



FIG. 1. Male *Anolis carolinensis* mating with female *Anolis sagrei* in Brevard County, Florida, USA.

84). *Anolis sagrei* is the most frequently observed *Anolis* at the site (NMS, pers. obs.). Photos of this event have been deposited at HerpMapper (HM 190125). To our knowledge this is the first published record of a male *A. carolinensis* mating with a female *A. sagrei*.

NATALIE M. SATER, Department of Biology, University of Central Florida, 4000 Central Florida Blvd, Orlando, Florida 32816, USA (e-mail: natalie.sater@knights.ucf.edu); **CHRISTOPHER E. SMITH**, Wildlife Research & Consulting Services, LLC, PO Box 803, Lakeland, Minnesota 55043, USA (e-mail: christopher.smith@fieldecology.com).

ANOLIS CAROLINENSIS (Green Anole). NEST SITES AND COMMUNAL NESTING. The Green Anole is a small, slender, arboreal lizard native to the southeastern United States (Powell et al. 2016. Field Guide to Reptiles and Amphibians of Eastern and Central North America, 4th ed. Houghton Mifflin Harcourt Publishing Company, New York, New York. 512 pp). This species is mostly insectivorous and usually feeds on small, soft-bodied insects (Crews 1980. Adv. Stud. Behav. 11:1–74). The breeding season occurs over ~ 4 months from about April to July (Lovern et al. 2004. IJAR Journal 45:54–64), when the female lays several clutches of a single egg, often in moist leaves or in a shallow hole which is either pre-existing or created by the female (Crews 1980, *op. cit.*). Females will also conceal their eggs under leaves, logs, stones, or other objects and debris; the interval between clutches is 7–14 days (Lovern et al, *op. cit.*; Crews, *op. cit.*).

On several occasions during Spring 2016 and Spring 2017, we uncovered *A. carolinensis* nests in the tidal freshwater forested wetlands of the Savannah River near Hardeeville, South Carolina (32.20981°S, 81.11784°W; WGS 84). The majority of the nests were found in elevated mounds of soil substrate and leaf litter (i.e., “hummocks”) at the base of Bald Cypress (*Taxodium distichum*) and Water Tupelo (*Nyssa aquatica*) trees. The hummocks are generally the only suitable nesting substrate that remains above the average water level in this tidal wetland (roughly 15–25 cm above water).

Eggs were measured, photographed in situ, and immediately covered with leaf litter. The average egg size ($N = 22$) was 10 mm in length. We discovered that the eggs belonged to *A. carolinensis* during fieldwork conducted at the same site during Spring 2016. An egg that was collected temporarily for photographs hatched several hours later in a container before it could be returned. This may have been an example of environmentally cued hatching (Doody 2011. Int. Comp. Biol. 51:49–61). The aforementioned egg was taken from a communal nest of approximately five eggs, which we found within a decomposing tree limb (roughly 20 cm above water). Repeated visits to the nest revealed that all of the eggs hatched successfully. The eggs had not been disturbed or preyed upon, and all of the eggs had typical egg tooth perforations.

Our record provides previously undocumented descriptions of *A. carolinensis* nest sites in tidal freshwater forested wetlands, along with a further record of communal nesting (Doody et al. 2009. Quart. Rev. Biol. 84:229–252). It is likely that other reptile species found in tidal freshwater forested wetlands also use hummocks or similar habitat features (e.g., accumulated organic matter at the base of shrubs) as nesting sites. Information regarding the ecology of herpetofauna in tidal, freshwater forested wetlands is incomplete. Our record improves our understanding of reptilian reproduction in this wetland type.

SIDNEY T. GODFREY (e-mail: stgodfr@g.clemson.edu) and **JAMIE A. DUBERSTEIN**, Baruch Institute of Coastal Ecology and Forest Science, Clemson University, 177 Hobcaw Road, Georgetown, South Carolina 29440, USA (e-mail: jdubenstein@clemson.edu); **JOEL MOTA**, Baruch Institute of Coastal Ecology and Forest Science, Clemson University, Georgetown, South Carolina 29440, USA (e-mail: jmota2505@gmail.com); **WILLIAM MOORE**, College of Natural Resources and Environment, Virginia Tech, 310 West Campus Drive (MC0321), Blacksburg, Virginia 24061, USA (e-mail: willi88@vt.edu).

ANOLIS CRISTATELLUS (Puerto Rican Crested Anole). CANNIBALISM. *Anolis cristatellus* is native to Puerto Rico but has been introduced, and become regionally established, in Greater Miami, Florida, USA (Kolbe et al. 2016. Landsc. Ecol. 31:1795–1813). It is a generalist consumer of terrestrial arthropods, although it has been occasionally recorded preying on other lizards in its native range (Ríos-López et al. 2015. Life Excit. Biol. 3:118–136). Cannibalism is widespread in *Anolis* lizards (Powell and Watkins. 2014. IRCF Reptiles Amphib. 21:136–137) and has been recorded in *A. cristatellus* in its native range of Puerto Rico (Ríos-López et al. 2015, *op. cit.*), as well as in the Dominican Republic where this species is invasive (Fitch et al. 1989. Amphibia-Reptilia 10:307–320). Here we report, to our knowledge, the first record of cannibalism in *A. cristatellus* in Florida, a region outside of its native range.

On 14 October 2017 at ca. 1400 h, an adult male *A. cristatellus* (ca. 6 cm snout–vent length) was observed in Fairchild Tropical Botanic Garden (25.676°N, 80.274°W; WGS 84, elev. < 1 m) preying upon a smaller conspecific (ca. 3 cm SVL; Fig 1). The larger lizard seized the smaller lizard across the torso. The prey lizard frequently bit the head of the predatory lizard in response, as well as consistently extending its dewlap throughout the course of the interaction. Other lizards, including a female conspecific, were present in the immediate vicinity of the interaction, although only the two lizards involved in the trophic event were physically involved. We have observed multiple other cannibalism interactions of *A. cristatellus* at this and different sites in Miami, Florida, however this is the first time



FIG. 1. Cannibalism of a juvenile *Anolis cristatellus* by a larger mature male. An adult female (left) observed the interaction.

we have been able to obtain clear photographic support. These observations suggest that cannibalism is a conserved behavioral trait in *A. cristatellus* when subjected to novel abiotic and biotic environmental conditions, such as those experienced in its non-native range in southern Florida, USA.

NATHAN CAMPBELL, Braddock Senior High School, 3601 SW 147th Ave, Miami, Florida 33185, USA (e-mail: nathan0305@live.com); **CHRIS-TOPHER J. THAWLEY**, Department of Biological Sciences, University of Rhode Island, 120 Flagg Rd., Kingston, Rhode Island 02881, USA (e-mail: cthawley@gmail.com); **JAMES T. STROUD**, Fairchild Tropical Botanic Gardens, 10901 Old Cutler Rd, Coral Gables, Florida 33156, USA (e-mail: James-Tstroud@gmail.com).

ANOLIS SAGREI (Brown Anole). OPHIOPHAGY. Native to Cuba and the Bahamas, *Anolis (Norops) sagrei* was first noted in Florida, USA in 1887 (Garman 1887. Bull. Essex Inst. 19:25–50) and has subsequently become established throughout Florida, southern Georgia, and other areas of the southern United States (Campbell 1996. Herpetol. Rev. 27:155–157). The species is considered a direct threat to native fauna, especially its congener the Green Anole (*Anolis carolinensis*), due to its voracious appetite. *Anolis sagrei* consumes an array of invertebrate and more rarely vertebrate prey, particularly other lizards (Norval 2007. Herpetol. Bull. 102:34–37; Norval et al. 2010. Russ. J. Herpetol. 17:131–138; Giery et al. 2013. Funct. Ecol. 27:1436–1441). Here I report the first record of ophiophagy by *A. sagrei*.

At 1057 h on 9 November 2017, I observed an adult male *A. sagrei* consuming a small, burnt-red colored snake on the East campus of Valencia College in Orlando, Florida (28°33'05.5"N, 81°15'03.6"W, WGS 84; 22 m elev.). The apparently deceased snake was being consumed headfirst (Fig. 1). The anole escaped with the prey item into nearby bushes as I attempted capture. Therefore, species-level identification of the snake is not possible. Given its scalation, burnt-red dorsal coloration largely lacking in pattern, and lighter colored venter, the snake could possibly be *Storeria victa*, *Rhadinaea flavilata*, or *Tantilla relicta*, all of which occur in central Florida.

My observation is the first documented case of ophiophagy by *A. sagrei* and represents a new prey suborder for the species and, to my knowledge, the diverse genus *Anolis*. This record adds to the known prey items of this opportunistic feeder and confirms its ability to consume relatively large vertebrate prey.



FIG. 1. Adult Brown Anole (*Anolis sagrei*) preying upon a small, unidentified snake.

I thank Steve Myers for helpful discussion, as well as Kevin Enge, Kenneth Krysko, and Paul Moler for comments on the potential identity of the snake.

ALEXANDER BENJAMIN ORFINGER, Department of Science, East Campus, Valencia College, 701 N Econlockhatchee Trl, Orlando, Florida 32825, USA (e-mail: aborfinger@gmail.com).

ASPIDOSCELIS VELOX (Plateau Striped Whiptail) and ASPIDOSCELIS UNIPARENS (Desert Grassland Whiptail). RARE SYNTOPY. *Aspidoscelis velox* and *A. uniparens* are triploid obligatory parthenogenetic species; they were separately derived in two-stage hybridization processes (Dessauer and Cole 1989. In Dawley and Bogart [eds.], Evolution and Ecology of Unisexual Vertebrates, pp. 49–71. Bulletin 466, New York State Museum; Moritz et al. 1989. Evolution 43:958–968). These species of lizards have been shown to have essentially complementary natural geographic ranges, with *A. velox* distributed to the north of *A. uniparens*. The range of *A. velox* includes parts of Arizona, Colorado, New Mexico, and Utah, whereas the range of *A. uniparens* includes mostly allopatric parts of Arizona and New Mexico and entirely allopatric parts of Texas and areas in the Mexican states of Chihuahua and Sonora (Wright 1968. J. Herpetol. 1:1–20; Dessauer and Cole, *op. cit.*; Lemos-Espinal et al. 2017. Herpetol. Rev. 48: 639). The initial survey by Wright (*op. cit.*) to determine the respective geographic distributions of these triploid species, in relationship to that of *A. inornatus*, a common gonochoristic progenitor in their independently complicated ancestries, revealed only two areas where these parthenogenetic species are syntopic. Wright (*op. cit.*) reported sites of syntopy in Yavapai County, Arizona (documented only by specimens examined) and Socorro County, New Mexico (documented by specimens examined and brief remarks). However, Wright's report of syntopy between *A. velox* and *A. uniparens* was overlooked by Cuellar (1979. Amer. Zool. 19:773–786). Exhaustive independent searches at many sites in Arizona and New Mexico by BKS and associates, JEC, and JMW have not increased the number of known counties for syntopy between *A. velox* and *A. uniparens*. Herein, we provide the first detailed description of syntopy between these species at the two known sites in Yavapai County. The sites described also provide examples of the presence of up to three parthenogenetic species of *Aspidoscelis* in the *A. sexlineatus* species group in habitats not occupied by gonochoristic congeners,