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# Communal Nesting in the Cuban Twig Anole (*Anolis angusticeps*) from South Bimini, Bahamas

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Lizards in the genus *Anolis* (i.e., anoles) generally lay one-egg clutches. These clutches result when a single follicle in one ovary matures and ovulates, and the next ovulation (typically from the alternate ovary) only occurs after the previous egg is laid (Licht and Gorman 1970). Female anoles oviposit approximately every 1–2 weeks throughout the breeding season (Andrews and Rand 1974), and eggs are deposited under leaf litter or soil, under rocks or logs, and in decaying bark (Rand 1967). Most female anoles select solitary nesting sites away from the oviposition sites of other lizards, possibly to avoid mass predation or to prevent the rapid spread of disease between eggs (Rand 1967). However, several species of West Indian anoles have been reported to deposit eggs in communal nests: *A. allisoni*, *A. angusticeps*, *A. argenteolus*, *A. argillaceus*, *A. bartschi*, *A. lucius*, *A. porcatius*, *A. valencienni*, *A. vermiculatus*, and possibly *A. cristatellus*, *A. homolechis*, and *A. marmoratus* (Rand 1967, Henderson and Powell 2009 and references therein, Domínguez et al. 2010). Here, we describe an observation of communal nesting in *A. angusticeps chickcharneyi* on the island of South Bimini, Bahamas.

The Cuban Twig Anole (*Anolis angusticeps*; Fig. 1) is an arboreal anole native to Cuba and the Bahamas (Schwartz and Henderson 1991). Three subspecies are currently recognized: *A. a. angusticeps* in Cuba, *A. a. chickcharneyi* of South Bimini, Bahamas, and *A. a. oligaspis* from elsewhere in the Bahamas (Oliver 1948). This species occurs primarily on twigs and small branches of the canopy, and is assigned to the “twig” ecomorph (Beuttell and Losos 1999). Novo Rodríguez (1985) first reported communal nesting in *A. a. angusticeps* on Cayo Francés, Cuba. He described a female attempting to enter a hole in the trunk of a palmetto tree. Upon examining the hole, the opening of which was 1.6 x 1.0 cm and 1.6 m above the ground, he found 65 developing eggs and 1,625 eggshells. On Cayo Coco, Cuba, Estrada (1993) also reported locating several communal nests of *A. a. angusticeps*, first finding 250 shells/m<sup>2</sup> in an approximately 3-m<sup>2</sup> area of a cave. At another site, he found four intact eggs (one of which hatched during collection) and a number of scattered shells,



**Fig. 1.** Like other “twig” ecomorphs, Cuban Twig Anoles (*Anolis angusticeps*) are small and slender and possess proportionately short tails and limbs relative to most other anoles. They move slowly and rely heavily on crypsis. Although twig anoles typically are associated with narrow branches, *A. angusticeps* also is known to perch on tree trunks, fence posts, rocks, and even the ground. Photographs by Joseph Burgess.



Fig. 2. Communal nest of *Anolis angusticeps chickcharneyi* inside a hole in a *Ficus* tree. Photograph by Bonnie K. Kircher.

and elsewhere in a rocky fissure he found four intact eggs and about 80 shells/m<sup>2</sup> in an area of about 2.5 m<sup>2</sup>.

On 28 July 2013, while walking the “Beach Trail” of South Bimini (25.7022°N, -79.3019°W), we observed an instance of communal nesting in *A. a. chickcharneyi*. We captured an adult female on the trunk of a *Ficus* sp. tree and realized that she had been covering a hole in the tree, her body position suggesting that she was exiting the hole. Two days prior, we had captured another female in the same location on this tree. The hole was 1.12 m above the ground, and the opening was 3.5 x 1.5 cm. Inside the hole, we could see at least seven eggs, packed together and touching one another (Fig. 2). Because we did not wish to disturb the eggs, we were unable to determine whether additional eggs were packed into the hole or to count any eggshells that might have been inside.

Communal nesting in lizards may occur when suitable nesting sites are rare or if adaptive benefits accrue from aggregation of eggs (Radder and Shine 2007). Communal nests, although infrequently described for West Indian *Anolis* lizards, may be more common than the number of reports would suggest.

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