

## Catalogue of American Amphibians and Reptiles.

Hoffman, Richard L. 1988. *Hyla femoralis*.

***Hyla femoralis* Bosc  
Pinewoods Treefrog**

*Hyla femoralis* Bosc, in Daudin, 1800:10, pl. 5. Type-locality, "la Caroline," restricted by Harper (1940) to "the vicinity of Charleston, S.C." Type specimen not known to exist; not listed as present in the Museum National d'Histoire Naturelle, Paris (Guibé, 1950).

• **Content.** No subspecies are recognized.

• **Definition and Diagnosis.** The body length reaches about 40 mm, with females slightly larger than males. The body is slender, the legs are long, with the heel extending to the level of the eye. There are 49-65 maxillary teeth. The color is typically medium to dark brown dorsally, with a darker transverse interocular spot, an irregular dark scapular blotch with several arms of varying length, often smaller posterodorsal dark markings more or less confluent with tibial spots when the legs are flexed, and a dark postocular bar extending to axilla. There is no subocular light spot. The posterior sides of the thighs are brown with prominent round yellow or orange spots. Greenish or pale gray dorsal colorations, sometimes with no dark markings evident, may be assumed.

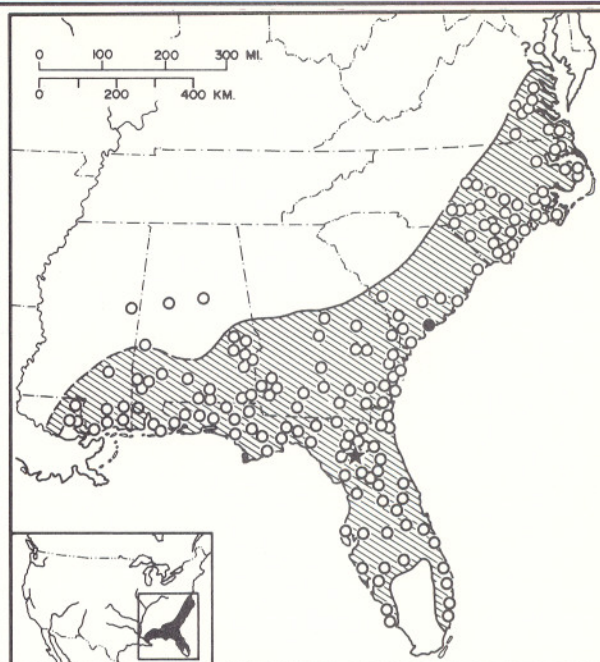
*Hyla femoralis* differs from similar species by the nearly smooth dorsal surface of adults, absence of subocular light spot, presence of interocular dark bar, usual presence of irregular dark scapular blotch, and presence of round yellow or orange postfemoral spots. The advertisement call is a series of staccato notes averaging about 12 per second.

• **Descriptions.** General descriptions of adults are in Carr (1940), Mount (1975), and Wright and Wright (1949). Immature stages were described by Fortman and Altig (1973) and Wright (1929, 1932). Eggs were keyed by Livezey and Wright (1947), tadpoles by Altig (1970) and Wright (1929).

• **Illustrations.** Black and white photographs of adults are in Mount (1975) and Wright and Wright (1949); color illustrations are in Conant (1975) and Martof et al. (1980); hybrids with *H. squirella* and *H. cinerea* are illustrated in Fortman and Altig (1974). Egg mass photographs are in Wright and Wright (1949). A diagram of an egg is in Livezey and Wright (1947); black and white photographs of tadpoles and drawings of mouthparts are in Wright (1929); the tail pattern of a tadpole is in Fortman and Altig (1973) who also (1974) gave a drawing of a sperm cell of a hybrid male; labial teeth of tadpoles are shown by SEM by Altig and Pace (1974). Wiley (1982) illustrated the G-banded karyotype. An ilium of a fossil specimen was figured by Lynch (1965).

• **Distribution.** The Atlantic and Gulf Coastal plains, from King and Queen Co., Virginia to easternmost Louisiana, south through peninsular Florida to Naples and Fort Lauderdale (but not in the Everglades). Disjunct inland populations occur in central Alabama and east-central Mississippi. A record for Calvert Co., Maryland, requires confirmation (Cooper, 1970; Fowler and Orton 1947). State records are published for Alabama (Mount, 1975); Florida (Carr, 1940, Duellman and Schwartz, 1958); Georgia (Williamson and Moulis, 1979); Mississippi (Lohoefer and Altig, 1983); North Carolina (Brandt, 1936; Brimley, 1940; Brothers, 1965; Palmer et al., 1974); South Carolina (Jopson, 1940); Virginia (Hoffman, 1979; deRageot, 1964; Tobey, 1985).

• **Fossil Record.** Holman (1959) and Lynch (1965) refer ilia from the Pleistocene (Illinoian or Kansan stage) of Florida to this



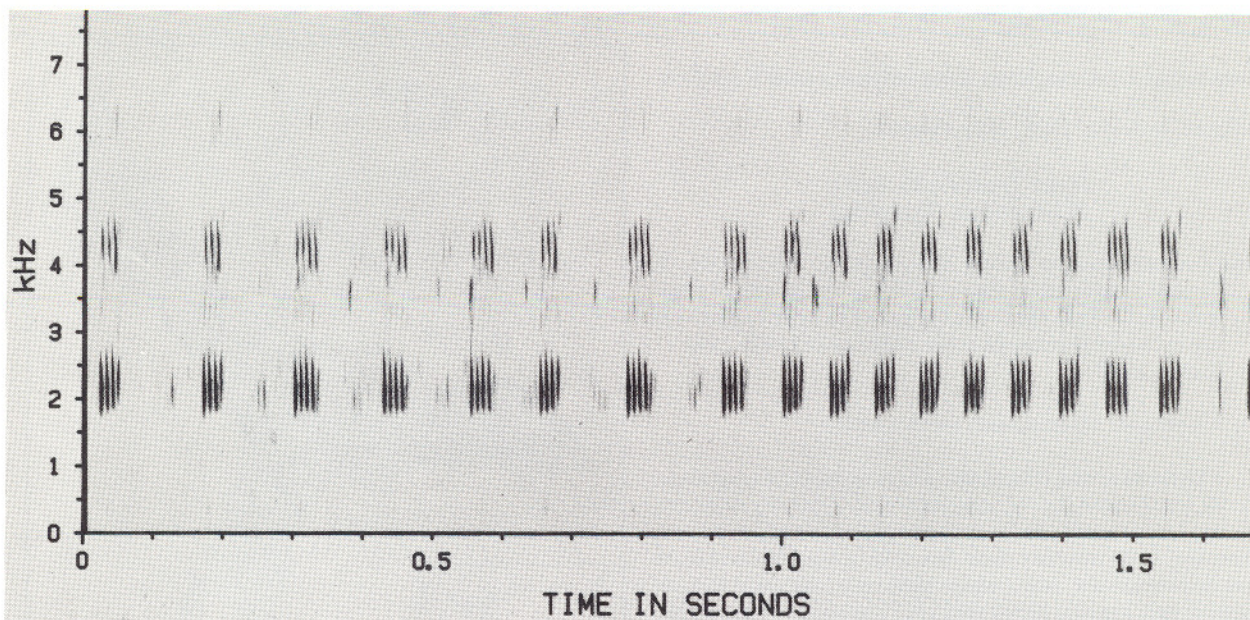
**Map.** Solid circle marks type-locality, open circles indicate other records; some disjunct from body of the range are questioned. Star marks fossil site.

species.

• **Pertinent Literature.** Relationships of *H. femoralis* with other species were considered by Blair (1958, 1959, 1962), Hedges (1986), Jameson and Richmond (1972), Lynch (1965), Maxson (1978), and Maxson and Wilson (1974, 1975). Natural and experimental hybridizations are reported in Blair (1958), Gerhardt (1974), Fortman and Altig (1973), Mecham (1965), and Pyburn (1960). Skeletal analysis is summarized in Gaudin (1974). Goin (1958) recorded variability in maxillary teeth; Altig and Pace (1974) described labial teeth of tadpoles. Buccal musculature of tadpoles is discussed in Satel and Wassersug (1981). Wiley (1982) treated chromosome structure, and Goin et al. (1968) established DNA value. Harper (1932) and Wright (1932) reviewed general natural history in south Georgia. These authors mention habitat preferences, as do Anderson et al. (1976), Brandt (1936), Carr (1940), Duellman and Schwartz (1958), Mount (1975), and Smith and List (1955). Carr (1940) and Einem and Ober (1956) discussed overwintering in Florida. Breeding sites are described in Duellman and Schwartz (1958), Mount (1975), and Wright (1932); Mount (1975) listed anuran associates in Alabama sites. Breeding season is defined for North Carolina and Georgia by Brandt (1936, 1953), for Florida by Carr (1940), Duellman and Schwartz (1958), and Einem and Ober (1956), and for Alabama by Mount (1975). Altig (1972) and Wright (1932) referred to larval development. Blair (1959) gave a sonogram of the advertisement call. Gerhardt (1974) reported the negative reaction of a female *femoralis* to the call of a hybrid male *femoralis* X *chrysoscelis*. Jaeger and Hailman (1973) studied response of adults to light intensity. Duellman and Schwartz (1958) and Wright (1932) mentioned food habits. Brown (1979) reported predation by *Thamnophis sauritus*; escape strategies from snake predators were summarized by Marchisin and Anderson (1978). Harper (1940) presented evidence that Bosc, rather than Daudin, Latreille, or Sonnini and Latreille, is the author of the species.

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**Figure.** Audiospectrogram of part of an advertisement call of *Hyla femoralis*: near Midway, Liberty Co., Georgia, 27 June 1977; body 27.8 °C; AMNH Dept. Herpetology & Ichthyology tape 216, 300 Hz filter, specimen AMNH 98998.

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