**Ophisaurus ventralis** (Linnaeus)  
Eastern glass lizard


*Chamaea ventralis*: Schneider, 1801:215.


*Hyadactylus ventralis*: Merrem, 1820-79.

*Ophisaurus punctatus* Cuvier, 1829:70. *Nomen nudum*.

*Ophisaurus striatulus* Cuvier, 1829:70. *Nomen nudum*.

*Ophisaurus lineatus* Gray, 1838:391. Type-locality, "North America," restricted to Charleston, South Carolina (Schmidt, 1953:37). Type-specimen not known to exist.

- **Content.** The species is monotypic. See Remarks.

- **Definition.** *Ophisaurus ventralis* is a large (maximum snout-vent length 292 mm, maximum total length 1082 mm) legless, serpentiform lizard with a distinct lateral fold. Scales along the lateral fold number 98 or more. The fronspostal is usually undivided, and the upper labials are separated from the orbit by the lorealabials. White markings are present on the posterior corners of the dorsal scales, never in the center of the scales. The midventral stripe is absent in adults, and there are neither stripes nor dark pigmentation below the lateral fold. Distinct vertical white neck bars are present. In body vertebrae the angle between the posterior border of the neural spine and the longitudinal axis of the centrum is 65 to 84 degrees. Caudal vertebrae have distinct fracture planes and secondary neural spines. The angle between the anterior border of the caudal transverse process and the longitudinal axis of the centrum is 70 to 75 degrees. Palatine teeth are present. The hemipenis has a ridge the entire length of the organ along the medial side of the sulcus, and another ridge that extends about one-fourth the length of the organ on the lateral side of the sulcus.

- **Descriptions.** McConkey (1954) provided the most complete, non-composite description of this species, including a detailed description of a to po type, notes on variation in color of young and adults, and data on variation in scutellation. Osteological descriptions are in Cope (1900), Auffenberg (1955), and Etheridge (1960, 1961).

- **Illustrations.** A color photograph was provided by Cochran and Goin (1970: pl. 9, fig. f). Black and white photographs are in Smith (1946: pl. 133, a and f), McConkey (1954: pl. 2), Carr and Goin (1955: pl. 52), and Pope (1955: pl. 219). Conant (1958; pl. 14) illustrated the species in color. A photograph of *O. ventralis* brooding its eggs is in Vinegar (1968). Line drawings of scutellation are in Cope (1900: fig. 85), Burt (1935: fig. 2), and McConkey (1954: fig. 1). Drawings of vertebrae are in Etheridge (1967).

- **Distribution.** *Ophisaurus ventralis* occurs mainly in the southeastern coastal plain of the United States from Atchafalaya Bay, Louisiana, through southern Mississippi, Alabama, all of Florida, Georgia, South Carolina, and coastal North Carolina to Albemarle Sound. Locality records outside this general range are frequent. McConkey (1954) listed a single record from McCurtain County in extreme southeastern Oklahoma, and another from Arkansas. Webb (1970:58) suggested that further study was needed to clarify the status of *O. ventralis* in Oklahoma. McConkey (1954) also listed records from St. Louis and Jefferson County, Missouri, which Anderson (1966) considered questionable, but fossil *Ophisaurus ventralis* have recently been found near St. Louis (see Fossil Record). A record from Ashe County, North Carolina was questioned by McConkey (1954:139).

Since the American species of *Ophisaurus* were confused until the 1950's, many data on ecological preference of *O. ventralis* are obscure in composite accounts. McConkey (1954) quoted W. T. Neill, who characterized the habitat of *Ophisaurus ventralis* in Florida, as follows: "Common in pine flatwoods, mesic hammock, borders of low hammock..., damp grassy situations generally."

- **Fossil Record.** Auffenberg (1955, 1956) listed *Ophisaurus ventralis* from the Pliocene (probably Hemphillian) of Alachua County, Florida, and from the Pleistocene (probably Irvingtonian) of Alachua and Marion Counties, Florida. Holman (1958) listed the species from the Pleistocene (Wisconsin) of Citrus County, Florida, and from the Pleistocene (perhaps Illinoian) of Levy County, Florida (Holman, 1959). *Ophisaurus ventralis* is also known from the Late Pleistocene near St. Louis, Missouri (Holman, 1965).

- **Pertinent Literature.** The anatomy of *O. ventralis* has been studied by Hebard and Charipper (1955a, 1955b; adrenal cortex), Lynn and Walsh (1957: thyroid gland), Baird (1960; periotic labyrinth), Schmidt (1964; cochlea), and Weyer (1967; torcular membrane of the ear). Tooth counts were given by Edmund (1969). Hamilton and Pellack (1961) discussed food of *O. ventralis* in Georgia. Geographic distribution was included in papers by Freeman (1955; South Carolina), Duellman and Schwartz (1958; southern Florida), Cliburn (1959; Mississippi), Martof (1963; Sapelo Island, Georgia), and Mount and Folkerts (1968; Alabama). Neill (1950) mentioned the occurrence of *O. ventralis* in residential areas of Augusta, Georgia. Records from pocket gopher mounds in central Florida were mentioned by Funderburg and Lee (1968), and the presence of *O. ventralis* remains in a natural trap in southern Florida was noted by Hirschfeld (1969). Caudal vertebrae were described by Etheridge (1967). Hunsaker and Johnson (1959), and Hutchison and Lartimer (1960) discussed physiology of the integument. Brooding was described by Noble and Mason (1935), and Vinegar (1968). A size record was given by Hudson (1948). The most comprehensive systematic work is that of McConkey (1954).
• Remarks. For many years all United States populations of *Ophisaurus* were placed in the composite species *O. ventralis*. Bouleger (1885) recognized *O. ventralis* and a second species, *O. attenuatus*, but his arrangement was generally ignored. McConkey (1952, 1954) demonstrated that three species are involved: *O. ventralis, O. compressus, and O. attenuatus*.

• Etymology. The name *ventralis* is from the Latin *venter* (= belly), probably in reference to the snake-like locomotion of *Ophisaurus ventralis*.

**Literature Cited**


J. Alan Holman, Michigan State University, East Lansing, Michigan 48823.

Primary editor for this account, Clarence J. McCoy.