

**HEMIDACTYLUS MABOUIA** (Tropical House Gecko). **HUMAN-INDUCED INTRODUCTION.** *Hemidactylus mabouia* occurs in urban and other anthropogenic environments as well as varied less disturbed habitats such as tropical rainforest, sand dunes and rock outcrops (Teixeira 2001. *Atlântica* 23:77–84). A small lizard native to sub-Saharan Africa, it was accidentally introduced to and has colonized most of the South and Central America and Florida (Butterfield et al. 1993. *Herpetol. Rev.* 24:111–112), Caribbean islands (Townsend and Krysko 2003. *Florida Scient.* 66:204–208), and Atlantic islands such as Cape Verde (Jesus et al. 2001. *J. Herpetol.* 35:672–675), Madeira (Jesus et al. 2002. *Herpetozoa* 15:179–180), São Thomé and Príncipe (Jesus et al. 2005. *Mol. Phylogenet. Evol.* 34:480–485), and the Abrolhos Archipelago, 70 km off the Brazilian coast (Rocha et al. 2002. *Braz. J. Biol.* 62:285–291). Populations in the Gulf of Guinea and Macronesian islands are genetically homogenous likely as a result of recent introductions (Jesus et al. 2005, *op. cit.*). Introduction to the Brazilian mainland likely occurred through slave ships from Africa (Vanzolini 1968. *Arq. Zool. São Paulo* 17:1–84). Here, we describe the recent colonization of the oceanic Trindade Island in the mid-Atlantic Ocean and discuss the likely introduction event. Trindade Island, located 1140 km off the Brazilian coast, is a small volcanic island (5 km × 2.5 km) with an area of 13.5 km<sup>2</sup> and elevations over 600 m (Almeida et al. 2001. *In* Schobbenhaus et al. [eds.], *Sítios Geológicos e Paleontológicos do Brasil*, pp. 369–377. DNPM, Brasília, Brazil). Originally covered by forests of *Colubrina glandulosa*, fire and domestic grazing (sheep and goats) drove this tree to extinction (Alves 1998. *Ilha da Trindade & Arquipélago de Martin Vaz, um Ensaio Geobotânico*. Serviço de Documentação da Marinha, Rio de Janeiro, Brazil). Reforestation was begun in 1994, and eradication of goats occurred over the interval 1999–2005 (Alves 2006. *In* Alves and Castro [eds.], *Ilhas Oceânicas Brasileiras, da Pesquisa ao Manejo*, pp. 83–104. MMA, Brasília, Brazil). Both these domestic grazers are now eradicated, but despite its success, reforestation has ceased. Apart from humans, the only terrestrial vertebrate on Trindade Island is the exotic House Mouse, *Mus musculus*, which is now abundant throughout the island. Since 1957, a small number of Navy personnel (currently ~25 people) who maintain a weather station live on Trindade Island. A boat transports food, equipment, and personnel to the island every two months.

We first observed *H. mabouia* at dusk on 31 December 2006 on a plateau above Príncipe Beach (20.5165°S, 29.3096°W; datum: Córrego Alegre; elev. 140 m) in rock outcrops bordered by the dense, tall (ca. 50 cm high) sedge, *Cyperus atlanticus*. The next day, we captured one *H. mabouia* and found one semi-buried clutch of two eggs and a second clutch of three eggs, both under rocks. Because this species typically deposits two eggs, this may have been a communal nest (Rocha et al., *op. cit.*). After this initial discovery, we made several subsequent observations of adults and juveniles. From January to April 2007, we found up to 10 individuals during search sessions lasting about 1 h, with higher num-

bers recorded near the reforestation area where we first recorded the species.

*H. mabouia* or their eggs were probably introduced with saplings during the reforestation interval in the late 1990s or early 2000s (Alves 2006, *op. cit.*). As no harbor exists on Trindade and because of its steep topography, saplings were usually transported from boats to the drop areas by helicopters, which would explain the absence of *H. mabouia* near human settlement. Despite the abundance of the terrestrial crab, *Gecarcinus lagostoma*, on the island that could prey on this lizard, a well-established population now exists that is apparently spreading to other areas. We also found 3 *H. mabouia* at sea level on Andradas Beach on different occasions at dusk and at night, roughly 400 m SE from the place where it was presumably first introduced. The nocturnal and crepuscular habit of *H. mabouia* is well known (Rocha et al. 2002, *op. cit.*).

Four specimens were collected and deposited in Setor de Herpetologia, Museu Nacional do Rio de Janeiro (MNRJ 17117, one juvenile collected 1 January 2007; MNRJ 17118 one adult collected 28 February 2007), and in the Museu de Biologia Prof. Mello Leitão, Santa Teresa, Espírito Santo (MBML 2107 and 2108, one juvenile recently hatched and one adult, both collected 19 January 2007). We also found exoskeleton fragments of insects and spiders underneath rocks inhabited by *H. mabouia*. Arthropods are the main prey of *H. mabouia* in Brazil in both urban (Bonfiglio et al. 2006. Biociências, Porto Alegre 14:107–111) and less disturbed coastal environment (Teixeira 2001, *op. cit.*). To our knowledge, no detailed study of the arthropods on Trindade has been undertaken, but the island is home to varied arthropod species including dragonflies, beetles, spiders, flies, moths, grasshoppers, and exotic cockroaches, and may include several introduced species as on Gough Island in the South Atlantic (Jones et al. 2003. Biol. Cons. 113:75–87). *H. mabouia* is expected to expand its distribution throughout the island and arrive at the human settlement soon. As it is the only terrestrial reptile on the island, no conservation concern for related species as a function of *H. mabouia* presence currently exists, as has occurred on other islands (Arnold 2000. Bonn. Zool. Monogr. 46:309–323), but it may represent a threat to endemic invertebrates.

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