Catalogue of American Amphibians and Reptiles.

Gates, William R. 1988. Pseudacris nigrita.

Pseudacris nigrita (Le Conte) Southern Chorus Frog

Rana nigrita Le Conte, 1825:282. No type-locality stated; later designated by Harper (1935) as "the vicinity of Riceborough [=Riceborol, Liberty County, Georgia." Syntypes not identified. Academy of Natural Sciences of Philadelphia (ANSP) 2211-2214, collected by Le Conte in Georgia (examined by author; date and exact locality not recorded; E. V. Malnate, pers. comm.), and U. S. National Museum of Natural History 5935, 234482-234486, collected by Le Conte in Liberty County, Georgia (examined by author; date unknown), may qualify as syntypes.

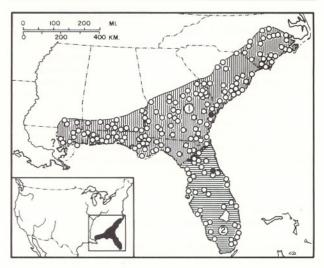
Acris nigrita: Duméril and Bibron, 1841:509. Cystignathus nigritus: Holbrook, 1842:107. Chorophilus nigritus: Baird, 1854:60. Pseudacris nigrita: Günther, 1858:97.

Pseudacris nigritus: Fowler, 1917:39 (wrongly labelled p. 27). Incorrect spelling of nigrita; incorrect nomenclature.

- Content. Two subspecies are recognized: nigrita and verrucosa.
- **Definition.** A small to medium-sized frog (19-32 mm snout to vent) with a slender body, narrow head, and pointed snout. The tips of the digits are moderately expanded and the second, third, and fourth toes have basal webbing. The dorsum is tan to black with three dark, longitudinal stripes or rows of spots. The median stripe or row of spots usually extends onto the snout but is absent in some specimens. The amount of white pigment on the upper lip varies from several spots or thin, wavy streaks to a bold stripe. A dark band stretches from the snout through the eye and along the side of the body to the groin. The arms and legs are spotted or barred, with the dark tibial bars wider than the light interspaces. The venter is yellowish-white or white and may have dark spots or reticulations on the chest. The throat of the male is greenish-yellow or dusky orange. The skin is smooth on the throat and aereolate on the abdomen.

At hatching the larva has a lateral light stripe extending from the eye to the anterodorsal section of the tail musculature. Individual melanophores are present in the dorsal tail fin. The tail musculature is tan to brown above and cream to dull yellow below. The chest and abdomen are cream to dull yellow. The dorsum of a larva in stage 37 of development (Gosner, 1960) is dark brown to black with gold flecks and black spots (See Comment). Both tail fins are completely speckled by melanophores. The chest, throat, and sides of the abdomen are dark. The center of the abdomen is golden. The golden portion of the abdomen may form a triangle with its apex directed anteriorly. The total length at hatching is approxmately 4.5 mm. The larva reaches a maximum total length of 35 mm. A newly-transformed froglet is 8.5-15.0 mm snout to vent.

- **Diagnosis**. *Pseudacris triseriata feriarum* closely resembles *P. nigrita* but is more robust and has a rounded snout and wider head. A dark triangle is usually present between the eyes of *feriarum* and the light tibial bands are wider than the dark bands. The pulse rate of the call of *feriarum* is 2-4 times faster than that of *nigrita* (Fouquette, 1975). The larva of *feriarum* lacks black spots on the dorsum and the throat and chest are not pigmented.
- **Descriptions**. Wright (1932) and Wright and Wright (1949) published detailed descriptions of the adult including information from previous authors. Wright and Wright (1949) described both subspecies. Gates (1983) described the egg and larva of *P. n. nigrita*. Brady and Harper (1935) described the egg of *P. n. verrucosa*. There is no description of the larva of *verrucosa*. Crenshaw and Blair (1959) described attributes of the call of *nigrita* and Blair (1958) described



Map. Solid symbols mark type-localities, hollow symbols indicate other localities. Overlapping patterns show area of intergradation.

those of verrucosa.

- Illustrations. Photos or illustrations of various features of the adult of either or both subspecies are in Conant (1975), Cope (1889), Crenshaw and Blair (1959), Harper (1935), and Wright and Wright (1949). Livezey and Wright (1947) illustrated the egg of *verrucosa*.
- **Distribution**. *Pseudacris nigrita* inhabits the Coastal Plain from just north of the Tar and Pamlico Rivers in North Carolina to the Pearl River in southern Mississippi. Gartside (1980) described a zone in the Pearl River area where *P. nigrita* hybridizes with *P. t. feriarum*. I have seen specimens from St. Tammany Parish (Auburn University Museum 15872-82, 16074-79, and 16102-03) and Orleans Parish (1 of 2 specimens of Cornell University 01523), Louisiana that appear to be hybrids.
- Fossil Record. None.
- Pertinent Literature. The early literature was reviewed by Wright (1932) and Wright and Wright (1949). Gates (1983) cited literature on the eggs and larvae. Other pertinent information includes hybridization studies (Mecham 1965; Ralin 1970), albumin analysis (Maxson and Wilson 1975), and distribution and ecology (Batts 1960, Carr and Goin 1959, Duellman and Schwartz 1958, Lohoefener and Altig 1983).
- **Comment.** Altig (1970) described the larva of *P. nigrita* as lacking small black dorsal dots. He did not state how or where he obtained the specimens used for his key. My description is based on larvae reared from eggs obtained from adults collected in Alabama (Gates 1983). Prior to Schwartz (1957) *P. nigrita* and *P. triseriata* were not considered different species. Care in using the earlier literature is recommended.
- Etymology. Nigrita, a diminutive of dark or black, alludes to either the dark ground color or over-all coloration of this anuran. Verrucosa (Latin, "warty") refers to the warty dorsum of this form.

1. Pseudacris nigrita nigrita (Le Conte) Southern Chorus Frog

Rana nigrita Le Conte. See species account. Pseudacris nigrita nigrita: Stejnegèr and Barbour, 1933: 31.

• Diagnosis. The maxillary stripe is continuous or mainly continu-

ous with minor breaks.

2. Pseudacris nigrita verrucosa (Cope) Florida Chorus Frog

Chorophilus verrucosus Cope, 1877: 87. Type-locality, "From Volusia, Florida." Brady and Harper (1935) stated that this locality was on the east side of the St. John's River, probably 5 miles southeast of Lake George. Holotype, Academy of Natural Sciences of Philadelphia10773 (immature, not examined by author), collected by Mrs. A. D. Lungren (date not given).

Chorophilus nigritus verrucosus: Cope, 1889: 459.
Pseudacris nigrita verrucosa: Brady and Harper, 1935: 108.
Hyla (Pseudacris) nigrita floridensis DuBois, 1984: 88. Replacement name for verrucosa, preoccupied in Hyla and necessitated by reduction of Pseudacris to subgeneric status (DuBois, 1982).

• **Diagnosis**. The maxillary stripe may be absent or is broken into a series of dashed lines, dots, or thin, wavy stripes.

• Remarks. Brady and Harper (1935) believed *P. n. verrucosa* differed from *P. n. nigrita* in having a smaller size, smaller and better separated dorsal spots, wider light bars on the hind limbs, and a broken, reduced or absent maxillary stripe. They reported that the throat of male *verrucosa* is yellowish in life and clear in preservatives whereas that of *nigrita* is dusky orange in life and dusky in preservative. I agree with Burt (1938) that the only reliable difference is that the maxillary stripe is continuous on *nigrita* and broken, reduced or absent on *verrucosa*. The dorsum of *verrucosa* tends to be more warty. However, this feature is not consistently different between the two forms.

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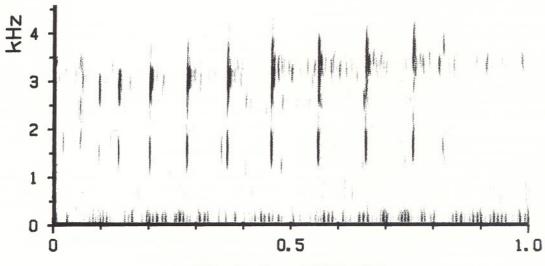
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TIME IN SECONDS

Figure. Audiospectrogram (wide band, 300 Hz filter) of advertisement call of *Pseudacris nigrita:* Eufaula, Barbour Co., Alabama, 19 March 1983, air 23.3 °C; recording courtesy of J. L. Dusi, Amer. Mus. Nat. Hist. Dept. Herpetology tape library.

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