# Collecting Palms Next To A Volcano

On July 18, 1995, the Soufriere Hills volcano on the Caribbean island of Montserrat erupted after 400 years of dormancy. The capital city of Plymouth was evacuated as numerous pyroclastic flows buried the commercial center. Since then, the volcano has gone through several phases of nearly continuous activity including dome growth with rockfalls, pyroclastic flows, mud flows, and occasional dome collapses and explosive events. Two thirds of the population left the island and the volcano rendered over half of the island (the exclusion zone) uninhabitable with the remaining population re-colonizing the upper northwest corner.

Last February, a large pyroclastic flow raced down the northeast side of the mountain and buried the last remnants of the old airport. Five months later, I considered this as I followed Mappie, my colleague from the Montserrat National Trust, into the exclusion zone and onto a boulder-strewn moonscape, created by last February's pyroclastic flow. Mappie knew this part of the island well, having grown up in the area. He would run his dogs to capture goats and return them to their owners. He reminded me, "I'm a bushman, man" and his agility in jumping from boulder to boulder while not slipping as he climbed up steep muddy trails in his smooth-soled cowboy boots proved it.

I went to Montserrat to collect native palms, particularly *Syagrus amara*, which occurs on only five islands in the Caribbean. Its northernmost limit is Montserrat, which is also the northernmost limit of the entire genus *Syagrus*. Mappie informed me of a fan-leaved palm that he knew from his youth and I was anxious to see what it might be, as no native fan-leaved palms had been recorded from the island.

We entered the exclusion zone and followed the contour of the hills, climbing up and down rocky inclines and across boulders until we arrived at a small population of fruitless *Coccothrinax barbadensis*. They grew in a vulnerable location lying just above last February's pyroclastic flow, barely escaping burial and incineration. I acquired a couple of herbarium specimens for documentation. That collection would be the first record for the island. We then descended the steep slope and returned to the car via the flow itself. The next day, Mappie, Kurt Lee, Glenford James (Forestry, Department of the Environment), and I took a trailhead that led up into the Centre Hills to a place called Locust Valley (elev. ca. 300 meters). Here we collected *Syagrus amara* from a very healthy population. It was a great trip.

Not only did we collect herbarium vouchers of all three naturally occurring palms including *Prestoea acuminata*, but we also collected and cleaned 643 seed, 413 of which were from different accessions of *Syagrus amara.* We shared the seed with the Botanical Garden in Montserrat, the Royal Botanic Gardens at Kew, England, and the Palmetum of Santa Cruz de Tenerife (Canary Islands). Thanks are due to Gerard Gray, Eudora Fergus, and Jervaine Greenaway for helping to acquire permits and organize this successful trip.

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Dr. Noblick in front of exclusion zone made by the volcano.

*Syagrus amara* breaking through the canopy in Montserrat.

Kurt Lee, Dr. Larry Noblick, and Philemon Mappie Murrain.