and Reptiles of Florida. Krieger Publ. Co., Malabar, Florida. 166 pp.). Here, we report on nocturnal activity of *A. equestris* in South Florida.

On 18 April 2013 between 2203–2215 h, a single adult *Anolis equestris* was observed at Fairchild Tropical Botanical Gardens, Miami, Florida, USA (25.677°N, 80.276°W, WGS84; <1 m elev.). This individual was observed consuming Lepidoptera attracted to an artificial light source positioned above a doorway. Nocturnal lizards (*Hemidactylus mabouia*) were also present around the light source and could represent another potential prey source for nocturnally foraging *A. equestris*. This is the first documentation of *A. equestris* using artificial light sources to allow for nocturnal activity.

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***ANOLIS EQUESTRIS* (Cuban Knight Anole) and *ANOLIS DISTICHUS* (Hispaniolian Bark Anole). EXOTIC INTRAGUILD PREDATION.** *Anolis equestris* is native to Cuba and *A. distichus* is native to Hispaniola; both have been introduced to Florida, USA (Kraus 2009. Alien Reptiles and Amphibians: A Scientific Compendium and Analysis. Springer, [Dordrecht, Netherlands], 563 pp.; Krysko et al. 2003. Florida Sci. 66:74–79). *Anolis equestris* consumes a wide variety of animals and plants including vertebrates, invertebrates and fruit (Camposano et. al. 2008. Iguana 15:212–219, Giery et. al. 2013. Functional Ecol. 2013:1–6). Documented activity times for populations in southern Florida indicate that *A. equestris* activity falls between midmorning and late afternoon, ceasing at sunset (Meshaka et. al. 2004. The Exotic Amphibians and Reptiles of Florida. Krieger Publ. Co., Malabar, Florida. 166 pp.). Here, we report on an intraguild predation event of *A. equestris* in South Florida (Miami) on an *A. distichus*.

On 28 August 2013 at 1504 h, a single adult female *Anolis equestris* was observed at Florida International University, Modesto A. Maidique Campus, Miami, Florida (25.757°N, 80.376°W, WGS84; ~2 m elev.). This individual was observed consuming a juvenile *A. distichus* on a tree at ~2 m height. Ingestion took <1 minute. Prior to the predation event, the *A. equestris* was a uniform dark brown base color, with faded yellow barring. Upon predation of the smaller anole, the *A. equestris* rapidly returned to a more typical pattern—green base color with a yellow bar above the shoulder of the forelimb. During the predation event an adult male *A. distichus* was observed performing dewlap extension displays at the *A. equestris* from a distance of ~55 cm. Following consumption, the *A. equestris* proceeded to try and catch an adult female *A. distichus* between 1507–1508 h but failed. This is the first recorded observation of *Anolis equestris* predating *Anolis distichus* in Florida.

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***ANOLIS SAGREI* (Brown Anole). SEXUAL CANNIBALISM.** Sexual cannibalism occurs when a reproductive adult kills and consumes a potential mate. This form of sexual conflict is common among invertebrates, especially arachnids (Birkhead et al. 1988. Behaviour 106:112–118; Dick 1995. J. Zool. 236:697–706; Kaston 1970. Trans. San Diego Soc. Nat. Hist. 16:33–82; Polis 1980. Annu. Rev. Ecol. Syst. 12:225–251), and typically involves the consumption of males by females. In contrast to its frequent occurrence among invertebrates, cannibalism of any form among adult vertebrates is typically reported only in isolated instances in captivity or under stressful conditions (Amstrup et al. 2006. Polar Biol. 29:997–1002; Gander 1934. Copeia 187; Martinez-Freiria et al. 2006. Herpetol. Bull. 96:26–28). Here, we describe four separate occurrences of sexual cannibalism involving the consumption of adult female *Anolis sagrei* by conspecific males, two of which occurred under natural conditions in a wild population.

Brown Anoles exhibit pronounced sexual size dimorphism. Males from our study populations on the islands of Eleuthera and Great Exuma in The Bahamas exceed females by 22–32% in mean adult snout–vent length (SVL) and 106–153% in mean adult body mass (Cox and Calsbeek 2010. Evolution 64:798–809). Both sexes typically consume a variety of small invertebrates, but only rarely consume vertebrate prey (Norval et al. 2007. Russ. J. Herpetol.17:131–138). Although males of *A. sagrei* and other *Anolis* species are known to cannibalize conspecific juveniles (Cochran 1989. Herpetol. Rev. 20:70; Gerber 1999. Anolis Newsl. V:28–39; Gerber and Echternacht 2000. Oecologia 124:599–607; Nicholson et al. 2000. Herpetol. Rev. 31:173), we report cannibalism among adult *Anolis* lizards in the wild.

During a mark-recapture study in September 2007 on Eleuthera, The Bahamas (24.83°N, 76.32°W), we captured and temporarily confined ca. 20 *A. sagrei* adults of both sexes together in a 6-gal plastic bucket (containing a large pile of sea grape leaves, *Coccoloba uvifera*, to provide individuals with shelter and spatial structure) for transport to a nearby field station. Upon removal of the animals for measurement ca. 2–4 h after capture, two individual adult males were found with the hind limbs and tails of females protruding from their mouths. Both females had lacerations and bite marks on their heads and necks and were dead or nearly dead when removed from the males. We did not document the sizes of the individual males and females in this incident, which we interpreted as an unfortunate and unnatural response to high density and stressful conditions.

We later observed two separate instances of sexual cannibalism under natural conditions during mark-recapture studies of a second population on Regatta Point, near Georgetown, Great Exuma, The Bahamas (23.5°N, 75.75°W). On 7 September 2010, we captured an adult male that was lethargic and visibly

Fig. 1. Conspecific female removed from the mouth of male *Anolis sagrei.*

encumbered. Upon capture, the male immediately regurgitated a conspecific female that he had swallowed headfirst. The female was dead but nearly intact, with only the anterior tip of her head exhibiting signs of digestion. The female weighed 1.0 g (measured to the nearest 0.1 g with a Pesola spring scale) and the SVL and mass of the male after regurgitation were 63 mm and 6.2 g respectively. Although we did not dissect the female comestible to assess her reproductive condition, she exceeded the minimum size of maturity that we have previously established for this population (Cox and Calsbeek 2010. Evolution 64:1321–1330). In a separate instance on 28 May 2013, we captured an adult male with the hind limb of a conspecific female protruding from his mouth. The female was extracted and found to be partially digested, with digestion most pronounced at the anterior end (Fig. 1). The partially digested female weighed 1.0 g, and the SVL and mass of the male after regurgitation were 63 mm and 4.9 g respectively. Dissection of the female revealed mature ovaries with enlarged, vitellogenic follicles, indicating sexual maturity.

Although we do not know how frequently adult males of *Anolis sagrei* prey upon conspecific adult females, our independent observations under natural conditions suggest that sexual cannibalism in this species is not limited to isolated instances or unnatural conditions. In arthropods, sexual cannibalism of males by females has been interpreted as adaptive for males in cases where males have a low chance of finding another mate, and when being consumed during copulation leads to greater paternity (Andrade 1996. Science 201:70–72). This behavior may also be explained by adaptive mate choice in females if the decision of whether or not to cannibalize the male prior to mating is influenced by indicators of his genetic quality (Pearsons and Utez 2005. Anim. Behav. 69:89–94). By contrast, a non-adaptive explanation for sexual cannibalism includes "aggressive spillover," where aggression during the juvenile stage leads to rapid growth, rapid growth leads to greater fecundity in the adult female, and the genetic correlation between aggression in the two life stages is the ultimate driver of sexual cannibalism (Arnqvist and Henriksson 1997. Evol. Ecol. 11:255–273). Adaptive explanations for sexual cannibalism of males are possible because after sperm transfer, a female can gain further fitness benefits from consuming the male. By contrast, a sexually mature female is a necessity for reproduction and presumably always represents a reproductive opportunity for a male. Thus, the sexual cannibalism of females by males in *A. sagrei* appears to be maladaptive. The framework of the "aggressive spillover" hypothesis or even that of male mate choice could hold potential explanations for this behavior (Sentenská and Pekár 2013. Behav. Ecol. Sociobiol. 67:1131–1139).

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***ANOLIS UNIFORMIS* (Lesser Scaly Anole). SELECTED BODY TEMPERATURE.** Body temperature (T_b) data collected in the field form the basis of most of the thermal biology reports in the herpetological literature (Avery 1982. *In* Gans and Pough [eds.], Biology of the Reptilia, Vol. 12, Physiology C, pp. 93–166. Academic Press, New York). In contrast, selected body temperatures (T_{sel}) in laboratory conditions are rarely reported even though they are essential to understanding behavior, natural history, and effects of global warming on ectotherms (Sinervo et al. 2010. Science 328:894–899). T_{sel} represents the range of core temperature within which an ectothermic animal seeks to maintain itself by behavioral means (IUPS Thermal Commission 2003. J. Therm. Biol. 28:75–106). Hence, here we present data on *Anolis uniformis* body temperatures in both field and laboratory conditions.

Anolis uniformis is a small, widely distributed lizard that is found in tropical wet forest in northern Middle America. The thermal ecology of this species has not been adequately addressed (Birt et al. 2001. J. Herpetol. 35:161–166). Thus, during June 2013, we conducted field work in wet tropical rain forest habitat located in Macuspana, Tabasco, Mexico (17.6239°N, 92.4449°W; 195 m elev.). The data presented here are based on 17 adults (> 36 mm SVL; 9 females and 8 males; Campbell et al. 1989. Biotropica 21:237–243) of *A. uniformis* captured by noose and hand. Snout–vent length (SVL) was measured to the nearest 0.05 mm, and sex was determined for all individuals. T_b was recorded using a digital thermometer (Fluke model 51-II) with the sensor introduced one centimeter into the cloaca. We also recorded substrate temperature (T_s) at the exact point of observation and air temperature (T_a) 1 cm above the substrate where the lizard was captured.

In the laboratory, the lizards were maintained at 25°C in plastic containers. Laboratory experiments were conducted one day after capture using a thermal gradient. The thermal gradient consisted of a polycarbonate box 150 cm long x 100 cm wide x 70 cm high. The box was located in a room with controlled temperature of 20°C and two 150 W lamps were placed at different highs over the box to offer thermal gradient (20–50°C). The T_{sel} of individuals in the thermal gradient was taken manually each hour between 0930 and 1400 hs using the digital thermometer. Following laboratory experiments, all lizards were released at the site of capture.

Mean SVL was 38.2 mm (SD = 1.77, range = 36–41 mm). Mean T_b was 28.4°C (SD = 2.71°C, range = 24.5–32.7°C). Mean T_s was 26.1°C (SD = 1.15°C, range = 23.4–27.6°C) and mean T_a was 26.2°C (SD = 1.22°C, range = 23.4–27.9°C). A positive and significant correlation was found between T_b and the microhabitat temperature (Spearman Rank Correlation: r = 0.70, P < 0.0001, N = 17, based on T_s; r = 0.80, P < 0.0001, N = 17, based on T_a). There was no statistically significant difference between sexes (U = 34, P = 0.885). Mean T_{sel} was 30.1°C (SD = 1.90°C, range = 22–34.4°C). Interquartile of 25% and 75% was 28.9 and 30.9°C, respectively. T_b shows that *A. uniformis* analyzed in this study was thermopassive, a mechanism where individuals do not need to invest time and energy actively selecting microhabitats for thermoregulation in tropical habitats (Huey and Slatkin 1976. Q. Rev. Biol. 51:363–384). T_{sel} suggests that *A. uniformis* can be considered a stenothermic species due to the narrow range of temperatures. Previous thermal ecology studies of anoles have also demonstrated these trends (Birt et al. 2001, *op. cit.*; Hertz 1974. J. Herpetol. 8:323–327; Hertz et al. 1993. Am. Nat. 142:796–818).

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