

## Aggregating Behavior in the Cuban Short-tailed Racerlet, Arrhyton vittatum (Squamata: Dipsadidae)

Daylon Fundora Caballero<sup>1</sup> and Javier Torres López<sup>2</sup>

<sup>1</sup>Delegación Territorial del CITMA, Subdelegación de Medio Ambiente, Ciego de Ávila 65200, Cuba (daylonfc22@gmail.com [corresponding author])

<sup>2</sup>Department of Ecology and Evolutionary Biology, Kansas 66044, USA (javiertorres@ku.edu)

Reproductive behavior in Cuban snakes has been widely documented (Schwartz and Henderson 1991; Powell et al. 1996; Rodríguez-Schettino 2000; Fong 2004; Henderson and Powell 2009; Rodríguez-Schettino et al. 2013). Nevertheless, little is known about the reproduction of snakes in the Cuban endemic genus *Arrhyton* beyond a record of *ex situ* oviposition in *A. vittatum* and *A. taeniatum* (Amaro-Valdés and Morell-Savall 2017). Herein we present a putative reproductive behavior unreported for this genus.



Fig. 1. Cuban Short-tailed Racerlets (*Arrhyton vittatum*) aggregated under a rock in Morón, Ciego de Ávila, Cuba. Photograph by Sergei Alexander López Pérez.

At 0937 h on 28 February 2021, we observed six Cuban Short-tailed Racerlets (Arrhyton vittatum) under a rock in an area of the "Humedal Grande" Proyecto of the "Grupo Empresarial Flora y Fauna" in Moron, Ciego de Avila, in central Cuba (22.1289°, -78.6247°). All were entangled and presumably trying to mate. We were unable to verify if any were mating because, when we turned the rock, three individuals escaped and the remaining snakes became immobile (Fig. 1). We replaced the rock and checked it and the surrounding area 10 min later, but found no snakes. Some species of the superfamily Colubroidea are known to engage in behavior during which several males compete with each other to mate with a female, forming what have been termed "mating balls" (e.g., Joy and Crews 1988; Luiselli 1996; Friessen et al. 2013; Johnson 2021). We suspect that the aggregation we observed might have been an example of such behavior.

## Literure cited

Amaro-Valdés, S. and E. Morell-Savall. 2017. First notes on reproduction of Cuban snakes in the endemic genus *Arrhyton* Gunther 1858 (Squamata: Dipsadidae). *Reptiles & Amphibians* 24: 47–50. https://doi.org/10.17161/randa v24i1 14143

Friesen, C.R., R.T. Mason, S.J. Arnold, and S. Estes. 2013. Patterns of sperm use in two populations of Red-sided Garter Snake (*Thamnophis sirtalis parietalis*) with long-term female sperm storage. *Canadian Journal of Zoology* 92: 33–40. https://doi.org/10.1139/cjz-2013-0195.

Fong G., A. 2004. Antillophis andreae (Black and White Racer, Jubito). Reproduction. Herpetological Review 35: 57.

Henderson, R.W. and R. Powell. 2009. *Natural History of West Indian Reptiles and Amphibians*. University Press of Florida, Gainesville, Florida, USA.

Johnson, S. 2021. First record of a "mating ball" in Bahamian Racers (*Cubophis vudii*) on Eleuthera, The Bahamas. *Reptiles & Amphibians* 28: 274. https://doi.org/10.17161/randa.v28i2.15647.

Joy, J.E. and D. Crews, 1988. Male mating success in red-sided garter snakes: size is not important. *Animal Behaviour* 36: 1839–1841. https://doi.org/10.1016/ S0003-3472(88)80126-X.

Luiselli, L. 1996. Individual success in mating balls of the grass snake, *Natrix natrix*: Size is important. *Journal of Zoology* 239: 731–740. https://doi.org/10.1111/j.1469-7998.1996.tb05474.x.

- Powell, R., R.W. Henderson, K. Adler, and H.A. Dundee. 1996. An annotated checklist of West Indians amphibians and reptiles, pp. 51–93. In: R. Powell and R.W. Henderson (eds.), Contributions to West Indian Herpetology: A Tribute to Albert Schwartz. Contributions to West Indian Herpetology Vol. 12. Society for the Study of Amphibians and Reptiles, Ithaca, New York, USA.
- Rodríguez-Schettino, L. 2000. Cuban reptiles: Original citations, holotypes, and geographic range. *Smithsonian Herpetological Information Services* 125: 1–26.
- https://doi.org/10.5479/si.23317515.125.1.
- Rodríguez Schettino, L., C.A. Mancina, and V. Rivalta González. 2013. Reptiles of Cuba: Checklist and geographic gistribution. *Smithsonian Herpetological Information Service* 144: 1–96. https://doi.org/10.5479/si.23317515.144.1.
- Schwartz, A. and R.W. Henderson. 1991. *Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History.* University of Florida Press, Gainesville, Florida, USA.