

## MIMIC GLASS LIZARD

*Ophisaurus mimicus*

**Order:** Squamata

**Family:** Anguillidae

**FNAI Ranks:** G2/S1S2

**U.S. Status:** none

**FL Status:** none



**Description:** This is one of four similar species of glass lizards, genus *Ophisaurus*, that occur in Florida. All are legless, have movable eyelids and external ear openings, a lateral fold on each side that runs from the neck to the vent, small ventral scales, very long tails (which begin at the vent) that comprise up to three quarters of total body length, and relatively hard bodies stiffened by osteoderms within the scales. Adult *O. mimicus* can be 38-66 cm (15-26 in.) in total length (maximum snout-vent length 181 mm = 7.1 in.). There are 95 or fewer scales along the lateral fold. Typically there is a dark (sometimes faint) middorsal stripe bordered on either side by tan and in turn another dark stripe; below this but still above the lateral fold are 3-4 narrow dark stripes separated by narrow light stripes that continue onto the tail. Marking below the lateral fold generally is reduced to freckling, spots, or dashes. Irregular, often indistinct pale bars may be present on the sides of the head and neck. The lateral striping is poorly developed in juveniles (Palmer 1987, 1992; Ashton and Ashton 1991; Moler 1992; Jensen et al. 2008; Powell et al. 2016; Krysko et al. 2019).

**Similar Species:** Because they lack legs and have elongated, scaly bodies, glass lizards are frequently confused with snakes. However, several features noted above distinguish them from snakes, which have wide belly scales, fixed eye coverings, no ear openings, relatively short tails, and more flexible bodies. The four species of glass lizards in Florida are distinguished by a combination of color pattern and scalation. As adults, *O. mimicus* are characterized by a low scale count (< 95) along the lateral fold in combination with the presence of multiple stripes on the tail. Other species have 99 or more scales along the lateral fold or have only a single dark stripe on the tail (Palmer 1987, Powell et al. 2016, Krysko et al. 2019). *O. mimicus* is also the smallest of the four species, although it overlaps the other species in size.

**Habitat:** The mimic glass lizard generally occurs in longleaf (occasionally slash)

pine-dominated uplands with grassy groundcover, particularly mesic to wet flatwoods, but infrequently in more xeric communities such as sandhill and upland pine; canopy is generally open, and there is little midstory. The species is sometimes found in hillside seepage bogs, the edges of dome swamps, and wet prairies where these communities are closely associated with pine uplands (Krysko et al. 2019, Stevenson et al. 2023).

**Seasonal Occurrence:** The species is present year-round in appropriate habitats, although it is less active in winter, when it possibly retreats below ground. Known records of surface activity extend from 27 March to 16 November, with a peak from April through June, the likely reproductive season (Stevenson et al. 2023).

**Florida Distribution:** In Florida, the mimic glass lizard is nearly restricted to the Panhandle, where it at least formerly ranged east to Wakulla County. A single older record from Duval County suggests that the range dipped southward from southeastern Georgia into northeastern Florida (Krysko et al. 2019). The species possibly occurs in some Panhandle counties not indicated on the map but may have gone unnoticed because of its recency of recognition as distinct from other glass lizards.

**Range-wide Distribution:** This is a species of the lower southeastern U.S. Coastal Plain (both Gulf and Atlantic), with historic records extending from southern Mississippi to the Florida Panhandle and northward from southern Georgia to southeastern North Carolina (Powell et al. 2016, Krysko et al. 2019). Extensive habitat loss and alteration have led to recent records being confined to the Florida Panhandle, adjacent southern Alabama, and coastal southeastern North Carolina (Stevenson et al. 2023).

**Conservation Status:** Loss of native habitat has led to fragmentation and decline of populations both range-wide and in Florida. Though never considered common and now potentially threatened, the opportunity for *O. mimicus* to remain secure in Florida exists as long as conservation lands are managed to retain natural habitats. Eglin Air Force Base, Apalachicola National Forest, and Blackwater River State Forest, in particular, provide extensive habitat, although historic observations have been made at other sites including Tate's Hell State Forest and St. Marks National Wildlife Refuge. Outside of public lands, much of the longleaf pine/wiregrass habitat has been degraded by conversion for agriculture and

silviculture, and fire suppression has allowed hardwood encroachment in forested sites, resulting in population losses and range fragmentation (Krysko et al. 2019, Stevenson et al. 2023).

**Protection and Management:** Remaining privately owned, longleaf pine-dominated upland habitat, especially larger tracts, in the Florida Panhandle should be protected as conservation land. Although this species probably can tolerate some disturbance, conversion of natural habitats to high-intensity silviculture, agriculture, and residential and urban uses can lead to extirpation of local populations. Conservation lands should be managed to retain (or restore) longleaf pine and native groundcover, particularly wiregrass; uneven-aged pine stands with < 25% canopy cover and intact soil horizons are preferred. While fire is a natural management tool in such upland communities to prevent succession to hardwood and/or shrub-dominated communities, high-intensity fires may temporarily impact glass lizard populations, so burning in a patchwork manner may be preferable. Efforts to control fire ants, which are known to prey on reptilian eggs and hatchlings, may be beneficial, as would reduction of feral pigs that create extensive soil disturbance in wetter habitats occupied by this lizard. State and federal listing as a threatened species merit consideration.

**References:** Ashton and Ashton 1991; Jensen et al. (Eds.) 2008; Krysko et al. 2019; Moler (Ed.) 1992; Palmer 1987, 1992; Powell et al. 2016; Stevenson et al. 2023.

Mimic Glass Lizard

*Ophisaurus mimicus*



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Female © E. Pierson Hill



Juvenile © E. Pierson Hill