



Thorny Situations: Reptiles on the Grenadines

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During the course of fieldwork in difficult habitats, occasionally slipping, tripping, stumbling, or falling, or getting poked, jabbed, whipped, stung, slapped, and otherwise abused by aggressive branches, fronds, and foliage is not unusual. We have all experienced this abuse, it is not unexpected, and we keep coming back for more.

That said, two weeks after our encounters with the vile foliage, we were still in the process of healing from multiple punctures and rashes accumulated during recent photography-related fieldwork on several of the Grenadine Islands that lay between St. Vincent to the north and Grenada to the south in the southern Lesser Antilles. We have been working on these islands for decades and certainly know what to expect, but a combination of factors provided a “perfect storm” of potentially safe havens for reptiles and frequent discomfort for us (Fig. 1). During the dry season foliage is not at its luxuriant best and vegetation armed with thorns is conspicuous and usually easily avoided. This, however, was November and the midst of the wet season; we had never seen the Grenadines looking greener and lusher. Trails that were easily traversed in the dry season were muddy and overgrown, and maintain-



Fig. 1. A wall of *Acacia*, Prickly Pear cacti (*Opuntia dillenii*), and the pain-and-rash-inducing euphorb, *Cnidoscolus urens*. Photograph by Craig S. Berg.



Fig. 2. Beware! Here’s a close-up of *Cnidoscolus urens*. Photograph by Richard A. Sajdak.



Fig. 3. Rash produced by *Cnidoscolus urens* through field pants. Photograph by Craig S. Berg.

ing one’s footing while also trying to avoid rash-inducing and eyeball-impaling vegetation was difficult. *Acacia* (probably *A. farnesiana*) thorns were long (4–5 cm), rigid, and as sharp as any ice-pick or meat skewer; we’re pretty sure murders could be committed with the spines. The icing on the cake was a



Fig. 4. A Grenada Tree Anole (*Anolis richardii*) awakened in its thorny nocturnal retreat. Photograph by Richard A. Sajdak.

bumper crop of a nettle-like euphorb (*Cnidocolus urens*; Fig. 2) that caused instant pain, even when merely brushing against bluejeans, followed by swelling, red pimples (Fig. 3), and a strong itching sensation on the upper body. We all suffered some of the symptoms and at least one of us (RWH) was lucky enough to experience the full repertoire of discomfort.

Everything we hated about the thorny plants the reptiles seemed to embrace. They obviously sought out the vegetation for both foraging and as a safe retreat, either at night for diurnal species or during the day for those species active at night. Diurnally active anoles (Fig. 4) and juvenile Green Iguanas (*Iguana iguana*; Figs. 5 & 6) chose to perch on or among *Acacia* thorns and cactus spines as nighttime retreats. These largely arboreal species also were very much at home among the thorns while they were active during the day, as was the ground-dwelling, diurnally active Grenada Bank Ground Lizard, *Ameiva aquilina* (Fig. 7).

Snakes seemed especially at home among the thorns. One morning while taking habitat photos, one of us (RAS) encountered a foraging Windward Tree Racer (*Mastigodryas bruesi*); it instantly teleported into a nearby fortress of cactus, acacia, and nettles that would have made Brer Rabbit ecstatic — and stopped Sajdak in his tracks. The Grenada Bank Treeboas (*Corallus grenadensis*), however, were most intriguing. They were able to gracefully navigate through gauntlets of spines as they either sought sleeping perches (Fig. 8) or actively foraged (Figs. 9 & 10). Spines never seemed to be an encumbrance to their progress as they wended their way from



Fig. 5. A juvenile Green Iguana (*Iguana iguana*) sleeping on a slender *Acacia* branch. Photograph by Richard A. Sajdak.

branch to branch. On the other hand, if we tried to remove one of the boas from a tree, spines became instant obstacles. Grabbing part of a branch without getting stabbed was virtually impossible and we had to be careful not to skewer the snake on the thorns (note that any snake handled was placed back on its original branch within minutes of capture).

On Carriacou at 2010 h, CSB observed an adult *C. grenadensis* moving slowly through an *Acacia* tree. It very quickly assumed a coiled resting posture at about 2.1 m above the ground and among thorns and leafy foliage (Fig. 11). It had an obvious meal in its gut, probably a Black Rat (*Rattus rattus*) or a young iguana. Close examination of the photos taken while it rested showed that it had blood on its face (Fig. 11, insert), suggesting it must have fed minutes before it was observed. Aside from taking photographs, we made no attempt to disturb the snake. Treeboas work too hard for their meals and we had no desire to stress this one into disgorging its prey.

Most of the original vegetation on the Grenadine Islands was cleared for agriculture (sugar, cotton) in the 1800s (Nichols 1891; Howard 1952). When descriptions of the vegetation by Nichols and Howard on various islands in the archipelago are compared to how the islands appear today, the changes are dramatic and widespread. The prevalence of thorny vegetation is almost surely a response to the agriculturally driven, ravaged landscapes of the 19th century. Once the original forests were gone and widespread agriculture abandoned, sun-drenched open-habitat-tolerant vegetation took over.

Use of thorny vegetation as a likely safe harbor for arboreal squamates during both daylight and nighttime hours is well known (e.g., Henderson 2015: Fig. 271). On the other



Fig. 6. A juvenile Green Iguana (*Iguana iguana*) resting comfortably (?) on the spines of a columnar cactus (*Cereus* sp.). Photograph by Craig S. Berg.



Fig. 7. The diurnally active Grenada Bank Ground Lizard (*Ameiva aquilina*) foraging among Erect Prickly Pear (*Opuntia dillenii*). Photograph by Richard A. Sajdak.



Fig. 8. A Grenada Bank Treeboa (*Corallus grenadensis*) at rest in a fortress of *Acacia* spines. Photograph by Richard A. Sajdak.



Fig. 9. An adult Grenada Bank Treeboa (*Corallus grenadensis*) foraging on *Acacia*. Photograph by Craig S. Berg.

hand, Poche et al. (2005) found no evidence that anoles (*A. aeneus* and *A. richardii*) on Grenada sought out thorny perches as sleep sites. Thorn-laden vegetation, however, is much more widely distributed relative to island area on islands in the southern Grenadines than on Grenada, and its exploitation by arboreal reptiles for seeking prey and avoiding predators is quite evident.

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Fig. 10. A young-of-the-year Grenada Bank Treeboa (*Corallus grenadensis*) balancing on an *Acacia* thorn. Photograph by Richard A. Sajdak.



Fig. 11. An adult Grenada Bank Treeboa (*Corallus grenadensis*) that has recently fed at rest in *Acacia*. The insert is a close-up of the same snake showing blood on its muzzle, indication of a recent predation event. Photographs by Craig S. Berg and Richard A. Sajdak (insert).

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