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Communal nests of *Phyllopezus periosus*, an endemic gecko of the Caatinga of northeastern Brazil

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Geckos of the genus *Phyllopezus* Peters, 1877 (infraorder Gekkota) are known from dry regions of South America (Gamble et al. 2008). Currently, three species are known: *Phyllopezus marajonensis* Koch, Venegas & Böhme, 2006, which is present in some dry forests of Peru (Koch et al. 2006), *P. pollicaris* (Spix, 1825), widely distributed in semiarid areas of South America, and *P. periosus* Rodrigues, 1986, from 'relict' occurrences in northeastern Brazil (Paraíba, Alagoas, Pernambuco, Rio Grande do Norte and Ceará states) (Rodrigues 1986, Freire et al. 2000, Rodrigues 2003, Roberto & Brito 2004).

While the natural history of *P. pollicaris* is relatively well known (e.g., Vanzolini et al. 1980), the remaining species of *Phyllopezus* are poorly understood. With regard to *P. periosus*, available data on distribution and activity are inconclusive (Rodrigues 2003, F. R. Delfim, unpubl.). In this paper, we provide information on reproduction sites, nest size, and the existence of communal nests in this taxon. Data were obtained from rocky outcrops in the São João do Jaguaribe Municipality, Ceará State, northeastern Brazil (05°20'651"S; 38°12'464"W) on 21 February 2009.

We found a clutch of *P. periosus* within a longitudinal fissure in a granite boulder. The gap was 15 cm deep and extended for 1.7 m from the soil surface level. The nest contained eight spherical eggs with calcareous but fragile shells in a juxtaposed arrangement. In an attempt to move closer to the nest, a fractured piece of boulder was removed, the fissure of which was found to contain shells of similar but hatched eggs, suggesting the repeated use of this oviposition site as a result of its suitability for the incubation of eggs. We removed a single egg (20.2 mm in diameter), which cracked during handling and was later deposited in the Herpetological Collection of the Universidade Federal do Ceará (CHUFC L 4232). The characteristics and size of the eggs allowed us to identify them as belonging to *P. periosus*, because they would not be referable to any of the sympatric lizards, i.e.: Tropiduridae: *Tropidurus hispidus* (Spix, 1825) and *T. jaguaribanus* Passos, Lima & Borges-Nojosa, 2011; Gekkonidae: *Hemidactylus agrius* Vanzolini, 1978; Phyllodactylidae: *Gymnodactylus geckoides* Spix, 1825 and *Phyllopezus pollicaris* (Spix, 1825) (Passos, Lima & Borges-Nojosa, 2011). While the two former produce flexible eggshells, those of the remaining lizards are calcified but smaller in diameter (Rigui et al. 2004).

Geckos produce small clutches of at maximum of two eggs (e.g., Sinervo 1994, Sousa & Freire 2010). Our finding of eight eggs in one place shows that communal nesting occurs in *P. periosus*, which is something also known from other Gekkotan species, such as *Gonatodes humeralis* (Guichenot, 1855) (Oda 2004), *Hemidactylus agrius* Vanzolini, 1978 (Bezerra et al. 2011), and *P. pollicaris* (Spix, 1825) (Rigui et al. 2004). Ours is the first record of a communal oviposition site in *P. periosus,* adding this species to the list of Gekkotan species that engage in this type of behaviour.

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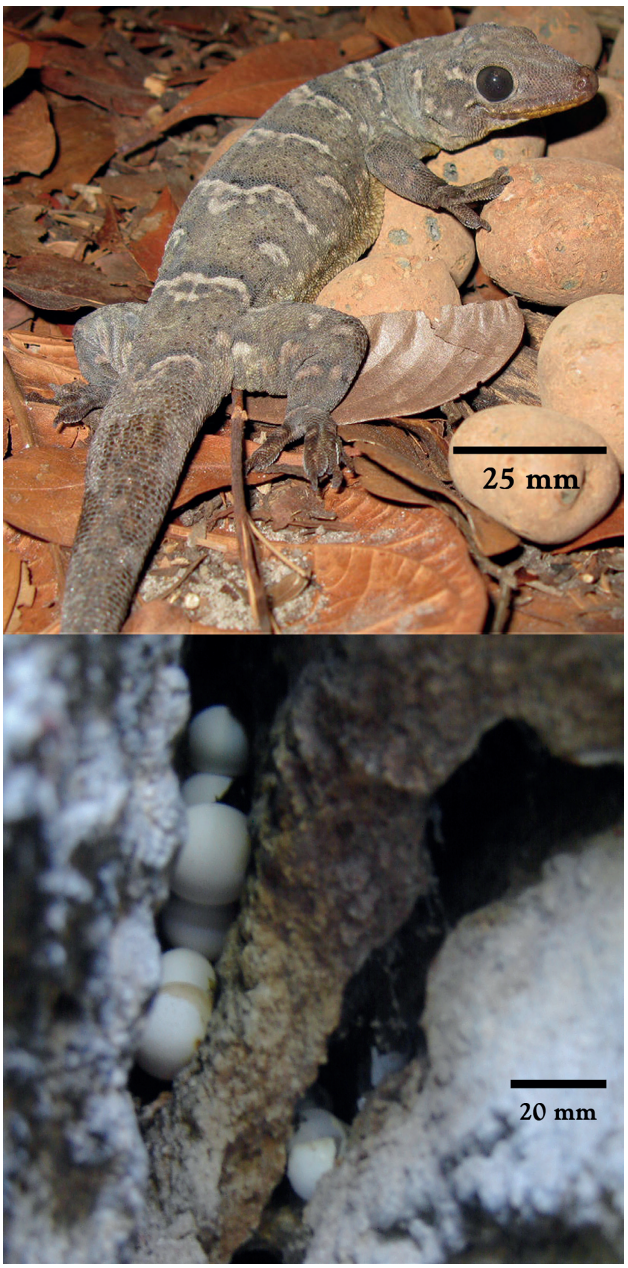

Figure 1. Adult individual of *Phyllopezus periosus* and the communal nest in a rock fissure in São João do Jaguaribe Municipality.

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