 specimens currently misplaced or possibly lost) from Somerset, Bexar Co., Texas, collected (or received) 10 February 1932 by Albert J. Kirn (Wright & Wright, 1949:279; James N. Layne, personal communication). Type-locality subsequently designated in error to "Waco, McLennan County, Texas" by Schmidt, 1953:76; revised herein to Somerset, Bexar County, Texas.

• CONTENT. Two subspecies are recognized: *streckeri* and *illinoensis*, the latter consisting of relict populations.

• DEFINITION. Adults of this robust and toadlike *Pseudacris* are usually 30 to 44 mm from snout to vent. The fingers and toes have barely perceptible digital pads; the toes have vestigial webs. A dark masklike stripe extends from the snout to the shoulder and continues toward the groin as a dark lateral stripe or series of two to four dark spots. A dark suborbital spot is usually conspicuous. A dark interorbital V is normally prominent, and a pair of elongate dark bars, each with one or more lateral processes, or linear series of spots is usually present on the middorsum. The ground color is green, gray, brown, or hazel; the markings are brown or black. *P. streckeri* differs from allied and similar *ornata* in having a considerably more robust habitus, shorter legs, and a dark suborbital spot on each side of the head.

• DESCRIPTIONS. Breeding behavior, eggs, and tadpoles have been discussed by Strecker (1926—as *P. ornata*), Burt (1936), Bragg (1942), Wright & Wright (1949), Jameson (1956), Blair (1958a), and Fouquette & Littlejohn (1960). Adults have been described by Wright & Wright (1933, 1949) and P. W. Smith (1951, 1961).

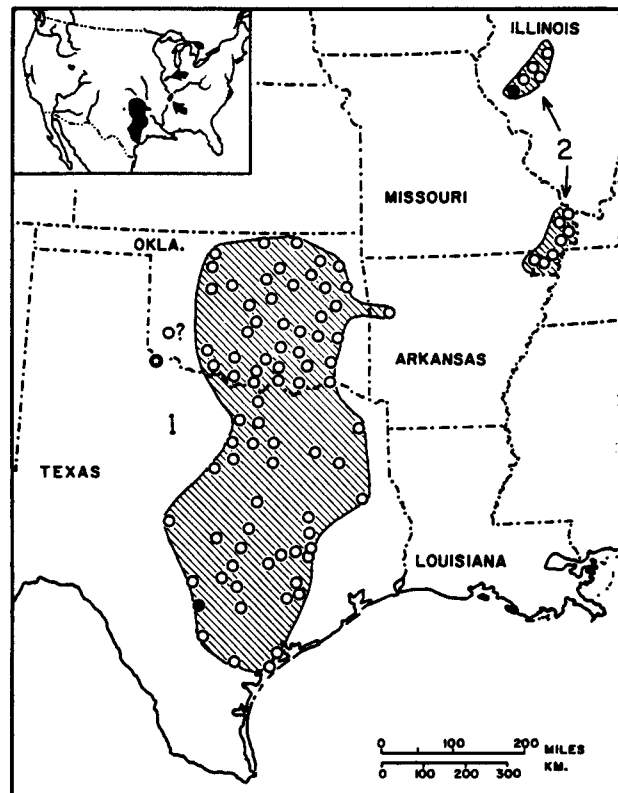
• ILLUSTRATIONS. For eggs, see Bragg (1942:61, pl. 1) and Wright & Wright (1949:35, fig. 36). For embryos and larvae, see Bragg (1942:61-62, pls. 1-2), and for tadpole mouthparts, *ibid.*, fig. 10 and P. W. Smith (1951:194, fig. 1). For black and white photographs of adults, see Wright & Wright (1933:102, pl. 35; 1949:273, pl. 53) and P. W. Smith (1961:84, fig. 70). For a color illustration, see Conant (1958, pl. 38).



AUDIOSPECTROGRAM. The call is a series of sharp, clear whistles each about 0.05 sec in length with an interval of about 0.40 sec between whistles; from 6 to 16 whistles are given in sequence (see Blair, 1958a:30-31). Shown is the call of *P. streckeri*, Washington County, Texas, 15 November 1958, air 23°, water 22° C. (Courtesy W. F. Blair.)

• DISTRIBUTION. In Texas the species occurs west to Atacosa, McCulloch, and Wise counties and east to Calhoun, Colorado, Leon (Brown, 1950:67), Smith, and Morris counties (H. M. Smith & Sanders, 1952:208). In Oklahoma "the lack of ecological restriction . . . makes it probable that this form occupies most [of the state], except . . . the panhandle . . . [and] the upland areas of [extreme south-] eastern Oklahoma" (Bragg & Dundee, 1951:20). However, the record, based on tadpoles, for Greer County in extreme southwestern Oklahoma (Bragg, 1950:43) is questioned because it is somewhat isolated and could represent *P. clarki* rather than *P. streckeri* (Bragg, personal communication). Records for Franklin County, Arkansas, presumably represent a western plains immigration via the Arkansas River valley (Dowling, 1956:183). A relict population in central Illinois is known to occupy five counties (P. W. Smith, 1961:85); another in extreme southwestern Illinois (Holman *et al.*, 1964:205), the bootheel of Missouri, and Clay Co., Arkansas, seven counties (P. W. Smith 1955:411 and unpublished records in the Illinois Natural History Survey collections).

Published records for *Pseudacris occidentalis* from Lafayette, White, and Garland counties, Arkansas, were assumed by Dowling (1957:17) to be *P. streckeri*, but the specimens upon which the first two records are based (Univ. Kansas Mus. Nat. Hist. 11699-701 and 17679) are extant and prove upon re-examination to be *P. triseriata feriarum*. The Garland County record (specimen no longer available) is most likely also based on a misidentified *P. t. feriarum*. A published record for *Pseudacris ornata* from Clay County, Arkansas, also cited by Dowling (1957) and based on a specimen collected by S. E. Meek (Chicago Nat. Hist. Mus. 1796), variously identified as *Hyla squirella*, *Hyla versicolor*, *Pseudacris ornata*, and *Pseudacris streckeri*, is a specimen of *Hyla regilla* and obviously an error in cataloging. However, *P. streckeri* does occur in Clay County.



MAP. Solid symbols mark type-localities. Hollow symbols represent some other known localities. The question mark indicates a problematical record, and the star symbol a fossil record.

Within its range *P. streckeri* is generally distributed and apparently abundant, although it is rarely encountered except during the breeding season. Nonbreeding adults are campestrian, inhabiting prairie areas, cultivated fields, and marshy vacant lots, but they also may be found in wooded floodplains and flatwoods. Relict populations are closely associated with sand prairie. Breeding sites include flooded fields, ditches, sloughs, and small ponds; the season is during the winter months in the southern part of the range and in the early spring months in Illinois.

• **FOSSIL RECORD.** A fossil record from the Pleistocene Wisconsin glacial stage at Groesbeck Creek, Hardeman County, Texas, is almost 100 miles west of the westernmost Recent record for the species (Lynch, 1966).

• **PERTINENT LITERATURE.** For general information on life history and ecology of the species, see references listed above under DESCRIPTIONS; for experimental studies involving genetic compatibility with *P. ornata* and summary of hybridization studies, see Mecham (1959); for discussions of role of voice and response of females to calls of males of other species, see Blair (1958a), Littlejohn & Michaud (1959), and Blair & Littlejohn (1960). For minimal and maximal developmental temperatures and their relationships to breeding season, see Hubbs *et al.*, (1963). For biogeographic significance of the species range, see P. W. Smith (1957) and Blair (1958b).

• **REMARKS.** Except for the account of *Chorophilus ornatus* by Cope (1889:333-334) and *Pseudacris ornata* by Strecker (1926:8-11), descriptions involving this species prior to 1933 were usually based on a composite of *Pseudacris ornata* (Holbrook) and *P. streckeri* Wright & Wright under the names *occidentalis* or *ornatus*. The name *occidentalis* (*Litoria occidentalis* Baird & Girard, 1853, a junior synonym of *Hyla regilla* Baird & Girard, 1852), was frequently misapplied to specimens of *Pseudacris streckeri*, sometimes to *P. ornata* (Holbrook), *P. clarki* (Baird), and *P. triseriata feriarum* (Baird). In the first account of the breeding habits of *P. streckeri*, the author (Strecker, 1910) believed that he was describing the tadpoles of *Eleutherodactylus augusti latrans* (Cope), a frog that has direct development.

• **ETYMOLOGY.** The name *streckeri* is in honor of John K. Strecker, Jr., an enthusiastic student of Texas amphibians in the early 20th century; *illinoensis* refers to Illinois, where the relict subspecies was first found.

1. *Pseudacris streckeri streckeri* Wright & Wright Strecker's chorus frog

Pseudacris streckeri Wright & Wright. See species synonymy. *Pseudacris streckeri streckeri*: P. W. Smith, 1951:190.

• **DEFINITION.** The groin (in life) is yellow or orange-yellow and (in preserved specimens) has dark pigment concentrated into coarse reticulations; the ground color is green, gray, red-brown, brown, or hazel.

2. *Pseudacris streckeri illinoensis* P. W. Smith Illinois chorus frog

Pseudacris streckeri illinoensis P. W. Smith, 1951:190. Type-locality, "three miles north of Meredosia, Morgan County, Illinois." Holotype, Illinois Nat. Hist. Surv. 5982, adult male collected 19 May 1950 by a University of Illinois herpetology class.

Pseudacris streckeri illinoisensis: Schmidt, 1953:76. Unjustified emendation of spelling.

• **DEFINITION.** A rather pallid frog, this subspecies averages slightly larger than the nominate subspecies; the groin (in life) is without a yellow or orange wash and (in preserved specimens) is without coarse reticulations of dark pigment; the ground color is gray, ivory, or hazel.

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- Issued 23 December 1966. Primary editor for this account, Richard G. Zweifel. Publication is supported by National Science Foundation grant G24231. © American Society of Ichthyologists and Herpetologists 1966.