

ANOLIS SAGREI (Brown Anole). POLYDACTYLY. Naturally occurring polydactyly has been reported in a wide range of vertebrate taxa, but is infrequently observed in non-avian reptiles, especially lizards (Bauer et al. 2009. *Herpetol. Notes* 2:243–246). This account provides a first description of polydactyly in the lizard *Anolis sagrei*. On 16 May 2017, a polydactylous female *Anolis sagrei* (37 mm SVL, 1.24 g) was captured on a small cay (vegetative area of 324 m²) near Great Abaco Island in the Bahamas (26.4506°N, 77.0567°W; WGS 84; 1 m elev.). The anole displayed six digits on each forelimb (Fig. 1), which appeared to be the result of symmetrical duplication of the first metacarpal. Each additional toe appeared fully formed with a complete claw, and a few extra lamellae were present on the duplicate toe of the

right forefoot (see Fig. 1 inset for an example of normal *A. sagrei* foot anatomy). The rarity of this condition is evidenced by the fact that this individual was the only polydactylous anole present in a sample of ca. 3500 *A. sagrei* captured from both natural and experimental island populations at our Abaco study site between May 2008 and March 2020. These data calculate a diminutive rate of 0.03% for anole polydactyly in this region.

Interestingly, while polydactyly may have been an expected result of inbreeding in some of the experimentally founded island populations represented among the *A. sagrei* sampled (Kolbe et al. 2012. *Science* 335:1086–1089), the sole polydactyl individual described here came from an established, naturally occurring population with a mean population size of 101.9 (SD = 27.2) lizards across 13 years of study. This is significant considering that the only previous mention of polydactyly in any species of anole lizard was in the context of an experimental hybrid cross of bark anole species (<https://www.anoleannals.org/2012/12/18/six-toed-anole>; 10 Sept 2020). As a result, this observation constitutes the first description of naturally occurring polydactyly in the genus *Anolis*.

TYLER DEVOS, Department of Biological Sciences, University of Rhode Island, 120 Flagg Road, Kingston, Rhode Island 02881, USA (e-mail: tylerdevos@uri.edu); **THOMAS SCHOENER**, Department of Evolution and Ecology, One Shields Avenue, University of California, Davis, California 95616, USA (e-mail: tw schoener@ucdavis.edu); **JONATHAN LOSOS**, Department of Biology, Washington University, One Brookings Drive, St. Louis, Missouri 63130, USA (e-mail: losos@wustl.edu); **JASON KOLBE**, Department of Biological Sciences, University of Rhode Island, 120 Flagg Road, Kingston, Rhode Island 02881, USA (e-mail: jjkolbe@uri.edu).



FIG. 1. Ventral scan of *Anolis sagrei* displaying polydactyly. Inset: typical *A. sagrei* anatomy of the right manus.