

**The Natural History of the 2010 West Indian Herpetofauna REU through  
Avila University engaged in collecting fieldwork pertinent to the local inhabitants of Union  
Island in St. Vincent & The Grenadines (SVG).**

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We are currently working on a collaborative intervention in sharing the ecological knowledge gained from the research experience for education and conservation. The research produced four publications and more still in press that will be implemented into local schools and regional NGOs to support educational and conservation efforts.

We met with local educators and administrators while on Union Island and agreed to exchange information obtained from the island. We will develop an electronic curriculum accessible for the Union Island education system based on Quinn et al. publication (cited below). IUCN Red List assessments have been submitted for three species: *Gonatodes daudini*, *Typhlops tasymicris*, and *Sphaerodactylus kirbyi*. The recommended conservation status of the first two species is critically endangered and that of the third vulnerable. We were confronted daily with the complexity of working on a small island that local inhabitants comprise of only a small percentage of the overall population (approx. 20%). The immigration of citizens from throughout the Caribbean and an influx of seasonal and annual tourism has diluted much of the island's original autonomy. Based largely on recommendations in Bentz et al. (cited below), we continue to work closely with the SVG Department of Forestry and local NGOs (Environmental Attackers, Sustainable Grenadines, SVG National Trust) to develop and implement a conservation plan for the slopes above Chatham Bay on Union Island. This is the most important watershed on the island and provides the only known habitat for the three species listed above. It is threatened by development plans that include a road construction project that would bisect the habitat and fragment the populations of the species, as well as a plan to expand a resort currently catering to yachts that anchor in the bay. As another means of preservation, we have been in contact with an international NGO (Conservation International) in regard to controlling feral mammals (goats that threaten the integrity of the habitat and cats that prey on small reptiles). This research conducted in conjunction with these endeavors is situated within the long-term goals that seek to: (1) re-route the road to minimize impact on the critical habitat, (2) restrict the development of the resort to the beach, and (3) establish the slopes as a protected area. The ecological research obtained instills a crucial element in conserving the biota of the island and also maintaining the natural landscape. The environment is an and ecological and cultural facet engrained in the livelihoods and autonomous culture of Union Islanders. Publications:

1) Bentz, E.J., M.J. Rivera Rodríguez, R.R. John, R.W. Henderson, and R. Powell. 2011. Population densities, activity, microhabitats, and thermal biology of a unique crevice and litterdwelling assemblage of reptiles on Union Island, St. Vincent and the Grenadines. *Herpetological Conservation and Biology* 6: in press; (2) McTaggart, A.L., D.P. Quinn, J.S. Parmerlee, Jr., R.W. Henderson, and R. Powell. 2011. A rapid assessment of reptilian diversity on Union Island, St. Vincent and the Grenadines. *South American Journal of Herpetology* 6: in press; (3) Rivera Rodríguez, M.J., E.J. Bentz, D.P. Scantlebury, R.R. John, D.P. Quinn, J.S. Parmerlee, Jr., R.W. Henderson, and R. Powell. 2011. Rediscovery of the Grenada Bank Endemic, *Typhlops tasymicris* (Squamata: Typhlopidae). *Journal of Herpetology* 45: in press; and (4) Quinn, D.P., A.L. McTaggart, T.A. Bellah, E.J. Bentz, L.G. Chambers, H.D. Hedman, R.R. John, D.N. Muñoz Pagan, and M.J. Rivera Rodríguez. 2010. The reptiles of Union Island, St. Vincent and the Grenadines. *Reptiles & Amphibians* 17: 222–233.

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