REPTILES & AMPHIBIANS

First Record of a Green Iguana (*Iguana iguana*) on Long Island, The Bahamas

Scott Johnson[1], Zoe Cartwright[2], Roger Cartwright[2], and Hendrew Haley[3]

[1]Wild Bahamas Group of Companies Ltd., Nassau, The Bahamas (sjohnson@wild-bahamas.com [corresponding author])
[2]Long Island Bahamas Boat Rentals and Tours, Mangrove Bush, Long Island, The Bahamas (longislandboatrentals@gmail.com)
[3]Ardastra Gardens and Wildlife Conservation Centre, Nassau, The Bahamas (hendrewhaley@gmail.com)

In the Greater Caribbean Region, goods, including a substantial volume of agricultural and landscaping products, worth hundreds of millions of dollars are imported annually (Forgenie et al. 2024). Cargos often are not properly inspected before entering a new country, which provides opportunities for animal stowaways to disperse to new regions where many become problematic. Invasive reptiles in particular have benefitted greatly from shipments of goods across the world, but other modes of transport into non-native locations include natural disturbances such as hurricanes, private vessels and yachts, and intentional and accidental releases of captive animals (Censky et al. 1998; Gill et al. 2001; Lever 2003; Kraus 2009; Johnson 2020).

The Green Iguana (*Iguana iguana*), a species that has benefitted greatly from globalization, is native to Central and South America and some West Indian islands (Krysko et al. 2007). Green Iguanas are invasive in The Bahamas. They were first observed in the nation in the 1990s and have since spread and become established on a number of islands, including Grand Bahama, Abaco, Berry Islands, Bimini, Eleuthera, and New Providence (Knapp et al. 2011; Johnson 2020). We herein report the first sighting of a Green Iguana on Long Island, The Bahamas.

At 1830 h on 6 April 2025, ZC and RC saw a large iguana at the Lighthouse Point Restaurant at the Flying Fish Marina in Clarence Town, Long Island (23.10245, 74.96043; Fig. 1). It was captured that same evening and placed in a cat trap. On 11 April 2025, ZC sent the photographs to SJ for identification, who forwarded them to Jonathan B. Losos, Washington University in St. Louis, Robert W. Henderson, Milwaukee Public Museum, and Joseph A. Wasilewski, Natural Selections of South Florida, Inc., who confirmed the identity of the species. A photographic voucher has been deposited in the Florida Museum of Natural History (UF Herp 195904). On 2 May 2025, the animal was shipped to Nassau, where it is currently housed at the Ardastra Gardens and Wildlife Conservation Centre.

On 17 May, while in captivity, HH observed the iguana expelling eggs (Fig. 2) and expressed concern that it could have laid eggs prior to capture. Based on observations of Green Iguanas established in The Bahamas, females at that time of year have mature oviductal eggs ready to be fertilized or shelled eggs ready to be laid. Considering where the animal was found, precautionary searches are warranted to determine if other iguanas, possibly including additional gravid females, arrived on the island, or if eggs were laid by this female or other introduced individuals had subsequently hatched.

Green Iguanas are large lizards, reaching snout-vent lengths of 50 cm and total lengths of 200 cm (Falcón et al. 2013). A female can lay 10–71 eggs, usually in sandy open areas like beaches (Krysko et al. 2007). Their large size, adaptability, and propensity to destroy landscaping plants, and creation of unsanitary conditions in and around marinas, decks, and pools render them highly problematic (Wasilewski et al. 2022).

To mitigate future introductions, we strongly recommend that all shipping containers arriving on Long Island be thoroughly inspected. Given Florida's role as a major shipping hub for Bahamian imports, stricter inspection protocols at departure points also are necessary. Furthermore, The Bahamas must adopt a more proactive biosecurity strategy, as the frequency at which exotic species are being introduced

Figure 1. A Green Iguana (*Iguana iguana*) found at Lighthouse Point Marina, Long Island, The Bahamas. Photograph by Zoe Cartwright.

Reptiles & Amphibians ISSN 2332-4961
https://doi.org/10.17161/randa.v32i1.24139

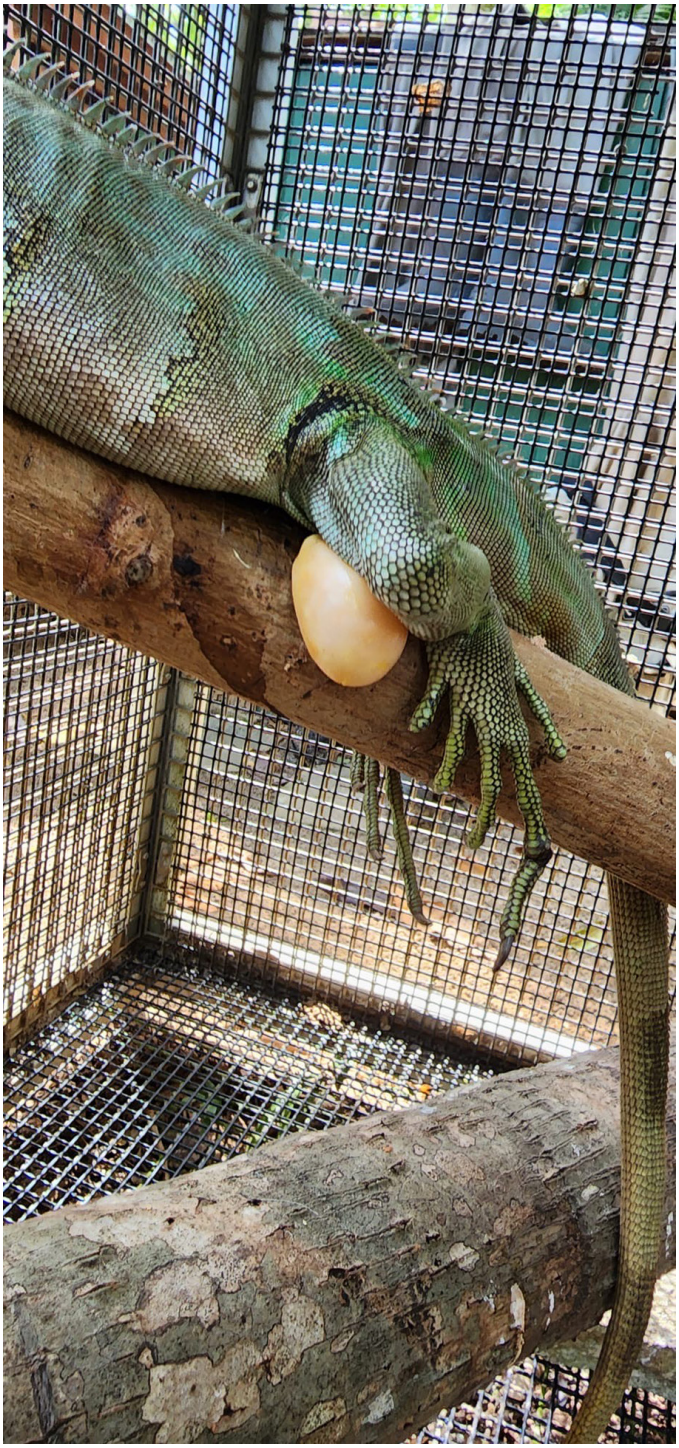

Figure 2. A recently captured Green Iguana (*Iguana iguana*) from Long Island expelling an egg while in captivity at the Ardastra Gardens and Wildlife Conservation Centre. Photograph by Hendrew Haley.

is increasing. Since 2015, a number of new island or national records of exotic and invasive herpetofauna have been recorded (Johnson 2018, 2020, 2021; Johnson and Francios 2018; Johnson and Gibson 2018; Johnson et al. 2018; Johnson and Knowles 2019). Also, several exotic species, including the Green Iguana, are expanding their ranges in the archipelago, often posing serious ecological threats to native fauna, including endangered endemic rock iguanas (Johnson 2020).

Acknowledgements

We thank the Ardastra Gardens Zoo and Wildlife Conservation Centre for holding the Green Iguana and Jonathan B. Losos, Robert W. Henderson, and Joseph A. Wasilewski for confirming the identity of the species.

Literature Cited

Censky, E.J., K. Hodge, and J. Dudley. 1998. Over-water dispersal of lizards due to hurricanes. *Nature* 395: 556–556. https://doi.org/10.1038/26886.

Falcón, W., J.D. Ackerman, W. Recart, and C.C. Daehler. 2013. Biology and impacts of Pacific island invasive species. 10. *Iguana iguana*, the Green Iguana (Squamata: Iguanidae). *Pacific Science* 67: 157–186. https://doi.org/10.2984/67.2.2.

Forgenie, D., S.D. Hutchinson, and A. Muhammad, 2024. Welfare implications of rising imported food costs in the Caribbean. *Journal of Agriculture and Food Research* 18: 101489. https://doi.org/10.1016/j.jafr.2024.101489.

Gill, B.J., D. Bejakovtch, and A.H. Whitaker. 2001. Records of foreign reptiles and amphibians accidentally imported to New Zealand. *New Zealand Journal of Zoology* 28:3 51–359. https://doi.org/10.1080/03014223.2001.9518274.

Johnson, S. 2018. Black Spiny-tailed Iguana (*Ctenosaura similis*) on New Providence Island, The Bahamas. *Reptiles & Amphibians* 25: 212–213. https://doi.org/10.17161/randa.v25i3.14310.

Johnson, S. 2020. First record of a Green Iguana (*Iguana iguana*) on Andros (Bahamas): A potential threat to endemic Bahamian rock iguanas. *Reptiles & Amphibians* 26: 255–256. https://doi.org/10.17161/randa.v26i3.14430.

Johnson, S. 2021. First record of a Brown Basilisk (*Basiliscus vitattus*) in The Bahamas. *Reptiles & Amphibians* 28*:* 163–164. https://doi.org/10.17161/randa.v28i1.15382.

Johnson, S. and K. Francois. 2018. First record of an Eastern Ribbonsnake (*Thamnophis sauritus*) from Paradise Island, The Bahamas. *Reptiles & Amphibians* 25: 214. https://doi.org/10.17161/randa.v25i3.14311.

Johnson, S. and D. Gibson. 2018. South American Cane Toad (*Rhinella marina*) found on Great Guana Cay, Abaco, The Bahamas. *Reptiles & Amphibians* 25: 160–161. https://doi.org/10.17161/randa.v25i2.14286.

Johnson, S. and T. Knowles. 2019. North American Racer (*Coluber constrictor*) on Grand Bahama, The Bahamas. *Reptiles & Amphibians* 26: 77–78. https://doi.org/10.17161/randa.v26i1.14354.

Johnson, S., S. Buckner, and D. Knowles, 2018. Another parthenogenetic species of gecko on New Providence Island, The Bahamas. *Reptiles & Amphibians* 25: 215–216. https://doi.org/10.17161/randa.v25i3.14313.

Knapp, C.R., J.B. Iverson, S.D. Buckner, and S.V. Cant. 2011. Conservation of amphibians and reptiles in The Bahamas, pp. 53–87. In: A. Haley, B.S. Wilson, and J.A. Horrocks (eds.), *Conservation of Caribbean Island Herpetofaunas. Volume 2: Regional Accounts of the West Indies*. Brill, Leiden, The Netherlands. https://doi.org/10.1163/ej.9789004194083.i-439.21.

Kraus, F. 2009. *Alien Reptiles and Amphibians. A Scientific Compendium and Analysis*. Invading Nature: Springer Series in Invasion Ecology 4. Springer Science + Business Media B.V., Dordrecht, The Netherlands.

Krysko., K.L., K.M. Enge, E.M. Donlan, J.C. Seitz, and E.A. Golden. 2007. Distribution, natural history, and impacts of the introduced Green Iguana (*Iguana iguana*) in Florida. *Iguana* 14: 142–151.

Lever, C. 2003. *Naturalized Reptiles and Amphibians of the World*. Oxford University Press, New York, New York, USA.

Wasilewski, J.A., K.L. Krysko, N. Wasilewski, and E.F. Metzger III. 2022. Efficient nocturnal capture methods for controlling a diurnal and arboreal invasive lizard species. *Herpetological Conservation and Biology* 17: 37–42.