

## Catalogue of American Amphibians and Reptiles.

Cooper, William E., Jr. 1988. *Eumeces laticeps*.

### *Eumeces laticeps* (Schneider) Broad-headed Skink

*Scincus laticeps* Schneider, 1801:189. Type-locality unknown, restricted to Charleston, South Carolina by Schmidt (1953). Holotype lost, formerly in the Museum of Göttingen, Germany. Collector and date of collection unknown.

*Lacerta tristata* Latreille, 1801:248. Type-locality, "Carolina," restricted to Charleston, South Carolina, by Schmidt (1953). Holotype lost, collector and date of collection unknown.

*Scincus erythrocephalus* Gilliams, 1818:461. Type-locality, "Southern states," restricted to Charleston, South Carolina, by Schmidt (1953). Holotype lost, collector and date of collection unknown.

*Scincus bicolor* Harlan, 1824:286. Type-locality, "Southern states," restricted to Charleston, South Carolina, by Schmidt (1953). Holotype lost, collector and date of collection unknown.

*Scincus americanus* Harlan, 1835:138. Type-locality, "Southern states," restricted to Charleston, South Carolina, by Schmidt (1953). Holotype lost, collector and date of collection unknown.

*Plestiodon laticeps*: Duméril and Bibron, 1839:705.

*Eumeces laticeps*: Peters, 1864:49; Taylor, 1932:263. First use of combination, and first use *sensu stricto*. See Nomenclatural History.

*Eumeces polygrammus* Cope, 1900:637. Type-locality, "Colonels' Island, Liberty Co., Georgia." Holotype, National Museum of Natural History (USNM) 4156, collected by Dr. Jones, date of collection unknown (not examined by author).

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

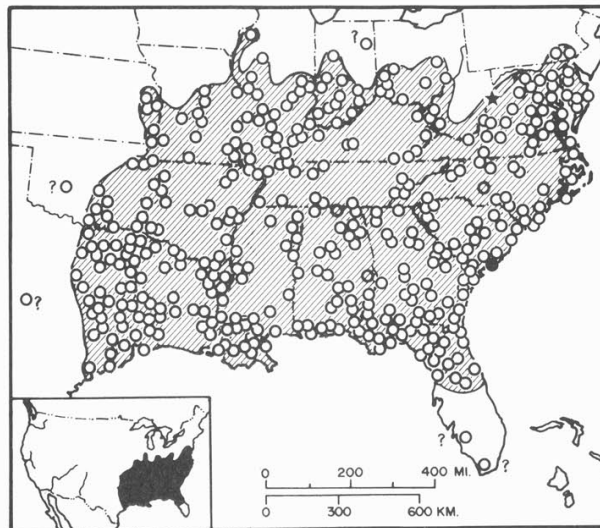
• **Definition and Diagnosis.** A large (adults 82-143 mm snout-vent-length) *Eumeces* of the *fasciatus* species group (*sensu* Taylor, 1935), distinguished by the following combination of characteristics: five supralabials anterior to subocular on each side, or four on one side and five on the other; usually 30 or 32 dorsal scale rows; median row of subcaudals distinctly larger than lateral rows; five or seven light longitudinal stripes in hatchlings; no enlarged postlabials; dorsolateral light stripe involving the fourth, or third and fourth scale rows.

Hatchlings (ca. 27-30 mm SVL) have bright blue tails. The ground color is black anteriorly with longitudinal light stripes on the dorsal and lateral surfaces. These are often intensely orange, especially on the head. The median dorsal stripe bifurcates on the nuchal with branches extending to the frontonuchal. The blue tail coloration gradually fades to gray and then to tan with age. The black ground coloration fades to brown in juveniles and finally to tan in adult males and old adult females. The stripes also fade gradually, but females retain stripes longer than males. The head of adult males is larger than that of females of the same size; it becomes bright orange during the breeding season, and fades to tan at other times.

• **Description.** The most comprehensive description is that of Taylor (1935). A general description is in Conant (1975). Davis (1968) discuss quantitative variation of numerous morphological traits. Vitt and Cooper (1985a) discuss sexual dimorphism.

• **Illustrations.** Taylor (1935) and Davis (1968) provide line drawings. Black and white photographs are in Smith (1946). Color illustrations of adults and juveniles are in Conant (1975) and color photographs of adults of both sexes are in Behler and King (1979) and Vitt and Cooper (1985a). Other color photographs are in Garrett and Barker (1987) and Johnson (1987). A black and white photograph of pseudocopulation is in Moehn (1986).

• **Distribution** *Eumeces laticeps* occurs throughout much of the southeastern United States. It ranges from Florida near Orlando northward along the eastern seaboard to southeastern Pennsylvania.



**Map.** The solid circle marks the type-locality; open circles indicate other locality records. Questionable localities are indicated by arrows. The star marks the fossil locality.

It is absent from all but extreme southeastern Delaware, the eastern tip of West Virginia, and the southwestern portion of the Ohio River drainage in that state. It occupies southern Ohio, Indiana, and Illinois, with narrow northward extensions in western Indiana and western Illinois along the Wabash, Illinois, and Mississippi Rivers. *Eumeces laticeps* occurs in southern Missouri and extreme southeastern Kansas, southward through southeastern Oklahoma into Texas to the vicinity of Fort Worth, then gradually southeastward to the Gulf Coast at Matagorda Bay. The range is continuous eastward along the Gulf Coast from Texas to its southern limit in Florida, except for a small area in southwestern Louisiana and the extreme southeastern tip of the Mississippi River delta. An isolated population may occur in northeastern Indiana. Isolated questionable records also exist far west of the established range in Oklahoma and Texas and south of it in Florida (Davis, 1968; Conant, 1975). *Eumeces laticeps* occupies primarily forested areas within a wide range of habitats from relatively xeric coastal islands to moist swamps. It is semi-arboreal and strongly associated with hardwoods in the southeastern portion of its range (Cooper and Vitt, 1987c).

• **Fossil Record.** Fossils are known from New Trout Cave, 5.6 km SW of Franklin, Pendleton County, West Virginia (38°36'10" N, 79°22'08" W). Specimens were found in two sites dated 17,060 ± 220 ybp and > 30,000 ybp (Holman and Grady, 1987).

• **Pertinent Literature.** Taxonomic and systematic discussions are in Taylor (1932, 1935), Davis (1968), Murphy et al. (1983) and Lieb (1985). Distributional studies include Taylor (1932) and Davis (1968). General anatomical data are in Taylor (1935) and Davis (1968). Lynn and Zmich (1967) discuss the thyroid gland and Trauth et al. (1987) the cloacal anatomy. An aberrant color pattern is described by Cooper (1981b). Thompson and Huff (1944a & b) present limited data on susceptibility to parasites. The ecological and behavioral literature is extensive. An early summary which includes *laticeps* is that of Fitch (1954). Goin and Goin (1951) discuss several aspects of natural history. Other ecological aspects are: thermal ecology, Pentecost (1974); predatory behavior and diet, McIlhenny (1937), Hamilton and Pollack (1961), Cooper (1981a, c) and Vitt and Cooper (1986a, in press a); aggregation, Cooper and Garstka (1987b); tail-autotomy as a predator-escape mechanism, Cooper and Vitt (1985a) and Vitt and Cooper (1986b); reproductive ecology, Martof (1956), Vitt and Cooper (1985a, b), and Cooper and Vitt (1987b, c, 1988); reproductive behavior, Goin (1957), Cooper, Garstka and Vitt (1986), Cooper, Mendonca and Vitt (1986, 1987), Moehn (1986), and Cooper and Vitt (1987b); aggressive behavior,

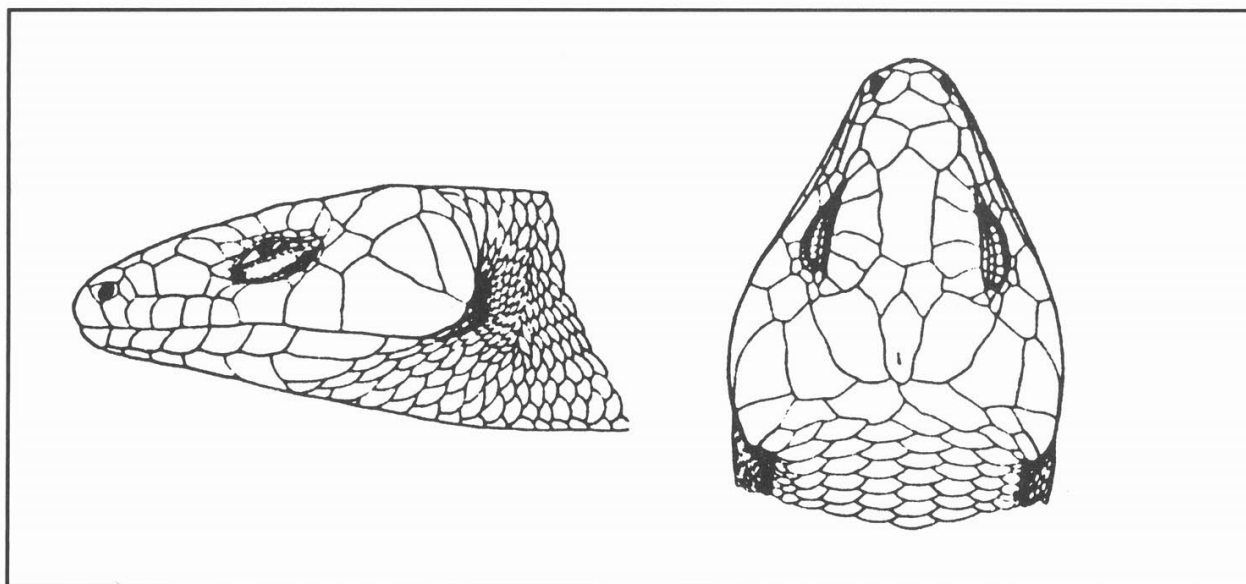
Cooper and Vitt (1987a, b, 1988) and Cooper, Mendonça and Vitt (1987); pheromone, Cooper and Vitt (1984a, b, 1985b, 1986a-e, 1987b, c, 1988), Cooper, Garstka and Vitt (1986), and Cooper and Garstka (1987a, c); brooding behavior, Noble and Mason (1933) and Vitt and Cooper (in press b); effects of steroid sex hormones and coloration on social behavior, Cooper, Mendonça and Vitt (1986, 1987) and Cooper and Vitt (1988). Kingman (1932) compares skull morphology to other species of *Eumeces*.

• **Taxonomic History.** *Eumeces laticeps* was long confused with *E. fasciatus* and *E. inexpectatus*. Distinguishing the three sibling species requires careful examination and comparison of specimens. The three species were frequently lumped in the literature before Taylor's (1932) re-establishment of *E. laticeps* as a distinct species. Subsequent investigations have confirmed Taylor's separation of the forms (Davis, 1969; Murphy et al., 1983); the nomenclature has been stable for over half a century and is not now controversial. Taylor (1935) provides a detailed history of the many nomenclatural shifts within the taxon.

• **Etymology.** The name *laticeps*, meaning "wide-headed," is compounded from the Greek *kephale*, (head), and the Latin *latus* (wide).

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**Figure.** *Eumeces laticeps*, lateral and dorsal view of the head. From Taylor (1935).

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**William E. Cooper, Jr.**, Department of Biology, Auburn University at Montgomery, Montgomery, Alabama 36193-0401.

Primary editor for this account, Andrew H. Price.

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