

Records of Mating in The Bahamian Racer (Cubophis vudii vudii)

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The Bahamian Racer (*Cubophis vudii vudii*) is an active, diurnal dipsadid that is endemic to The Bahamas (Schwartz and Henderson 1991; Henderson and Powell 2009; Powell 2014). Although aspects of Bahamian Racer biology have been recorded (Schwartz and Henderson 1991; Henderson and Powell 2009; Powell 2014; Johnson and Hayes 2020), little information on reproduction has been documented. Gravid females found in April–July and clutch and egg sizes were recorded by Schwartz and Henderson (1991), but no records of mating in the wild have been published.

At 0942 h on 29 April 2010, SJ observed a mating pair of Bahamian Racers (Fig. 1) in Wemyss Bight, South Eleuthera (24°44'42.21"N, 76°12'26.61"W). At 1305 h on 22 February 2021, BW encountered a pair of Bahamian Racers

in copula (Fig. 2) on an overgrown trail of an abandoned agricultural site on Eleuthera (24°54′29.30″N, 76°10′42.24″W). He called the first author to the location and together they observed and took photographs of the pair before they moved into adjacent scrub still in copula.

The second observation in particular appears to be a very early time for mating in this species. Although speculative, we suggest that a warming climate could be shifting reproductive activity earlier in the year. Impacts of climate change are phenomenally complex (Le Galliard et al. 2012), especially in tropical and subtropical regions with little elevational relief (Bickford et al. 2010; Manne 2012). Considerably more research is needed to better understand the effects of climate change on West Indian reptiles like the Bahamian Racer.



Fig. 1. A pair of Bahamian Racers (Cubophis vudii vudii) in copula on 29 April 2010 at Wemyss Bight, South Eleuthera. Photographs by Scott Johnson.



Fig. 2. A pair of Bahamian Racers (Cubophis vudii vudii) in copula on 22 February 2021 on Eleuthera. Photographs by Scott Johnson.

Literature Cited

- Bickford, D., S.D. Howard, E.J.J. Ng, and J.A. Sheridan. 2010. Impacts of climate change on the amphibians and reptiles of Southeast Asia. *Biodiversity Conservation* 19: 1043–1062. https://doi.org/10.1007/s10531-010-9782-4.
- Henderson, R.W. and R. Powell. 2009. *Natural History of West Indian Reptiles and Amphibians*. University Press of Florida, Gainesville, Florida, USA.
- Johnson, S. and W.K. Hayes. 2020. An improved approach to measuring sexual dimorphism in snakes: Morphological variation in the Bahamian Racer (Cubophis vudii vudii). Reptiles & Amphibians 27:137–146.
- Le Galliard, J.F., M. Massot, J.-P. Baron, and J. Clobert. 2012. Ecological effects
- of climate change on European reptiles, pp. 179–203. In: J.F. Brodie, E.S. Post, and D.F. Doak (eds.), *Wildlife Conservation in a Changing Climate.* The University of Chicago Press, Chicago, Illinois, USA.
- Manne, L. 2012. Island species with nowhere to go, pp. 226–244. In: J.F. Brodie, E.S. Post, and D.F. Doak (eds.), Wildlife Conservation in a Changing Climate. The University of Chicago Press, Chicago, Illinois, USA.
- Powell, R. 2014. Cubophis vudii. Catalogue of American Amphibians and Reptiles 903: 1–15.
- Schwartz, A. and R.W. Henderson 1991. *Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History.* University Press of Florida, Gainesville, Florida, USA.