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CLUTCH SIZE, EGG MASS, AND INCUBATION PERIOD IN AN EASTERN GLASS LIZARD, *OPHISAURUS VENTRALIS*

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The eastern glass lizard, *Ophisaurus ventralis* (Squamata: Anguillidae), is one of four species of legless lizards in the eastern United States. It is distributed in eight states of the southeastern coastal plain (Conant and Collins 1991). Reproductive information about this species is minimal. Here, we report clutch size, egg mass, incubation period, and hatchling metrics of one female *O. ventralis* captured for use in another study on locomotion. As the female was gravid, we had the unique opportunity of obtaining data on these reproductive variables. We also present supplemental data on ovarian follicle number and oviductal egg number from 3 preserved specimens.

A gravid female was captured in Hillsborough County, Florida in May 1990. We recorded mass to the nearest g with a triple beam balance and measured snout-vent length (SVL) and tail length (TL) to the nearest mm with a clear plastic ruler. The female was placed in a 38 L aquarium with a long leaf pine (*Pinus palustris*) needle substrate. Light was provided by 150 W spot lamps and 40 W ultraviolet grow lights on a 10:14 hour light:dark cycle. Ambient temperature was 35°C during the light phase and 25°C during the dark phase.

The female laid seven eggs on 6 June 1990. We discovered the eggs under the pine needles with the female encircling the clutch; a common behavior in *Ophisaurus* (Vinegar 1968, Ashton and Ashton 1985, Bartlett 1985, Fitch 1989). The female retreated rapidly upon discovery. Each egg was weighed to the nearest mg on a Sartorius balance and measured to the nearest mm the same day. The eggs were placed in a 100 ml jar and covered with moistened vermiculite 20 cm deep. The jar was sealed with plastic wrap to prevent desiccation. Eggs were maintained under the same conditions as the adult female.

One week prior to egg laying, the female weighed 24.1 g. Total body length (TBL) of the female (tail intact) was 302 mm with a SVL of 148 mm. Average egg mass was 759 mg \pm 157 SD (range 505 - 882 mg). Relative clutch mass (RCM) was 22%. This is lower than that reported for *O. attenuatus* (Fitch 1989, average RCM = 24.62%). Eggs averaged 18 mm \pm 1.1 SD in length (range 17 - 20 mm) and 8 mm \pm 0.7 SD in width (range 7 - 9 mm). Average egg sizes of 21 \times 13.6 are reported elsewhere for *O. ventralis* (Schwab 1992), and *O. compressus* egg size averages 15 \times 10 mm (Bartlett 1985).

Two eggs desiccated after one week of incubation. Two eggs hatched on 23 July 1990 and three on 24 July (incubation periods of 47 and 48 days). All five hatchlings appeared healthy with no visible signs of developmental abnormalities. Similar incubation periods are reported for *O. ventralis* (Vinegar 1968, 47 days), *O. compressus* (Bartlett 1985, 39 days), and *O. attenuatus* (Fitch 1989, 53 days). Egg incubation periods of our clutch are shorter than those reported by Ashton and Ashton (1985, 60-75 days). Average hatchling mass was 824 mg \pm 107 SD (range 650 - 940 mg); average SVL and TL were 50 mm \pm 2.3 SD (range 48 to 53 mm) and 84 mm \pm 6.5 SD (range 75 to 91 mm), respectively. Average TBL was 133 mm. Average SVL of our hatchlings is intermediate between those reported for *O. compressus* (Bartlett 1985, 40 mm) and *O. attenuatus* (Fitch 1989, 56.8 mm).

Clutch size of our female is similar to those reported for *O. ventralis* (Vinegar 1968, 7 eggs; Ashton and Ashton 1985, 7-10 eggs; Schwab 1992, 6 eggs). We examined 3 female eastern glass lizards preserved in the University of South Florida Vertebrate Collection

and found ovarian follicles in two individuals (7 and 8, and 7 and 7 in left and right ovaries, respectively). The third female had 7 oviducal eggs.

Mean SVL of hatchlings comprised only 37% of the mean TBL. Since tail autonomy often is used as a defensive mechanism in *Ophisaurus*, it is not surprising that tails are well developed, even at this early stage in their ontogeny. Incubation period in this clutch is in conflict with that reported by Ashton and Ashton (1985) for *O. ventralis* in Florida. Thus, we feel our observations suggest the need for additional studies to examine field incubation periods of this species in Florida.

LITERATURE CITED

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ANNOUNCEMENT

Florida Scrub Jay Statewide Mapping Project.—A year-long statewide mapping project of the Florida Scrub Jay, sponsored by the U. S. Fish and Wildlife Service, is currently underway. This project, undertaken by researchers at Archbold Biological Station, hopes to locate and map every Scrub Jay existing in the state, and to assess its habitat size and quality. All FOS members aware of Florida Scrub Jays are urged to report the locations to personnel at the Archbold Biological Station, P.O. Box 2057, Lake Placid, Florida 33852.