



Common Name: MIMIC GLASS LIZARD

Scientific Name: *Ophisaurus mimicus* Palmer

Other Commonly Used Names: legless lizard, glass snake, horn snake

Previously Used Scientific Names: none

Family: Anguillidae

Rarity Ranks: G3/S2

State Legal Status: Rare

Federal Legal Status: none

Description: This is a long, slender, limbless lizard that reaches a maximum body length of 18.3 cm (7¼ inches). However, individuals have extremely long tails, and their body length constitutes only about one-third the total length of those with complete tails, i.e., those not shortened by injury. Male mimic glass lizards grow to slightly larger sizes than females. Like all four Georgia glass lizard species, this form superficially looks like a snake. The scales of mimic and other glass lizards are reinforced with tiny plates known as osteoderms, which make them considerably more rigid than snakes. This and other glass lizards are distinguished from snakes by their small belly scales, moveable eyelids, external ear openings, and a fold of skin (called the lateral fold) that extends along the side from the neck to the vent. The back of mimic glass lizards is tan or brown and may or may not have light and dark speckling. A dark stripe is usually present down the middle of the back and most of the tail, but it may be faint in some individuals. Narrow stripes occur on the side of the tail and above the fold on each side of the body. Also, a few stripes are present below the fold in adults, but these are quite faint. Vertical bars may be

present behind the ear. The belly is pale. Hatchlings have not been described, and descriptions of few juveniles are available. Juvenile specimens less than 9 cm (3½ inches) in body length possess only a single stripe above the lateral fold; rows of dots, which presumably develop into the multiple stripes of the adults, are present between the stripe and fold.

Similar Species: Island glass lizards (*Ophisaurus compressus*) are similar in size but have a very prominent dark stripe on each side of the body above the fold. The other two native glass lizards, eastern (*O. ventralis*) and slender (*O. attenuatus*), grow to be much larger, reaching body lengths in excess of 30 cm (11¾ inches). Counting scale rows is the most reliable way of distinguishing mimic glass lizards from smaller individuals of the latter two species; fewer than 97 scale rows are present along the lateral fold of mimics, while more than 97 are found on eastern and slender glass lizards.

Habitat: Mimic glass lizards are apparently strongly associated with the longleaf pine-wiregrass community of this region, but very little habitat information exists. Specific habitat types identified for this species in other parts of its range include mesic pine flatwoods, savannas, and pitcher-plant bogs. An intact groundcover dominated by grasses is characteristic of most, if not all, sites where mimic glass lizards occur.

Diet: Prey items are unknown, but likely consist of a variety of invertebrates, as has been documented for other glass lizard species.

Life History: Eleven enlarged eggs were found in a dissected female from Mississippi. Other than that, little is known about their reproductive biology. Other glass lizard species typically mate in the spring and nest from early to midsummer, with eggs hatching in late summer. Females usually attend the eggs, which are placed in depressions of moist soil under logs or similar shelters or in rotten logs. Whether these traits also pertain to this species remains to be determined.

Survey Recommendations: Natural resources managers of public lands, as well as biologists and naturalists that spend significant time there, should be made aware of the possibility of mimic glass lizard presence, and the importance of recognizing the species and properly documenting observations. Individuals are most likely to be encountered while crossing roads, or while lying dead on roads. Drift fence arrays equipped with funnel traps have captured mimic glass lizards in other states.

Range: Mimic glass lizards occur in a narrow band of the lower Coastal Plain from southeastern North Carolina to the Pearl River in Mississippi, and are apparently absent from peninsular Florida.

Threats: The last confirmed mimic glass lizard collected from Georgia was in 1978 prior to its recognition as a distinct species. Very few other records exist. It is quite possible that its similarity in appearance to other glass lizard species may have led to the misidentification of observed or captured specimens. Regardless, this is a very uncommon species in Georgia that may be significantly imperiled or may even have been lost from the state. Drastic habitat alteration in the lower Coastal Plain, including fire suppression and loss of the longleaf pine-

wiregrass community, has left the mimic glass lizard and many other endemic reptiles and amphibians without much remaining suitable habitat.

Georgia Conservation Status: Historical records exist for Ft. Stewart Military Reservation.

Conservation and Management Recommendations: If mimic glass lizards persist in Georgia, they have the highest potential for conservation on the public lands retaining, or restoring, longleaf pine-wiregrass communities. Maintenance of these habitats requires periodic fire or other management techniques that promote wiregrass or similar bunch-grass species. Intensive soil disturbance should be avoided. Clearly, the species' conservation is reliant on identification of inhabited sites and subsequent development of local protection and management plans. Natural history research is critically needed, but obviously that depends on the discovery of a Georgia population to study, or must take place in another state where extant populations are currently known.

Selected References:

Jensen, J. B. 2008. Mimic glass lizard *Ophisaurus mimicus*. Pp. 285-286 in Jensen, J. B., C. D. Camp, J. W. Gibbons, and M. J. Elliott (eds.). Amphibians and Reptiles of Georgia. University of Georgia Press, Athens. 575 pp.

Jensen, J. B. 2004. Mimic glass lizard *Ophisaurus mimicus*. Pp. 57-58 in Mirarchi, R. E., M. A. Bailey, T. M. Haggerty, and T. L. Best (eds.). Alabama Wildlife, Volume 3, Imperiled Amphibians, Reptiles, Birds, and Mammals. University of Alabama Press, Tuscaloosa.

Moler, P. E. 1992. Mimic glass lizard: *Ophisaurus mimicus*. Pp. 247-250 In Moler, P. E. (ed.). Rare and Endangered Biota of Florida, Volume 3, Amphibians and Reptiles. University Press of Florida, Gainesville.

Palmer, W. M. 1987. A new species of glass lizard (Anguinae: *Ophisaurus*) from the southeastern United States. Herpetologica 43: 415-423.

Palmer, W. M. 1992. *Ophisaurus mimicus*. Catalogue of American Amphibians and Reptiles 543: 1-2.

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Date Compiled or Updated:

J. Jensen, Dec. 2007: original account

K. Owers, Sept. 2009: updated status and ranks, added picture