Other Contributions Nature Notes

Gonatodes albogularis. Communal egg laying. The genus Gonatodes, in the family Sphaerodactylidae, is composed of 31 species of mostly diurnal and scansorial geckos with a wide distribution in the Neotropics (Uetz and Hošek, 2015). The distribution of G. albogularis extends from southern Mexico to northern South America, including adjacent islands, and also in Cuba, Hispaniola, Jamaica, and the Cayman Islands (Schwartz and Henderson, 1991; Savage, 2002); based on human activities, this species was introduced in Florida, United States (for an overview, see Meshaka, 2004), and presumably was introduced in Belize (Lee, 2000); Forrero-Medina et al. (2006) also indicated G. albogularis as a recent arrival to the San Andrés, Providencia, and Santa Catalina archipelago.

Gonatodes albogularis is an inhabitant of primary humid or dry lowland forests, but also occurs in disturbed areas (Savage, 2002). Fitch (1973) reported colonies of 10–40 individuals in large trees, especially *Ficus*, and noted that adult males are territorial and maintain their spacing by using aggressive displays that involve movements of the tail and jerky motions of the body. The coloration of the head in males is orange or red, the body is gray brown to black with blue lateral spots, the supralabials are white with conspicuous blue lines, and the tail tip is white; the coloration of females and juveniles is more cryptic (Fitch, 1973; Savage, 2002).

Reproductive activity in *G. albogularis* apparently is influenced by food availability (Savage, 2002). Females produce multiple clutches, each consisting of a single egg (Lee, 2000). During a 13-month study conducted at Ancón, Panama (in the Panama Canal Zone), Sexton and Turner (1971) determined the reproductive cycle of *G. albogularis* based on the number of eggs laid at communal nesting sites; they counted 238 eggs in 29 samples from seven sites. Since the publication of that study communal nesting behavior in *G. albogularis* has gone unreported, so the purpose of this note is to provide information on a communal nest found on the Atlantic versant of Costa Rica.

On 2 February 2014, at 1350 h, in lowland secondary forest in the Gandoca-Manzanillo National Wildlife Refuge, Cantón de Talamanca, Provincia de Limón, Costa Rica (9.6347°N, 82.6465°W; WGS84; elev. 40 m), I found a communal nest of *G. albogularis* located on the base of a large *Ficus* sp., in a mossy "pouch" (ca. 8 cm long and 5 cm wide) approximately 1 m above the ground (Fig. 1 A, B). I estimated the number of eggs in the nest at 15 (I did not obtain the exact number so as not to damage the nest), in addition to several empty eggshells. The color, size, and texture of the eggs were nearly identical. For three days I also observed several individuals (males, females) of *G. albogularis* in the vicinity of the nest.





Fig. 1. (A) Close-up of a communal nest with the eggs of *Gonatodes albogularis*, and (B) location at the base of the large *Ficus* sp. where the nest was found.

On the Atlantic slope of Costa Rica, where there is no marked dry season, females of *G. albogularis* produce eggs throughout the year but with some decrease in December and January, and lay them one at a time from alternate ovaries (Fitch, 1973; Savage, 2002). Vitt et al. (1997) reported communal nesting (or multi-maternal nesting

Other Contributions Nature Notes

behavior) in another species in this genus, *G. humeralis*, after encountering more than 50 eggs of that species in a single nest, along with the eggs of four other lizard species. Oda (2004) reported lower numbers of eggs in communal nests of *G. humeralis* in different habitats. More than 800 eggs, however, have been found in communal nests of other lizard species (see Magnusson and Lima, 1984). Communal nesting has been reported in 255 lizard taxa, and is a much more common behavior than previously thought (for a review, see Doody et al., 2009). In principle, two hypotheses explaining communal nesting can be recognized (Radder and Shine, 2007; Doody et al., 2009), probably in various combinations depending on the different taxa. In the Gekkota, because females generally lay one or two eggs this behavior could provide an effective protection with suitable conditions (temperature, humidity) for their development. At any rate, it is important to report similar observations in all lizard species to develop a general understanding of the diversity this behavior among reptiles.

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