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An Interesting Reptile Dispersal Event from Continental South America to Trinidad, Trinidad and Tobago

During the period 19 to 21 August, 2010, a very large quantity of water hyacinths (*Eichhornia* sp.) appeared and washed ashore in Mayaro Bay in south-east Trinidad. Mats of the hyacinths dotted the beach for about three kilometres. Many of these mats were approximately 6 m² to 15 m². Three species of reptiles were found in association with these mats of vegetation on the beach between 10° 13' 28.42" N, 61° 00' 10.82" W and 10° 14' 24.59" N, 61° 00' 04.43" W.

At 1630 h on 20 August, a juvenile Green Anaconda, *Eunectes murinus* (SVL 1300 mm, T 220 mm) was found coiled in a small mat of hyacinths on the beach close to Frontin Road. Shortly thereafter at 1715 h and at the same locality, a juvenile Spectacled Caiman, *Caiman crocodilus* (SVL 263 mm, T 252 mm) was spotted emerging from the surf onto the beach. Later that evening, at 2010 h and 2040 h in the vicinity of Baywatch Boulevard, a sub-adult (SVL 420 mm, T 207 mm) and an adult (SVL 602 mm, T 130 mm) Water Mapipire, *Helicops angulatus* were found in large tangled mats of hyacinths on the beach. Finally, at 1600 h on 21 August a juvenile *H. angulatus* (SVL 204 mm, T 62 mm) was found in a small mat of beached vegetation near Frontin Road. All the animals, with the exception of the last noted, seemed in good physical condition. The juvenile Water Mapipire appeared quite weak when first observed, and possibly suffered heat stress from being exposed on the beach for a much longer period than the other animals. All of the animals were collected, given fresh water and photographed. The anaconda and the caiman were eventually released further north at the Nariva and the Ortoire Rivers respectively, while all the Water Mapipires were deposited in the University of the West Indies Zoology Museum at St. Augustine, Trinidad under accession number UWITT.2010.27.2. In addition to the reptiles noted, a small Synbranchid eel (total length - 200 mm) and a large Belostomatid water-bug (total length - 91 mm) were observed in association with the beached water hyacinths.

Several authors have noted over-water dispersal events of fauna including reptiles (assumed to be from the Orinoco Delta of Venezuela) to the south-east, south and south-west coastal regions of Trinidad (Underwood 1962; Boos 2001; Kenny 2008). The timing of the observations recorded here coincide with the annual peak flow rate of the Orinoco River of approximately 70,000 m³s⁻¹, known to occur in the middle of the rainy season in August (Muller-Karger *et al.* 1989). These seasonally increased flow rates of the Orinoco result in exceptionally low sa-

linity levels of surface waters in the Gulf of Paria and the Columbus Channel (Kenny 2008), which would permit usually freshwater and brackish water habitat specialists a chance to survive for some time in the marine environment; especially if floating rafts of vegetation can provide them with some degree of insulation from the seawater below and from direct exposure to sunlight above. Four of the five reptiles observed were in good condition after their sea crossing and might well have been capable of unaided movement from the beach into any of the nearby small streams which empty into Mayaro Bay. Such dispersal events from the mainland to Trinidad may be regular annual occurrences and may be a source of continued addition to the gene pool of resident reptile populations associated with coastal freshwater and brackish water systems.

It might be well worthwhile for naturalists and wildlife management authorities to monitor the coastlines of southern Trinidad after heavy rainfall is noted along the Orinoco River system, and particularly when large rafts of water hyacinths are seen along the shore, in order to keep track of continued immigration of reptiles (and other fauna) into already established resident populations in Trinidad, as well as to record and appropriately respond to any new potentially colonizing species.

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