



INTRODUCED SPECIES

Another Parthenogenetic Species of Gecko on New Providence Island, The Bahamas

Scott Johnson¹, Sandra Buckner², and Denis Knowles³

¹The Bahamas National Trust, Nassau, The Bahamas (sjohnson@bnt.bs)

²P.O. Box N-8893, Villa Capulet, Montague Foreshore, Nassau, The Bahamas

³P.O. Box N 6386, Nassau, The Bahamas

At 1159 h on 21 August 2015, the lead author encountered two geckos on the corner of a wall leading to the bar and dining area of the Towne Hotel in Nassau, New Providence, The Bahamas. Initially thinking that they were Tropical House Geckos (*Hemidactylus mabouia*), a non-native species already established in The Bahamas, upon closer inspection, the animals appeared to be different. He captured and photographed them and sent the photographs to Dr. Robert Powell for identification. He in turn sent the images to Drs. Aaron Bauer and Dan Scantlebury. All agreed that the lizards in question were Mourning Geckos, *Lepidodactylus lugubris* (Duméril and Bibron 1836), a non-native parthenogenetic gekkonid native to the tropical Pacific (e.g., Werner 1980; Krysko and Krysko 2016).

Earlier that same year, the second author received and recorded a Mourning Gecko brought to her by the third author, who had collected it on New Providence on 9 February 2015. More recently, on 27 July 2016, the latter heard these geckos vocalizing at his home on New Providence. The specimens collected by the second and third authors and photographs of those and the more recently encountered lizards (Fig. 1) were deposited in the Herpetology Division of the Florida Museum of Natural History, University of Florida (UF 177719–22).

The first published report of the Mourning Gecko in The Bahamas was on North Bimini in March 2016 (Krysko and Mackenzie-Krysko 2016). Although unsure how those geckos arrived in The Bahamas, like those found in the Towne Hotel, they probably were introduced inadvertently on plants brought into the Bahamas from outside sources or in cargo (Krysko and Mackenzie-Krysko 2016). This species has become widely established in various locations in the Western Hemisphere (e.g., Daza et al. 2012; Henderson and Breuil 2012; Jiménez and Abarca 2015; Alonso Bosch and Borroto Páez 2017; Lorvelec et al. 2017). The Mourning Gecko is the second parthenogenetic gecko introduced onto New Providence Island, where the Indo-Pacific Gecko (*Hemidactylus garnotii*) was discovered in 1992 (Meshaka 1995).

Acknowledgements

We thank Drs. Robert Powell, Aaron Bauer, and Dan Scantlebury for identifying the species. We also thank Mr. Simeon Pinder, Bahamas Department of Agriculture, for issuing the necessary permit and Drs. David Steadman, Kenneth Krysko, and Nancy Albury for transporting the specimens to the Florida Museum of Natural History.



Fig. 1. Mourning Geckos (*Lepidodactylus lugubris*) encountered at the Towne Hotel in Nassau, New Providence, The Bahamas. Photographs by Scott Johnson.

Literature Cited

- Alonso Bosch, R. and R. Borroto Páez. 2017. First record from Cuba of the introduced Mourning Gecko, *Lepidodactylus lugubris* (Duméril and Bibron, 1836). *BioInvasions Records* 6: 297–300.
- Daza, J.D., S.L. Travers, and A.M. Bauer. 2012. New records of the Mourning Gecko *Lepidodactylus lugubris* (Duméril and Bibron, 1836) (Squamata; Gekkonidae) from Colombia. *Check List* 8: 164–167
- Henderson, R.W. and M. Breuil. 2012. Lesser Antilles, pp. 148–159. In: R. Powell and R.W. Henderson (eds.), Island lists of West Indian amphibians and reptiles. *Bulletin of the Florida Museum of Natural History* 51: 86–166.
- Jiménez, R.R. and J.G. Abarca. 2015. Records for the Mourning Gecko (*Lepidodactylus lugubris*) and its expansion in Costa Rica. *Mesoamerican Herpetology* 2: 214–217.
- Krysko, K.L. and C. MacKenzie-Krysko. 2016. First report of the Mourning Gecko, *Lepidodactylus lugubris* (Duméril & Bibron 1836), from The Bahamas. *Caribbean Herpetology* 54: 1–2.
- Lorvelec, O., N. Barré, and A.M. Bauer. 2017. The status of the introduced Mourning Gecko (*Lepidodactylus lugubris*) in Guadeloupe (French Antilles) and the high probability of introduction of other species with the same pattern of distribution. *Caribbean Herpetology* 57: 1–7.
- Meshaka, W.E., Jr. 1995. Geographic distribution: *Hemidactylus garnotii* (Indo-Pacific Gecko). *Herpetological Review* 26: 108
- Werner, Y.L. 1980. Apparent homosexual behaviour in an all female population of a lizard, *Lepidodactylus lugubris* and its probable interpretation. *Ethology* 54: 144–150.